

# PROGRAM OF STUDIES

2025 – 2026



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Chelmsford High School

## Principal's Message

In early February, you will begin the process of scheduling your course of study for the 2025-2026 school year. This process will culminate in June. The Program of Studies is published annually as a catalog 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 make 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 21<sup>st</sup> 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 21<sup>st</sup> 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 Winter, students in grades 8, 9, 10, and 11 will be selecting courses for the 2025-2026 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, budgetary constraints, or other circumstances beyond our control.** In situations like these, you will be able to enroll in classes required to meet graduation requirements. Choosing up to four (4) 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 canceled 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 in the Teacher Recommendation portal. 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 January. 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, they may request an override. An override form can be obtained from the teacher, counselor or house office, and must be submitted to the Department Coordinator - for current 8th, 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> graders the deadline is **February 13th, 2025**. \*\*\*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**
Required Courses or Departments where they may be offered	English Social Science Science Math World Language Health & Wellness	English Social Science Science Math World Language Physical Education	English Social Science Science Math Physical Education	English Math Health & Wellness
Number of <b>Electives</b> /other courses you may add	1 full year course and 1 semester course or 3 semester courses from any department	1 full year course and 1 semester course or 3 semester courses from any department	2 full year course and 1 semester course or 5 semester courses from any department	4 full year courses and a semester course or 9 semester courses 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 58.

## 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 shifted graduation requirements 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.

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, or Introductory Physics).

<b>Department/Academic Area</b>	
English	40 credits
Mathematics	40 credits
Science	30 credits
Social Sciences	30 credits *
World Language	20 credits **
Fine & Performing Arts	10 credits
Practical Arts	5 credits
Physical Education	10 credits (Grades 10 & 11)
Health and Wellness	10 credits (Grades 9 & 12)
Other Courses/Electives	45 credits
<b>Total Credits for Graduation</b>	<b>240 credits</b>

\* Requirements: Modern World History, US History I, and US History II or AP US History.

\*\* Two years of the same World Language.

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 Framework 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 an 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, Seminar, Research, Calculus, Computer Science, Music Theory, Biology, Chemistry, Physics, US 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](http://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 College Preparatory Courses (CP)

Classroom activities are designed with a moderate amount of teacher assistance. While introducing new skills and concepts, 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 2 (CP 2)

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. 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 for the first month of the semester, unless an obvious need for change exists. Obvious need might include:

1. A computer-generated scheduling error
2. Incorrectly leveled students

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 within first 10 days of school.**

During the last two weeks of any marking period no courses will be added or dropped. First semester and full-year courses dropped after the first ten days of the class will result in a withdrawal on the transcript. Second semester courses dropped after the first ten days of the class will result in a withdrawal on the 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 then obtain the signature of the teacher and Department Coordinator for the course(s) to be dropped, giving that teacher an opportunity to work out any problem area before the student leaves the class.
3. Students obtain the signature of the teacher and department head/coordinator of the course(s) to be added first.
4. Students take the "add/drop" form home to be signed by a parent/guardian.
5. 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, department coordinator, or curriculum coordinator who has denied the change. Parents/guardians must attend this meeting.
2. 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, 978-251-5100 Chelmsford Public Schools Administrative Offices, 230 North Road, Chelmsford, MA 01824



### **NCAA Initial Eligibility Standards**

Students who plan to participate in Division I or Division II college athletics must register with the NCAA Clearinghouse. Once all materials have been submitted, the Clearinghouse issues a preliminary certification report to the college. At the end of your junior year and after you graduate, the Clearinghouse reviews your transcript to make a final certification decision according to NCAA standards. Students must also complete the amateurism questionnaire through the Eligibility Center website.

You will find throughout the course catalog courses that have the NCAA logo (as seen above) next to the course name; these courses are NCAA approved and count towards NCAA eligibility. To be certified by the Clearinghouse, students must complete a specific number of approved core classes, attain a minimum score on the SAT or ACT, and achieve a minimum GPA. To see specific NCAA eligibility requirements, visit these sites for more information:

[Division I Academic Requirements](#)

[Division II Academic Requirements](#)

**Division III Academic Requirements – N/A**

### **INNOVATION CAREER PATHWAYS**

Chelmsford High School is currently working with the Massachusetts Department of Elementary and Secondary Education to offer [“Innovation Career Pathways”](#) for all interested students in four areas: Business & Finance, Information Technology, Engineering and Manufacturing and Life Science with specific Environmental Technology and Biotechnology paths.

Innovation Career Pathways are open to all students starting in their freshman or sophomore years and are designed to provide coursework and experience in a specific high-demand industry. Working with the MassHire Greater Lowell Workforce Board and other organizations, teachers and industry partners will expose students to career options and help them develop knowledge and skills related to their chosen field of study before they graduate high school.

With each Innovation Career Pathway, there are no prerequisite performance measures for acceptance, and course structures allow for students in grades 9 & 10 to “enter” or “exit” the respective Innovation Pathway while still meeting graduation requirements. Students must complete two skills-based courses, two one-credit career focus courses, and two advanced courses for each pathway. Enrollment into the program is capped at a specific number of students, and a lottery system takes place should applications exceed openings in the program.

We encourage students and families to speak with the Career and College Center, guidance counselor, or administration for further information on the opportunities the Innovation Career Pathways can provide. Please feel free to refer to our [Innovation Career Pathways Frequently Asked Questions Document](#), which we will update periodically.

### **WORKPLACE EXPERIENCE: INTERNSHIP\*CAPSTONE COURSE**

5 Credits (# 21048 Engineering; #10198 Computer & Information Sciences; #03098 Biology; #12998-Business & Marketing)

#### **INNOVATION PATHWAY SENIORS ONLY**

This course is designed to be the culmination of an intensive, four-year academic Innovation Pathways education. Students will participate in a 100-hour career immersive experience or research project in which theory is put into real-world, professional practice. Each student’s Capstone will include structured work readiness activities and work-based learning experiences outside the classroom; in a capstone specifically, this could include an individual or group project focused on research, service learning, or related activities to serve as the “capstone project”. Each student will seek and consult advisors or mentors with industry sector knowledge, preferably an external partner.



### **EARLY COLLEGE ACCESS AT CHS**

In addition to a number of advanced PLTW and AP courses at CHS where students can earn college credit, we offer three tiers of early college access based on the interests of students: **1 credit courses, Dual Enrollment, and an Associate Degree Path.**

**1 Credit courses:** To support initial preparedness for high school and college coursework, all 9th grade students may register for the spring online, self-paced 1 credit course, Career and College Exploration I, which aligns to MCC IDS 101. Sophomores who have completed the first course may register for Career and College Exploration II, the second self-paced course, which aligns with MCC IDS 106. Students will not incur any costs for these 1 credit courses while they are funded through a grant provided by Middlesex Community College.

**Dual Enrollment:** Eligible CHS students can register for Dual Enrollment courses approved by a local partnering college while they are still attending Chelmsford High School. Credit for these courses applies both to Chelmsford High School and Middlesex Community College transcripts. Since our initial offerings in SY2019, Dual Enrollment programming at CHS has grown considerably and we now offer over 30 different courses for DE credit for students in grades 9-12. Students will request these courses during the CHS scheduling process and will register with MCC once the semester of enrollment begins. Students are responsible for the cost of college credits, which is offered at a significantly discounted rate. For more information about Dual Enrollment benefits, eligibility and requirements, please review our Dual Enrollment FAQ on the CHS website. Look for the MCC icon next to the course descriptions throughout the Program of Studies of already approved courses. On a yearly basis, we look to add more courses to our DE program and more may become available as MCC approves them.

**Associate Degree Path:** Due to the number of course offerings at CHS students have the opportunity to complete the majority of their coursework (60 credits) towards a Liberal Arts and Sciences Associate Degree. Students will need to work closely with their guidance counselor and the Career and College Readiness Facilitator to follow a [prescribed path of courses](#) that allows for completion of the required courses by the end of Senior year. Students/families are responsible for the cost of each of the dual enrollment courses towards the degree.

For more information on Early College Access programming at CHS please check out our website.



**Grade 9: (1 credit)**

This Dual Enrollment 1 credit online course is for all freshmen and provides an opportunity to obtain 1 credit from Middlesex Community College during their PLUS Block, at no cost to the student. Students learn essential success skills, behaviors, and habits of mind that they are then able to apply to increase their success in high school and beyond. With an emphasis on self-assessment and reflection, students will work to generate a personalized academic plan for their time at CHS and beyond. Students will also be introduced to MCC's Institutional Student Learning Outcomes (ISLOs), and engage with the high school and college's academic, student support and co-curricular services, along with other resources, to develop and strengthen those skills and abilities.



**Grade 10: Career and College Exploration II (1 credit)**

Beginning in the fall of 2023, this online course is for all sophomores and juniors who have successfully completed Career and College Exploration I. Students can work through this self-paced course during their PLUS Block. This course will introduce students to the main components of identifying interests aligned with career paths. Through self-assessment, students will explore their work interests, personality, skills, values and life goals in order to find purpose in their academic curriculum. This course will include career mapping and organization research to formulate a real-world perspective on current jobs and the

requirements needed to achieve them. Students will self-assess their competency with MCC's Institutional Student Learning Outcomes (ISLOs) and engage with CHS and MCC's academic, student support and co-curricular services, along with other resources, to develop and strengthen skills and abilities.

**CORE DE Classes:** Modern World Literature CP, Modern American Literature CP, Chemistry CP, US History I CP, US History II CP, Introduction to Statistics CP, Spanish IV H, French IV H.

**Elective DE Classes:** BioTechnology I, PLTW Introduction to Engineering Design, Forensic Science, Sociology, Introduction to Criminal Justice, Introduction to Philosophy Introduction to Digital Photography, Studio Art 3, Introduction to Acting and Play Production, Accounting 1, Business & Career Pathways, Marketing, Management, eCommerce, Entrepreneurship, Business Ethics, Microsoft Office, Child Growth and Development, Discover Teaching, Supervised Education Practicum and Seminar, Writing for College, Journalism. Nutrition, International Relations, Environmental Studies, Anatomy and Physiology H.

### **THE AP CAPSTONE PROGRAM**

AP Capstone<sup>®</sup> is a College Board program that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. By using the "QUEST" Framework of Questioning, Understanding/Analyzing, Evaluating, Synthesizing, and Transmitting, this program cultivates curious, independent, and collaborative scholars and prepares them to make logical, evidence-based decisions.

AP Capstone comprises two AP courses—AP Seminar and AP Research—and is designed to complement and enhance the discipline-specific study in other AP courses. Participating schools can use the AP Capstone program to provide unique research opportunities for current AP students, or to expand access to AP by encouraging students to master the argument-based writing skills that the AP Capstone program develops.

The program fosters the research, argumentation, and communication skills that are at the core of college readiness and essential for lifelong learning. It provides a setting to build on the knowledge and rigorous coursework of AP in an interdisciplinary format. Finally, the course offers students a unique opportunity to distinguish themselves to colleges and universities.

Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing will receive the AP Capstone Diploma. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams will receive the AP Seminar and Research Certificate. AP Seminar may also be taken as a stand-alone option.

*Selections from the AP Capstone Overview: AP Capstone Diploma Program*

#### **AP SEMINAR**

##### **10 Credits (#06113), Open to Grade 11 students**

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.

[\*AP Capstone Guide\*](#)

## **AP RESEARCH**

### **10 Credits (#32013), Open to Grade 12 students who have successfully completed AP Seminar**

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research based investigation to address a research question.

In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Although the topic of each research study will vary, the course requires students to plan and conduct a study or investigation. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of 4000–5000 words (accompanied by a performance or exhibition of product, where applicable) and a presentation with an oral defense.

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 accomplishment signifies their outstanding academic achievement and attainment of college-level academic and research skills.

[\*AP Capstone Guide\*](#)

## **ENGLISH**

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 students with a background in the major literature of their country and the world. In grades 9, 10, and 11, teachers will review each student's performance and make recommendations for the next school year's placement. 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 selected 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 a student did not pass.

## FRESHMAN YEAR

The freshman English program emphasizes skills in reading and writing through a balanced exposure to a variety of literature and writing experiences. Literature will be taught through a focus 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, CP



**10 Credits (#00513, #00523), Grade 9**

All levels of this course (English 9H and English 9CP) will explore similar topics, but the depth and pace of instruction will be adjusted according to the students' abilities, backgrounds, and needs. All courses will help students master the knowledge and skills articulated in the Massachusetts State Frameworks for grades 9 and 10 in reading literature, reading informational text, writing and research, speaking and listening, grammar, and vocabulary. All students will further develop 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 analysis. Students are expected to demonstrate their understanding of literature in class discussion and will complete vocabulary assignments. Mastering the skills assessed on the MCAS exam is one goal of the curriculum. A student who successfully completes this course will have a solid foundation in English Language Arts.

*Prerequisite: Teacher Recommendation or Department Coordinator-approved override required for English 9H. Please see website for course placement details.*

## 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 (CP or DE) (Practical Art)*
- *Public Speaking (Practical Art)*
- *Writing for College (CP or DE)*

### ENGLISH 10 - H, CP



**10 Credits (#02013, #02023), Grade 10**

All levels of this course (English 10H and English 10CP) will explore similar topics, but the depth and pace of instruction will be adjusted according to the students' abilities, backgrounds, and needs. All courses will help students master the knowledge and skills articulated in the Massachusetts State Frameworks for grades 9 and 10 in reading literature, reading informational text, writing and research, speaking and listening, grammar, and vocabulary. 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 writing assignments. An additional objective of the writing assignments is to develop the skills to organize, write, revise, and edit narrative and text-based essays similar to those on the MCAS exam and receive feedback. Students can expect regular work in vocabulary, reading, and writing.

*Prerequisite: Teacher Recommendation or Department Coordinator-approved override required for English 10H.*

Please see website for course placement details.

## 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 10 credit AP Seminar Elective:

### 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.

*Prerequisite: Teacher Recommendation or Department Coordinator-approved override.*

*Please see website for course placement details.*

#### 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 AP English Language and Composition Exam. Taking this exam is the expected outcome of taking this course; it is the culminating assessment. Additionally, students may take the AP English Language and Composition Exam without having taken the course. 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>)*

### MODERN AMERICAN LITERATURE, H and CP



(ENG 161)

#### Honors American Literature

#### 10 Credits (#03013 (H), #03023 (CP), #03043 (DE))

All levels of this course (English 11H and English 11CP) will explore similar topics, but the depth and pace of instruction will be adjusted according to the students' abilities, backgrounds, and needs. All courses will help students master the knowledge and skills articulated in the Massachusetts State Frameworks for grades 11 and

12 in reading literature, reading informational text, writing and research, speaking and listening, grammar, and vocabulary. This course explores 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. Preparation for the SAT exam is included. This course will include a personal essay unit, resulting in a product which could be used as a college application essay. **Modern American Literature CP may be taken for Dual Enrollment credit.**

*Prerequisite: Teacher Recommendation or Department Coordinator-approved override required for English 11H.*

*Please see website for course placement details.*

## 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:*

### 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 literature 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 or Department Coordinator-approved override.*

*Please see website for course placement details.*

#### 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 AP English Literature and



Composition Exam. Taking this exam is the expected outcome of taking this course; it is the culminating assessment. Additionally, students may take the AP English Literature and Composition Exam without having taken the course. 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>)



## **MODERN WORLD LITERATURE- CP (ENG 141)**

**10 Credits (#05023 (CP), #05043 (DE)), Grade 12**

This year-long 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 novels, 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. This course may be taken for Dual Enrollment credit.

## **ELECTIVES**



## **WRITING FOR HIGH SCHOOL - CP**

**5 Credits (#07304), Grade 9**

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 their 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 narrative and text-based essays similar to those on the MCAS exam and receive critical feedback to improve their test-taking skills. **Note: Students are selected for this course.** Students cannot sign up for this elective on their own. Please contact a guidance counselor or the Department Coordinator with any questions.



## **JOURNALISM--CP (COM 150)**

**5 Credits (#07024 (CP), #07044 (DE)), 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. This course may be taken for Dual Enrollment credit.

### **PUBLIC SPEAKING--CP**



**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--CP**



**(ENG 101)**

**5 Credits (#07121 (CP), #07141 (DE)), Open to Grades 10, 11, and 12**

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 effective writing and set personal writing 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. 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. This course may be taken for Dual Enrollment credit.

### **CP After Life: Heaven, Hell, and World Religions**



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

This course explores the concept of the afterlife across various world religions, examining how different cultures and spiritual traditions envision life after death. Through an in-depth study of sacred texts and classical literature, students will engage with themes of judgment, salvation, reincarnation, the supernatural, heaven, hell, angels, demons, and other topics. We will analyze perspectives from Christianity, Islam, Judaism, Hinduism, Buddhism, and other systems of belief and non-belief, comparing the similarities and differences in their depictions of the afterlife. Students will also explore philosophical and theological questions about the soul, morality, and the ultimate fate of humanity, as well as how contemporary reconstructions and commentaries on these topics might speak to modern society. Students will examine images and stories of the afterlife and moral judgment from ancient artwork to modern film. This course invites students to reflect on their own belief or non-belief and expand their understanding of death, spirituality, and what may lie beyond. We will honor multicultural worldviews and respect the contributions of multiple voices from inside and outside the classroom.

### **CREATIVE WRITING--CP**



#### **5 Credits (#07624), Open to Grades 11 and 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.

## **READING**

### **READING FOR HIGH SCHOOL - CP**



#### **5 Credits (#08804), Grade 9**

Reading for High School is a course designed to provide extra support to freshmen who could benefit from additional instruction in reading and study skills. The core of the course consists of opportunities for students to improve comprehension of reading in the content areas and to understand the elements of a text book and text structure. Students will also learn and review reading strategies to promote comprehension in order to expand their study skills and improve online reading strategies. Preparation for the MCAS test is another important aspect of the course. Students will respond to fiction and non-fiction passages as well poetry similar to those on the MCAS exam and receive critical feedback to improve their test-taking skills. Note: Students are selected for this course. Students cannot sign up for this elective on their own. Please contact a guidance counselor or the Department Coordinator with any questions.

### **READING SKILLS AND STRATEGIES - CP**

#### **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 to take the course.

## HISTORY/SOCIAL SCIENCES

The History and Social Sciences 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 Science offerings over the four years at Chelmsford High School. In addition to satisfying graduation requirements, a student will want to select courses from the various social science electives. Thirty credits of Social Science are required for graduation from Chelmsford High School. *Students must pass Modern World History United States History I and United States History II/APUSH to meet the requirements for graduation.*

### **MODERN WORLD HISTORY H, CP**



**10 Credits (#32413, #32423), Grade 9**

This course surveys world geography, history, and related studies from the age of Imperialism 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 1800s. 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 reading and writing. Additional writing and a summer reading assignment are required in the Honors level course.

### **UNITED STATES HISTORY I H, CP**



**(CP only-HST 121)**

**10 Credits (#32513 (H), #32523 (CP), #32543 (DE)), Grade 10**

In United States History 1, students examine the historical and intellectual origins of the United States from the Revolutionary and Constitutional eras. Students review the basic framework of our Democratic Republic in order to develop a deeper understanding and appreciation of civics and civic responsibilities. Students will investigate the cause and consequences of persistent social, economic and political changes that happened between the establishment of the Early Republic through World War I. Students will utilize a variety of resources including primary sources and secondary sources, images, videos, maps, and data to critically consider events of the past. Students will develop the skills to respond to enduring questions and challenges in the “American Experiment”. This course requires analytical reading and writing. Students in the Honors course will briefly review the eras of exploration and colonization before exploring the topics through to the Reconstruction Period. Additional writing and summer reading assignments are required in the Honors level course.

### **AP UNITED STATES HISTORY**



**10 Credits (#33013), Grade 11**

The Advanced Placement United States' history course provides students in their junior year with the analytic skills and facts necessary to deal critically with problems and materials in United States' history. Students will be prepared for intermediate and advanced college courses by the demands of the course, which is the equivalent of a full-year introductory college course. 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. Test taking and writing skills will be addressed throughout the course to prepare them for the Advanced Placement US History Exam in May. Students are required to complete a summer reading assignment prior to the first class of the school year. **All students will participate in a civics project designed to offer practice and build skills in citizenship and encourage students to become active participants in their community.**

**UNITED STATES HISTORY II - CP**   **(HST 122)**

**10 Credits (#33523 (CP), #33543 (DE)), Grade 11**

In United States History II, students investigate and analyze the dynamic history of the United States from the 1920s to modern day. Students will utilize a variety of resources including primary and secondary sources, images, videos, maps, and data to critically consider events of the past. Students will continue to develop the skills to respond to enduring questions and challenges in our ever changing Nation. This course requires critical thinking, analytical reading and writing. **All students will participate in a civics project designed to offer practice and build skills in citizenship and encourage students to become active participants in their community.** *Students must have successfully completed US History I.*

**HISTORY/SOCIAL SCIENCE ELECTIVES**

**SPEECH AND DEBATE – H, CP** *(Practical Art)* 

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

*Semester I.* This course is open to freshmen through seniors and is designed to introduce students to academic, competitive Speech and Debate. The course is ideal for those students who want to learn how to speak effectively and develop strong analytical skills. Skills developed in these events transfer into business, theater, law and government, and teaching. The class begins with an exploration of the common elements of both Speech and Debate. Every student starts in Debate, but after the first tournament students can opt to remain focused on Debate or choose from a variety of Speech events. Students select their events and prepare for their events with the guidance of the teacher. Students will engage in research, writing, preparing, editing and revising debate cases or their speech piece as the course progresses. Time will be given to students to practice for their presentations, where they will receive feedback and direction to improve upon the debate case or speech piece prior to in class presentation/competition and/or tournaments. There are no textbooks, no tests, no quizzes. Grades are based on smaller assignments and large writing assignments or reflections, after each presentation/competition. Course grades are based on student preparation, effort, and completion of assignments.

## ECONOMICS



**5 Credits (#38224), Grade 10, 11, 12**

This elective course open to sophomores, juniors and seniors is an introduction to the theory of income determination, business cycles, national income analysis and economic growth. The goal of the course is to understand how economic systems work (and don't work), and how they affect our lives. Topics include the structure and behavior of the economy at the national, regional, and global level (macroeconomics) and theories about monetary and financial systems. The role of labor and capital markets in economic activity is examined to explore the problems of unemployment and inflation. The functioning and impact of the monetary system is introduced. Government stabilization activities utilizing monetary and fiscal policy is explored. The mechanics of international goods transactions and the balance of trade, as they influence the domestic economy are examined. This course supports student development of Quantitative Literacy, Critical Thinking, and Multicultural/Global Literacy. While we do not yet offer an AP Macroeconomics course, this course is open to all students and can help prepare students who may want to take the exam.

## INTRODUCTION TO CRIMINAL JUSTICE CP (CRJ 111)

**5 Credits (#36224 (CP), #36244 (DE)), Grade 10, 11, 12**

Introduction to Criminal Justice is a one semester course where students will study the legal, judicial, and correctional systems of the United States. The class will focus on the foundation of the U.S. Constitution, fundamental legal principles, court procedures, civil and criminal laws, and the laws which impact our daily lives. The goal of the course is to provide students with practical and problem-solving skills that will develop in the students understanding of key legal concepts and their ability to be civic and legal minded citizens in a law-saturated society. The course will implement the use of case studies, mock trials, guest speakers, small-group exercises, and hands-on activities.

## AP AMERICAN GOVERNMENT AND POLITICS

**10 Credits (#38113), Grade 10, 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. Students are required to complete a summer reading assignment prior to the first class of the school year.

## INTRODUCTION TO

**5 Credits (#37441), Grades 10, 11**



**PHILOSOPHY  (PHL 101)  
& 12**

An introductory investigation of traditional and contemporary philosophies and an analysis of how their ideas apply to our world today. Students in the course explore such issues as: the meaning and purpose of life, the nature of religious belief, the justification of moral values, and the meaning of human freedom. Students will learn about several movements and traditions of philosophy, from the Presocratic to contemporary thinkers. They will learn to differentiate the major branches of philosophy and their respective methodologies, analyze arguments through close, critical reading, and construct effective arguments via written and oral discourse.

## **CIVICS CP**

### **5 Credits (#38724), Grade 11 & 12**

An educated citizen is essential. This course is designed to help students enhance their civic knowledge and skills. The course takes students beyond the foundational study of government structures and history and focuses on the roles and responsibilities of citizenship at the local community, state, and national levels. Students will learn how each level works in order to “promote the general welfare” and what that means with regards to legal, social and economic policy. Federal and local elections, public policy and current events will be a major focus of the course. The Town of Chelmsford and its governance will be a significant focus of our studies. Students will explore the various, often competing perspectives regarding major policy issues facing our citizens today, and how to analyze, deliberate, and discuss the issues and the arguments from those different viewpoints.

## **COMMON LAW AND TRIAL PROCEDURES I—H**

### **10 Credits (#39313), Grade 11 & 12**

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. Students are required to complete a summer reading assignment prior to the first class of the school year.

## **THE STRUGGLE FOR HUMAN RIGHTS**



### **5 Credits (# 38324 ), Grades 11 & 12, CP**

This course, open to juniors and seniors, will provide students with an introduction to basic human rights philosophy, principles, and institutions, with a focus on the Universal Declaration of Human Rights. Appropriate print materials, films and guest speakers will be used to help students understand the roots of

hate, the “us vs. them” mentality, propaganda and tools of hate, extremism, crimes against humanity, and strategies for combating hate in the future. The course will incorporate elements of social psychology, ethics, political science and geography to facilitate the understanding of these topics. We will investigate historical precedents including a series of 20th Century genocides and how they helped shape current international policies. We will explore current issues such as human trafficking, discrimination based on race, gender, disability, and religion, LGBTQ+ issues, refugee issues, and modern slavery. Students will be given the opportunity to examine their own sense of identity, responsibility and their role in the global community moving forward.

## PSYCHOLOGY I CP



**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, theories of sensation and perception and the theories of intelligence. Students will be expected to demonstrate their understanding of psychology through various projects, discussions, and assignments.

## SOCIOLOGY CP



**(SOC 101)**

**5 Credits (#36424 (CP), #36444 (DE)), 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 utilizing the methods of sociologists.

## AMERICAN HISTORY THROUGH FILM CP

**5 Credits (#39124), Grade 12**

This 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.

## **AP 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, the methods of research as well as 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 research. 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 read Lauren Slater's "Opening Skinner's Box" prior to the first class meeting of the school year. Copies are available in the CHS Learning Commons as well as the Chelmsford Public Library. Test taking and writing skills will be addressed throughout the course to prepare students for the Advanced Placement Psychology Exam in May.

## **COMMON LAW AND TRIAL PROCEDURES II - H**

### **10 Credits (#39413), Grade 12**

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. Students are required to complete a summer reading assignment prior to the first class of the school year.

*Common Law and Trial Procedures II is available to seniors who have taken CLTP I during their junior year.*

## **INTERNATIONAL RELATIONS—H**



### **(GOV 115)**

### **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.

*Students must successfully complete US History II or APUSH to take this course.*

## STEM

STEM curriculum involves 4 specific disciplines — Science, Technology, Engineering and Mathematics— applied using interdisciplinary methods to solve problems. Creativity and innovation combined with basic knowledge acquired in these courses prepares students for post secondary opportunities in STEM careers. CHS offers rigorous courses in all 4 years and students are encouraged to plan a pathway beginning in 9th grade to maximize opportunities to master a concentration of academic knowledge and technical skills.

## SCIENCE

The Science Department offers coursework at three academic levels. Specific placement information is listed for each course below. All AP courses are designed, audited and aligned with [College Board](#) and may require summer work. Level 1 Honors courses are by teacher recommendation only. The recommendation is based upon performance across Science and Mathematics as the courses are designed to fit the rigor of enrolling in a subsequent AP or college level science course. Students must complete 30 credits of lab-based science courses in order to graduate, and all courses meeting the Lab-based criteria are listed with the course description. College preparatory courses are available to all students.

### **ENVIRONMENTAL SCIENCE CP**

#### **10 Credits (# 26223), Grade 9, Lab - Based**

This activity-based course provides a foundation for the future study of Earth Science, Biology, Chemistry, and Physics through hands-on learning experiences geared towards the understanding and application of Environmental topics. Topics are current, problem based, and include issues such as long term energy solutions, sustainability, waste management, and environmental protection. Topics are addressed through a variety of community-focused projects through the demonstration of hands-on experiments and effective use of technology.

*Prerequisite: Completion of Grade 8 Science*

### **BIOLOGY—H, CP**



#### **10 Credits (#22413, #22423), Grade 9,10, Lab-based**

This first year Biology course is designed to prepare students for the next generation of science standards and practices. The high school biology content standards are built from middle school and allow grade 9 or 10 students to explain additional and more complex phenomena related to genetics, evolution, the functioning of organisms, and interrelationships between organisms, populations, and the environment. There are significantly higher academic expectations of students in honors level courses. 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. Students are expected to take the MCAS Biology assessment in the spring.

*Prerequisite for Honors: Recommendation of Environmental Science teacher; incoming freshmen must have term average of 93 or higher in 8th grade science and 3 of the following: Benchmark average in the exceeding range, placement into honors math, advanced score on the grade 7 ELA MCAS Exam, teacher recommendation*

### **AP BIOLOGY** **BIO 131**

### **10 Credits (#22013), Grades 10, 11, 12, Lab-based**

This second year Biology course will be an enrichment of the major concepts from first year Biology. This will be a fast-paced, intensive study of selected topics in Biology as set forth by the College Board. 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. The course will also emphasize techniques in preparation for the AP Biology exam in May. Students will be required to complete summer homework prior to the beginning of the academic year.

*Prerequisite: Success in Honors Biology or teacher recommendation from CP Biology, concurrent enrollment in or completion of Chemistry course. Summer work may be required and assessed for all students.*

### **CHEMISTRY—H, CP** **(CHE 121; CP only)**

#### **10 Credits (#24213 (H), #24223 (CP), #24243 (DE)), Grades 10, 11, 12, Lab-based**

The major focus of chemistry is on matter and its interactions. Quantitative and qualitative methods can be used to explain how matter interacts. Fundamental basics of matter are determined by the structure of atoms and the compounds they compose. Reactivity and properties of compounds are explored through a variety of inquiry-based laboratory activities. Topics covered include: atomic theory, stoichiometry, gas laws, bonding, solutions, and thermodynamics. Honors Chemistry is a full year course created for students who have demonstrated a sincere interest in the sciences with students independently using algebra skills in the context of the chemistry curriculum. Chemistry CP provides a foundational understanding of chemistry and may be taken as a Dual Enrollment course with Middlesex Community College as a general science credit (CHE 121).

*Prerequisite for Honors: Successful performance in Honors Biology, successful performance in an Honors level Algebra-based Mathematics course or advanced performance in CP algebra-based mathematics course, teacher recommendation.*

*Summer work may be required and assessed for students enrolled in Honors.*

### **PHYSICS - H, CP**

#### **10 Credits (#25113, #25223), Grade 10, 11, 12, Lab-based**

High School Physics standards expect students to apply a variety of science and engineering practices to three core ideas of physics:

1. Motion and Stability: helps students answer the question, “How can one explain and predict interactions between objects and within systems of objects?” Students are able to demonstrate their understanding by applying scientific and engineering ideas related to Newton’s second law, total momentum, conservation, system analysis, and gravitational and electrostatic forces.
2. Energy: develops students’ understanding of energy at both the macroscopic and atomic scales, and helps students answer the question, “How is energy transferred and conserved?”
3. Waves and their Applications: technologies for information transfer support students’ understanding of the physical principles used in a wide variety of existing and emerging technologies, which helps students answer the question, “How are waves used to transfer energy and send and store information?”

Lab investigations, demonstrations, and collaborative activities are designed and structured for each level offered within the curriculum.

*Prerequisite for Honors: Successful performance in previous Honors level Science course, or advanced performance in previous CP level science course. For Physics CP, successful completion of any level of Algebra 1.*

*Summer work may be required and assessed for students enrolled in Honors.*

**ENVIRONMENTAL STUDIES - CP**  **ENV 115**

**10 Credits (#26123), Grade 11 & 12, Lab-based**

This is a full year lab based elective course designed for students who intend to go to college as non-science majors. The course focuses on local, national and world sustainability of resources, such as conservation of material cycling, human and environmental influences, succession, and environmental problems. Students will be expected to be active participants in fieldwork which includes, but is not limited to, recording observations in outdoor environments, wearing waders and entering wetlands for study, and developing models of outdoor systems in the classroom. 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 research projects, presentations, and other collaborative exercises.

*Prerequisite: Successful completion of Biology or Chemistry*

**ANATOMY AND PHYSIOLOGY—H** 

**10 Credits (#23013), Grade 11 & 12, Lab-based**

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.

*Prerequisite: Successful completion of Honors Biology, advanced performance in CP Biology recommended*

**AP CHEMISTRY** 

**10 Credits (#24013), Grades 11 & 12, Lab-based**

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: atomic structure, periodicity; 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.

*Prerequisite: Successful performance in Honors Chemistry. Summer work will be required and assessed for students.*

**AP PHYSICS 1** 

**10 Credits (#25213), Grade 11 & 12, Lab-based**

This is an in-depth, mathematically rigorous, course in physics that is equivalent to the depth, time, and rigor 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. It will also introduce fluid dynamics. Projects, technical writing and lab work play an important role in this course.

*Prerequisite: Successful completion of Honors Physics or current Science teacher recommendation, co-enrollment in Honors Pre-Calculus or completion of any level Pre-Calculus. Summer work will be required and assessed for all students. Separate additional summer work will be required and assessed for any student who has not completed a high school Physics course.*

## AP PHYSICS C

**10 credits (#25012), Grade 12, Lab Based**

This course is for students strongly considering a degree in engineering, physics, or chemistry at the post-secondary level. Students must have completed or are enrolled in AP Calculus concurrently in order to take this course. Students must also have completed a physics course prior to enrollment. This course offers a conceptual and rigorous mathematical approach to physics, and an advanced understanding of high school math is assumed. Differential and integral calculus are applied to topics outlined by College Board for the AP Physics C: Mechanics and Electricity & Magnetism exam(s). Topics included are 1- and 2-dimensional motion, forces, work, energy, power, momentum, circular motion, gravitation, rotational motion, simple harmonics, electrostatics, conductors, capacitors and dielectrics, electric circuits, magnetic fields, and electromagnetism. Students' performance will be based upon several performance tasks such as investigation reports, tests, and final examinations. Participating colleges may grant credit and / or appropriate placement to those students who qualify based on the AP Exam.

*Prerequisite: Successful completion of Honors Physics or AP Physics 1, placement into or completion of AP Calculus AB or BC. Summer work will be required and assessed for students.*

## AP ENVIRONMENTAL SCIENCE

**10 Credits (#26013), Grade 12, Lab-based**

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.

Students are expected to read chapter material prior to in-class discussions, complete study guides, practice exams, and complete lab activities. Lab work plays a significant role in this course.

*Prerequisite: Advanced performance in CP or H Biology & CP or H Chemistry; Algebra proficiency, including scientific notation and dimensional analysis. Summer work is required and assessed for students.*

## SCIENCE ELECTIVES

### **BIOTECHNOLOGY I CP** **BIO 105**

**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.

*Prerequisite: Successful completion of a Biology course.*

### **FORENSIC SCIENCE CP** **SCI 130**

**5 Credits (#24324), Grades 10-12**

Students will explore forensic skills by integrating criminal investigative techniques with hands-on experience in the scientific procedures now used in the modern crime laboratory. Students will learn evidence collection, chemical and physical analysis of the evidence and crime scene, and focus on how modern techniques affect investigations. Students will also focus on how to present results in investigative reports both written and oral.

*Prerequisite: Successful completion of a Biology course.*

## **BIOTECHNOLOGY II - H**



### **5 Credits (#22114), Grade 11 & 12**

Biotechnology II is an intensive course focusing on topics necessary for the understanding of the biotechnology industry and multidisciplinary skills required for careers in research. Topics will include plasmid design, protein expression, purification, storage conditions, and validation. Focus will be on knowledge of protein peptide formulation, and storage stability. In protein purification, the students will learn about or utilize techniques used in purification; different procedures in chromatography; affinity ion exchange, absorption, and reduced vs. non-reduced SDS-PAGE. Students will also gain theoretical knowledge of HPLC, fluorescence, and Mass Spectrometry. Course material will be taken directly from the current, primary literature with emphasis on conduction laboratory research, student presentations, and discussion.

*Prerequisites: Successful completion of Biology course, successful completion of Biotechnology I or AP Biology, concurrent enrollment in or successful completion of Chemistry*

## **INTRODUCTION TO ORGANIC CHEMISTRY CP**

### **5 Credits (#24424), Grades 11-12**

Organic chemistry is a second-year chemistry course that provides an introduction to carbon-containing compounds. The course is focused on the chemical structure of hydrocarbons and their derivatives. The course will cover organic nomenclature, mechanisms, stereochemistry, IR Spectroscopy, Mass Spectroscopy and NMR analysis. The continued development of laboratory skills - including small molecule synthesis and analysis - and the multiple ways to report results will also be a major focus of the course. Students will also attend an in-school field trip to complete an undergraduate-level lab activity.

*Prerequisite: Successful completion of a Chemistry course.*

## **SCIENCE LAB TECHNICIAN INTERNSHIP CP**

### **5 Credits (#24524), Grade 12**

This course is ideal for students seeking additional hands-on experience prior to entering college or career options focused on the STEM fields. Students will deepen their skills related to the generation of solutions, gel preparation, chemical inventory management, and professional expectations in the laboratory workplace.

*Prerequisite: Enrollment is limited. Requires teacher recommendation and coordinator approval*

## **TECHNOLOGY**

CHS technology courses develop students' STEM concepts in Computer Programming, Robotics and Technology (IT). These in-demand careers require specific technology skill sets, and these courses give students a solid foundation while developing student enthusiasm for those fields. Students in these courses have access to environments such as the CHS Tv studio, state of the art engineering software and hardware or computer science coding simulations and a knowledge base rich in technical expertise. Each of these courses is considered a practical art credit under CHS graduation requirements.

## **AP PLTW COMPUTER SCIENCE PRINCIPLES**

### **10 Credits (#17613) Open to Grades 10-12**

The AP Computer Science Principles project-based course prepares the students for the AP exam and is designed to be equivalent to a first-semester introductory college computing course in Python. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data as well as working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computer apps based on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems as well as discuss and write about the impacts these solutions could have on their community, society, and the world. No programming experience or recommendation required.

*Prerequisites: Algebra 1*

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

## **INTRO TO PROGRAMMING CP**



### **10 Credits (#17423), Grades 9-12**

This course provides an introduction to essential computer science concepts, including problem-solving, algorithms, debugging strategies, and coding best practices, all taught through the Java programming language. Students will start with foundational topics such as data types, variables, arithmetic operations, conditional statements, loops, and methods. As they advance, they will explore data structures like arrays, deepen their understanding of object-oriented programming by working with classes and objects, and design interactive applications featuring graphical user interfaces. Through hands-on projects and engaging activities, students will build confidence and develop the skills needed to continue with Java programming in AP PLTW Computer Science A. Prerequisite: Algebra 1

## **AP PLTW COMPUTER SCIENCE A**



### **10 Credits (#17513), Grade 10, 11 & 12**

AP PLTW Computer Science A is a rigorous course that focuses on the design, development, and analysis of programs using the Java programming language to solve real-world problems. Key topics include object-oriented programming, algorithm development, and abstraction. Throughout the course, students will build strong computational thinking, logic, and problem-solving skills through hands-on activities and projects. By its conclusion, students will be thoroughly prepared for the AP Computer Science A exam and equipped with the knowledge and skills to continue studies in computer science at the collegiate level.

*Prerequisite: Completion of Programming 1, OR teacher recommendation.*

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

## **CREATIVE CODING CP (Practical Art)**

### **5 Credits, Grades 9, 10, 11, 12 (#69424)**

In this one-semester course, students will discover how computer science can be used to bring creative and imaginative ideas to life. Using JavaScript, students will create dynamic digital art, animations, and

applications. With a focus on essential computational thinking skills, self-expression through digital media, and foundational AI concepts, Creative Coding provides a strong base for future programming studies while showcasing the diverse applications of coding in art, design, and beyond.

Prerequisites none

### **VIDEO GAME DEVELOPMENT CP (Practical Art)**

#### **5 Credits, Grades 9, 10, 11, 12 (#69524)**

Jump into the world of video game development by creating your own games! Students will start with interactive animations and progress to sprite-based games. Along the way, develop essential programming skills while exploring the game development process, including key elements such as storytelling, design, and mechanics. By the end of the course, students will have a foundation in game development along with insights into potential career paths in the industry.

Prerequisites none

### **COMPUTER APPS CP (Practical Art)**

#### **5 Credits (#17524), Grades 9, 10, 11, 12**

Students explore design thinking, user research, and app design, while discovering how computer science can drive positive change in society. For their final project, students will team up to create an app that addresses a need within their community. Along the way, they will develop skills in creativity, problem-solving, and collaboration while tackling meaningful challenges with technology. This is a project-based course where 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. No programming experience necessary. This course is considered a practical art.

*Prerequisite: None*

### **COMMUNICATION/MEDIA 1 - CP (Practical Art)**

#### **5 Credits (#81004) Open to Grades 9-12**

Discover your voice and creativity in Communication/Media 1! This dynamic, hands-on course invites you to step into the exciting world of media production and broadcasting. Whether you're curious about creating podcasts, producing news segments, or diving into multi-camera TV production, this course offers the tools and experience to help you shine.

Communication/Media 1 is project based and includes direct instruction as well as experience in producing and broadcasting TV. This course ties into the CHSTv Club, a student driven group that that showcases all the great events that are part of CHS. The topics include:

- Overview of Mass Media (Radio, TV, Internet)
- News Media
- Pod Casting
- Impact and Effect of Advertising on Media



- Ownerships of Various Media
- Public Service Announcements
- Introduction to Multi-camera Production
- Visual Effects from the Fine Arts Angle
- Script writing
- Subject Lighting
- Conducting and Taping Interviews
- Journalism

*Prerequisites: None*

### **TV & BROADCASTING 1 and 2 - CP (Practical Art)**

#### **5 Credits (#81204, #81304) Open to Grades 9-12**

Step behind the scenes and bring stories to life with TV & Broadcasting! In this course, you'll gain the skills to produce television programs, from concept to broadcast. Learn technical operations, assess audience impact, and create short, engaging segments that inform and entertain. This course ties into the CHSTv Club, a student driven group that showcases all the great events that are part of CHS.

### **TECHNOLOGY TROUBLESHOOT AND REPAIR - CP (Practical Art)**

#### **5 Credits (#68021) Open to Grades 9-12**

Do you want to learn how to troubleshoot and repair computers? Students will learn the steps and processes needed to fix computers in a help desk environment. The class will focus on technologies at Chelmsford High School such as Chromebooks, Chromeboxes, ClearTouch panels, Chrome operating system, Chrome browser, and troubleshooting of other platforms. Pupils will learn about hard drives, fixing printing issues, and troubleshooting WiFi. Find out how technologies are deployed and maintained at Chelmsford High School. Design process thinking will be applied to fixing technologies in real-world settings. This course will prepare you to work on a Student Help Desk and give you valuable information technology skills.

*Prerequisites: Enrollment is limited.*

### **STUDENT HELP DESK INTERNSHIP - CP - Spring Semester (Practical Art)**

#### **5 Credits (#68024) Open to Grades 9-12**

Do you want to be part of an exciting technology opportunity where you will work with computer technicians and other students to be the first point of contact for students, staff and faculty seeking assistance for technology issues at CHS? Apply skills learned in the Technology Troubleshoot and Repair class(#68021) to technology issues in Chelmsford Public Schools equipment. Diagnose, repair and replace equipment as assigned while working in conjunction with CPS technicians. Learn more while working in a guided learning situation.

*Prerequisites: Enrollment is limited. Teacher approval. and Coordinator approval.*

## **ENGINEERING**

CHS Engineering courses provide an engaging hands-on application of STEM skills and immerse students in exciting experiences which empower students to move into engineering careers. The classes are project based and showcase student products by providing opportunities in CAD, parts design, 3D printing, drones, computer numerical controllers (CNC) router projects, Go Pro use, plastics engineering, circuit theory, robotic manufacturing and, architectural design, mechanical and electrical engineering.

Engineers solve problems by using their own innovative ideas and applying them to authentic problems to create a new reality. Engineering skills are in high demand and CHS courses engage students in compelling, real-world challenges to develop a problem solving mindset which will serve them well in college and beyond. Project Lead the Way (PLTW) courses add an additional dimension of competitions, showcases scholarships and internships.

### **ROBOTICS I and II – CP (Practical Art)**

**5 Credits (#69824, #69924), Grade 9 - 12**

Robotics is a one semester hands-on, project based course that focuses on creative problem solving and machine behaviors. The robots are built with VEX V5 Clawbots and can be programmed in blocks, Python or C++. Each class will be presented with similar components and programming exercises, but the challenges that students will solve will vary from term to term. This Robotics course ties in with the after school Robotics Club and all course students can participate in the competitions if they wish. The general types of exercises will include: following a wall or a line, knocking things over, picking up and moving objects. The challenges will be inspired by real world problems that robots face—search and rescue, moving of hazardous waste, warehouse management, etc. This course may be used for Practical Arts credit.

*Prerequisite: None*



### **PLTW: INTRODUCTION TO ENGINEERING DESIGN - CP, H EGR 101**

**10 Credits CP (25313), H (#25323) Open to Grades 9-12**

Transform Your Ideas Into Reality: Join Our Full-Year Technology Course! Are you ready to take your creativity and problem-solving skills to the next level? This yearlong course is perfect for students who love hands-on projects and want to dive deep into the exciting world of engineering and design. You'll get to:

- Explore the Engineering Design Process: Use your math and science knowledge to tackle real-world challenges.
- Create with Cutting-Edge Tools: Work with 3D modeling software to bring your ideas to life.
- Collaborate and Innovate: Team up with classmates and work individually to design solutions that make an impact.

*Prerequisites: None*

### **PLTW: PRINCIPLES OF ENGINEERING — H**

**10 Credits (#25413) Open to Grades 9-12**

Ready to tackle exciting challenges and explore cutting-edge technology? This yearlong course is packed with hands-on projects and opportunities to unleash your inner engineer. Here's what you'll get to do:

- Dive Into Engineering Topics: From building mechanisms and automating systems to designing bridges, working with series and parallel circuits, creating solar cars, programming microcontrollers, and flying drones—there's never a dull moment!
- Take On Big Challenges: Use your knowledge to design and build amazing creations, like a self-powered car that runs on its own.
- Build Essential Skills: Learn how to solve problems, conduct research, and design like a pro, all while mastering collaboration, presentation, and documentation strategies.
- Get Hands-On with PLTW: Through Project Lead the Way, you'll gain real-world experience in the

engineering process and develop skills that are in high demand.

*Prerequisites: None*

### **PLTW COMPUTER INTEGRATED MANUFACTURING - H**

**10 Credits (#25513), Grade 10-12** Step Into the Future: Explore Advanced Robotics and Modern Manufacturing! Ever wonder how the everyday items you use are made? This course is your gateway to understanding the incredible, high-tech world behind the products we use every day. Modern manufacturing is more than assembly lines—it's a world of high-tech innovation and creativity! In this exciting course, you'll:

- Discover Advanced Robotics: Learn how robots and automation are transforming manufacturing and engineering industries.
- Design and Create: Dive into product design and manufacturing processes, and see your ideas come to life.
- Explore Career Opportunities: Uncover pathways to professional careers in cutting-edge fields of engineering and technology.
- Learn By Doing: Get hands-on experience with tools and concepts that are shaping the future of how things are made.

Manufactured items are part of everyday life, yet most students have not been introduced to the high-tech, innovative nature of modern manufacturing. Advanced Robotics is the core of the modern manufacturing process. This course illuminates the opportunities related to professional careers in all fields of engineering. At the same time, it teaches students about manufacturing processes, product design, advanced robotics, and automation.

*Prerequisite: None*

### **TOOLS AND WOODWORKING I- CP**

**5 Credits (#69224), Grade 9 - 12**

Get hands-on with tools and machines in this course. You will design and build modular projects. Explore cutting-edge woodworking techniques, learn technical drawing. Work solo and in teams, while staying safe and learning industry standards. Perfect for future makers and innovators!. Safety is key, you will learn industrial standards and procedures while creating real-world projects. Understanding and adhering to Industrial Safety Standards is a primary requirement for each student. You'll also gain hands-on experience with material processing, measurement systems, and the technical aspects of design, including scale, proportion, and perspective. This course prepares you for future careers in design, construction, engineering and technology. Build practical skills while fostering creativity, teamwork, and problem-solving, all within a supportive environment.

Written tests will include vocabulary, machine safety, measurement and industrial concepts in current manufacturing practice.

*Prerequisite: None*

### **INTRODUCTION TO ARCHITECTURE AND CIVIL ENGINEERING - CP**

**10 Credits (#69523), Grade 9 - 12**

Architecture and Civil Engineering is the study of the design and construction of residential and commercial building projects. The course includes an introduction to many of the varied factors involved in building design and construction including building components and systems, and careers in the design and construction 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 instructional 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 maintain an A average in their current course.

### **ALGEBRA I – H, CP, CP2**



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

This Algebra I course encompasses the following topics: 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.

### **GEOMETRY – H, CP, CP2**



**10 Credits (#13213, #13223, #13233), Grades 9 & 10**

**All levels of Geometry will address similar topics, but the depth and pace of instruction will be tailored to meet the students' abilities, backgrounds, and needs.**

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. The Geometry H course focuses more heavily on proof-writing than the other levels of geometry offered. This course may be taken concurrently with Algebra II.

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

### **ALGEBRA II – H, CP, CP2**



**10 Credits (#14213, #14223, #14233), Grades 10 & 11**

This Algebra II course encompasses the following topics: Linear Functions (review), Quadratic Functions, Complex Numbers, Polynomial Functions, Rational Exponents and Radical Functions, and selected lessons

from Rational Functions. 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. *Prerequisite for Honors: Algebra I H with a grade of 85%, Algebra I CP with a grade of 95% or higher and the recommendation of your teacher.*

## **QUANTITATIVE REASONING AND PROBLEM SOLVING – CP**



**10 Credits (#14433), Grades 11 & 12**

This two semester yearly course is designed for students who have successfully completed Algebra II. The objective of this course is to enable students to see modern usage of mathematical applications in the real world. One semester will focus on topics which include: mathematical decision making with regard to stocks, car interest rates, inflation, personal finance and budget. The remaining semester will focus on researching home market data analysis to make conjectures for logical progression of market trends, calculate mortgage rates & loans, calculate commission percentages, taxes and proration, escrow, closing costs, down payment and residency budget. This course will help students develop college and career skills such as collaborating and conducting research which will prepare them for real world math application.

*Prerequisite: Algebra II*

## **PRE-CALCULUS – H**



**10 Credits (#15213), Grade 11**

Honors Pre-Calculus is designed to cover those topics essential to the study of calculus. 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. 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 and the recommendation of your teacher.*

## **PRE-CALCULUS – CP & CP2**



**10 Credits (#15223, #15233), 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.

For students interested in taking AP Calculus, successful completion of Pre-Calculus Honors is necessary.

*Prerequisite: Algebra II*

## **INTRODUCTION TO STATISTICS – CP**



**MAT 177**

**10 Credits (#15423), Grades 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 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. Intro to Stats may be taken for Dual Enrollment credit.

*Prerequisite: Algebra II H or CP*

## AP STATISTICS

**10 Credits (#15413), Grade 10, with special exceptions, Grades 11 & 12 predominantly.**

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.

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, Algebra II CP with a grade of 90% or higher. Students may request to take AP Statistics concurrently with Algebra II H. Priority will be given to 11th and 12th graders. A teacher recommendation and completion of summer work are required for all students.*

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

## CALCULUS I – CP

**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 as a way of helping students to think mathematically and to connect their learning to the real world.

*Prerequisite: Pre-Calculus H or CP*

## AP CALCULUS AB

**10 Credits (#16313), Grade 12**

Advanced Placement Calculus AB 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 AP Calculus AB test.

*Prerequisite: Pre-Calculus H, teacher recommendation and completion of a summer work is required for all students.*

Note: Visit College Board Advanced Placement online to see a complete list of topics for AP Calculus AB and AP Calculus BC.

## 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 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 AP Calculus BC test. Students who take the AP Calculus BC test will also receive an AP Calculus AB score.

*Prerequisite: Pre-Calculus H, teacher recommendation and completion of a summer work is required for all students.*

## WORLD LANGUAGE

The World Language Department offers classes that develop and refine communication skills, promote intellectual curiosity, and broaden cultural awareness. In order to prepare our graduates to become citizens of the world, students at Chelmsford High School are required to study **two** sequential years of language, but are **strongly recommended** to study a third and fourth year. A variety of instructional strategies, visual and print media sources, and technology tools are used to recreate an authentic learning environment. Active participation in class discussion and completion of assignments beyond classroom instruction are essential aspects to being successful and achieving proficiency in another language.

## AMERICAN SIGN LANGUAGE 1 CP



**10 credits (#48123) Grades 9, 10, 11**

This course is an introduction to American Sign Language (ASL) and the Deaf Community. Through this course, students will learn basic ASL vocabulary, grammar, sentence structure, and the cultural foundations of ASL. Students will learn the manual alphabet (i.e., fingerspelling), numbers, and basic ASL vocabulary (e.g., vocabulary related to family, occupations, clothing). Students will work on developing both an expressive and receptive understanding of WH questions, Yes/No questions, basic sentence structure, directional verbs, and the use of imperatives. Conversational skill practice will be emphasized throughout the course. Students will also have an opportunity to view and discuss cultural information related to both ASL and the Deaf Community. With successful completion of this course, students will be at the Novice High proficiency level of the Massachusetts World Language Framework.

*It is recommended that students who choose ASL 1 CP on the course selection sheet also make an alternative language selection. Enrollment in this year long course counts towards the two year requirement for world language credit.*

*Prerequisites: None*

## AMERICAN SIGN LANGUAGE 2 CP



**10 credits (CP#48123) Grades 10, 11, 12**

This course is a continuation of ASL 1. Students will continue to develop proficiency in the three modes of

communication: interpersonal, interpretive, and presentational. Students will continue to practice and refine their fingerspelling and signing skills and expand their knowledge of the Deaf community and culture. Conversational skill practice will be emphasized throughout the course. Students will communicate about topics relating to holiday gatherings, food preparation, daily routines, and academic choices. Students will also have an opportunity to view and discuss cultural information related to both ASL and the Deaf Community. With successful completion of this course, students will be at the Intermediate Low - Mid proficiency level of the Massachusetts World Language Framework.

Prerequisite: *Students must have completed ASL 1 in the 2020-21 academic year in order to enroll in this course.*

*Enrollment in this full year course counts towards the two year requirement for world language credit.*

### **AMERICAN SIGN LANGUAGE 3**

#### **10 credits (H #48313) Grades 11, 12**

This course is for students who have successfully completed ASL 2. Students will continue to increase their knowledge of vocabulary on a variety of topics and practice more with storytelling and narrating events. Conversational skills practice will be emphasized throughout the course. Students should expect to learn more about the Deaf community and culture and to discuss cultural information related to ASL and the Deaf community. With successful completion of this course, students will be at the Intermediate Mid - High proficiency level of the Massachusetts World Language Framework.

Prerequisite: *Students must have completed ASL 2 in the 2022-23 academic year in order to enroll in this course.*

*Participation in the Honors level is by teacher recommendation and requires strong Intermediate Low proficiency. Enrollment in this full year course counts towards the two year requirement for world language credit.*

### **FRENCH 1—CP**



#### **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 at this level. French will be used as much as possible during classroom instruction.

It is recommended that students who choose French 1 CP 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. With successful completion of this course, students will be at the Novice High proficiency level of the Massachusetts World Language Framework.

*Prerequisites: None*

### **FRENCH 2**



#### **10 Credits (2H - #41313; 2CP - #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. Students will continue to expand their vocabulary base and increase their knowledge of verb conjugation and time frame. Class will be conducted primarily in French.



With successful completion of this course, students will be at the Intermediate Low - Mid proficiency level of the Massachusetts World Language Framework.

Prerequisite: French 1 *Participation in the Honors level is by teacher recommendation and requires strong Novice High proficiency.*

### FRENCH 3



#### 10 Credits (3H - #41513; 3CP - #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*. Class will be conducted in French. With successful completion of this course, students will be at the Intermediate Mid - High proficiency level of the Massachusetts World Language Framework.

Prerequisite: French 2

Participation in the Honors level is by teacher recommendation and requires strong Intermediate Low proficiency.

### FRENCH 4



#### (LAN 212 (CP))

#### 10 Credits (4H - #42013; 4CP - #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 audio visual 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. With successful completion of this course, students will be at the Intermediate High proficiency level of the Massachusetts World Language Framework.

Prerequisite: French 3

Participation in the Honors level is by teacher recommendation and requires strong Intermediate Mid proficiency.

### AP FRENCH LANGUAGE AND CULTURE



#### 10 Credits (#42913), Grade 12

This course is designed for students who have successfully completed French 4 Honors and prepares students to take the AP French Language and Culture exam at the end of senior year. Students 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 nonfiction 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 will be conducted exclusively in French. With successful completion of this course, students will be at the Advanced Low proficiency level of the Massachusetts World Language Framework.

*Prerequisite: French 4*

Participation in the Honors level is by teacher recommendation and requires strong Intermediate High proficiency.

## **SPANISH 1—CP**

**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 communication at this level. Spanish will be used as much as possible during classroom instruction. With successful completion of this course, students will be at the Novice High proficiency level of the Massachusetts World Language Framework. *It is recommended that students who choose Spanish 1-CP 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.*

*Prerequisites: None*

## **SPANISH 2**

**10 Credits (2H - #43313; 2CP - #43323), 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. Students will continue to expand their vocabulary base and increase their knowledge of verb conjugation and time frame. Class will be conducted primarily in Spanish.

With successful completion of this course, students will be at the Intermediate Low - Mid proficiency level of the Massachusetts World Language Framework.

*Prerequisite: Spanish 1*

Participation in the Honors level is by teacher recommendation and requires strong Novice High proficiency.

## **SPANISH 3**

**10 Credits (3H - #43513; 3CP - #43523), 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. With successful completion of this course, students will be at the Intermediate Mid - High proficiency level of the Massachusetts World Language Framework.

Prerequisite: Spanish 2 Participation in the Honors level is by teacher recommendation and requires strong Intermediate Low proficiency.

**SPANISH 4**  **(LAN 252 (H))**

**10 Credits (4H - #44013; 4CP - #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. With successful completion of this course, students will be at the Intermediate High proficiency level of the Massachusetts World Language Framework.

Prerequisite: Spanish 3

Participation in the Honors level is by teacher recommendation and requires strong Intermediate Mid proficiency.

**AP SPANISH LANGUAGE AND CULTURE** 

**10 Credits (#44913), Grade 12**

This course is designed for students who have successfully completed Spanish 4 Honors and prepares students to take the AP Spanish Language and Culture exam at the end of senior year. 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 will be conducted exclusively in Spanish. With successful completion of this course, students will be at the Advanced Low proficiency level of the Massachusetts World Language Framework.

Prerequisite: Spanish 4

Participation in the Honors level is by teacher recommendation and requires strong Intermediate High proficiency.

## **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 encourages 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.

## ART

### **APPRECIATING THE ARTS – CP**

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

This is a hands-on, introductory course for students interested in learning about the history of art through a wide range of activities including group discussions, written assignments, and studio art projects. 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 throughout history.

*No previous art course or experience is required.*

### **STUDIO 1 —FOUNDATION COLOR AND DRAWING – CP**

#### **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. Drawing and painting will be explored in depth. Students will be introduced to a variety of new mediums such as a variety of drawing mediums, watercolors, acrylic paint, etc. Studio 1 is the prerequisite for Studio 2

*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 – CP**

#### **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). New materials that will be explored include paper mache, clay, cardboard, plaster, recycled materials, etc. Studio 1 and Studio 2 serve as the prerequisites for Studio 3.

*Prerequisite: Studio 1(#51224). Studio 1 and 2 may not be taken during the same semester.*



### **STUDIO 3 – CP**

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

In Studio 3, students will continue to develop their artistic skills while expressing their own ideas and creating work that is both personal and follows project guidelines. Students will create both 2-dimensional and 3-dimensional work with a variety of materials including drawing mediums, watercolor, acrylic, collage, printmaking, clay, etc.

*Prerequisite: Studio 2(#51524)*

### **CLAY STUDIO 1 – CP**

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

This course will focus on using clay as an artistic medium and as a way of creating functional ceramic pieces.

Students will develop hand building skills such as making pinch pots, coiling, and slab building. Projects may include but are not limited to: coil pots, mugs, bowls, lidded jars, teapots, clay figurines, wall hangings, and ceramic jewelry.

*Prerequisites: Studio 1(#51224).*

## **CLAY STUDIO 2– CP**

### **5 Credits (#51024) Open to Grades 10-12**

In this course students will expand on the skills they learned in Clay 1 and practice more advanced techniques, with the goal of creating a body of ceramic work that is unique and meaningful to the student. Students will learn how to throw on the potter's wheel and experiment with a variety of finishes including glazes, stains, and paint. Projects may include but are not limited to: mixed media work, masks, woven ceramic bowls, and larger vessels.

*Prerequisites: Clay 1 (#51124)*

## **HONORS ART PORTFOLIO 1 – H**

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

This class is intended for students who wish to create a portfolio of 2-dimensional and/or 3-dimensional work, including students who are considering majoring or minoring in art in college or pursuing a career in the field of art. Students will be encouraged to develop and advance their artistic skills in working with various mediums as well as idea generation and expression.

*Prerequisite: Studio 3(#51623) and teacher recommendation*

## **AP ADVANCED ART PORTFOLIO 2: DRAWING**

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

This class is intended for students who wish to create a portfolio of drawing-focused work which they will submit to the College Board for AP Portfolio Review. It is recommended for students who are planning to major or minor in art in college or who may pursue a career in the field of art. Students will be encouraged to create work that is meaningful and personal to them and executed with a high level of technical skill.

*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 class is intended for students who wish to create a portfolio of 2D design-focused work which they will submit to the College Board for AP Portfolio Review. It is recommended for students who are planning to major or minor in art in college or who may pursue a career in the field of art. Students will be encouraged to create work that is meaningful and personal to them and executed with a high level of technical skill.

*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 – CP**

**5 Credits (#53824 (CP), #53844 (DE)) 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 digital editing skills. Students will be required to complete weekly assignments and will create a portfolio of their work by the end of the course.

*Prerequisites: None*

### **DIGITAL PHOTOGRAPHY II – CP**

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

This course will further develop students' understanding of photographic techniques, digital editing, and artistic expression through photography. Assignments will focus on creating photographic series around specific concepts.

*Prerequisite: Intro to Digital Photography(#53824)*

### **GRAPHIC DESIGN – CP**

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

This class will give students a basic understanding of the Adobe Creative Suite. Using the elements of art and principles of design, students will learn color theory, typography, branding and layout while learning to solve creative problems. Students will learn the design skills of researching, sketching and idea development before using the computer as their final design tool.

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

### **ANIMATION– CP**

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

In this class, students will learn the basic principles of animation through exposure to both 2D and 3D design programs and processes. Throughout the class, students will discuss the history and evolution of animation and explore varying techniques and approaches to this exciting multimedia course.

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

## **MUSIC**

The Music Department at Chelmsford High School provides students with many opportunities to develop self-expression and aesthetic sensitivity. Course selections vary from large group performance ensembles to a variety of non-performance courses.

### **MUSIC THEORY 1 – CP**

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

In Music Theory 1 students will learn the fundamentals of note reading, chord structure, chord progressions, scales, key and key signatures. 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. Significant work is required outside of class.

*Prerequisite: Successful completion of Music Theory I(#54623) with teacher recommendation or completion of a theory knowledge assessment (see Department Coordinator)*

### **HONORS TRACK PERFORMANCE ENSEMBLES:**

**BAND - H (#57013) – Open to grade 9-12**

**TREBLE CHOIR - H (#57513) – Open to treble voices grades 9- 10**

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

**ORCHESTRA - H (#58013) Open to grade 9-12**

**See individual course descriptions below:**

**Band, Treble Choir, Concert Choir, and 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 or equivalent adjudicated experience at the approval of the director
- 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: Brass & Woodwinds – CP**

**10 Credits (#57223) Open to Grades 9-12**

The Band program is open to all students who play a wind instrument (previous experience in middle or high school band is highly recommended). 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 Athletic Pep 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).

*Prerequisite: None*

### **BAND: Percussion – CP**

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

The Band: Percussion class is open to all students who play a percussion instrument (previous experience in middle or high school band is highly recommended). Students enrolled in this course will participate in Percussion Ensemble, 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 Athletic Pep Band, musical pit orchestra, 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).

*Prerequisite: None*

### **TREBLE CHOIR – CP**

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

The Treble Choir is a performing vocal ensemble open to sopranos and altos in grades 9 through 10. 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 – CP**

#### **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*

### **ORCHESTRA – CP**

#### **10 Credits (#58023) Open to Grades 9-12**

This performance ensemble is for students who wish to perform advanced orchestral repertoire. 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: None*

### **EXPLORING POPULAR MUSIC – CP**

#### **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 topics will be addressed, and examples of many styles of music will be played, listened to, and discussed.

*Prerequisite: None*

### **DIGITAL MUSIC - CP**

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

This course will focus on exploring music by using digital technology. Students will use a cloud-based program



called Soundtrap to create and edit music. Some projects include composing original music, remixing and sampling, sound effects, and podcast creation.

*Prerequisite: None*

## **GUITAR 1 – CP**

### **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, and trios. Students may bring their own guitars to class, or use the guitars provided by the school.

*Prerequisite: None*

## **ADVANCED GUITAR – CP**

### **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 fretboard, transposition, trios and ensemble playing in many styles: blues, country, classic and rock.

*Prerequisite: Guitar 1 (#59024)*

## **THEATRE**



## **INTRO TO ACTING AND PLAY PRODUCTION – CP**

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

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). Students will also work on scenes for the beginning actor. In addition, students will learn the basics of stage makeup 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.

This course will be designed to meet the needs of the beginning actor, as well as to improve students' confidence in public speaking, verbal and nonverbal communication. Students will learn a variety of theater games and warm-ups; body language through pantomime; vocal techniques including diction, inflection, and breath support; and basic elements of acting including exits and exits, crosses, stage direction, eye contact, and the fourth wall. Students will apply these skills to the study of short scenes to be performed in the classroom.

*Prerequisite: None.*

## **DIGITAL FILMMAKING:- CP**

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

This course is designed for all students interested in film and video production. Students will learn the historical roots of film. Students will learn about how soundtrack influences a production, what defines a genre, and how to create a storyboard and screenplay. Students will create their own short films and incorporate the use of

camera angles, framing and camera shots to create an intentional experience for their audience members. This course is a hands-on experience!

*Prerequisite: None*

## **WELLNESS (PE/HEALTH)**

### **PHYSICAL EDUCATION Grade 9-ELECTIVES**

#### **YOGA AND FITNESS**

##### **5 Credits (#76404)**

This is a freshman elective course that will integrate the principles of yoga, cardio, and strength training. The course is designed to build strength and endurance, improve balance, increase flexibility, improve cardio health and meld movement and breath. This course will work on building self confidence, communication skills, and teamwork while working on adventure activities and the low ropes course. In this course you will have an opportunity to explore your own personal fitness levels and goals while working towards achieving these goals in and outside of school.

#### **LIFETIME SPORTS**

##### **5 Credits (#77124)**

This is a freshman elective class that will focus on sports/activities that use a net. This course will be centered on the sports of badminton, pickleball, triangle ball, disc golf, 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 a brief introduction to personal fitness with a focus on learning about the basics of strength and conditioning.

### **Grade 10 REQUIRED**

**Please choose ONE of the following courses to fulfill the Grade 10 Physical Education requirement.**

#### **EXERCISE AND CONDITIONING 10**

##### **5 Credits (#76354)**

This course is designed to give students the opportunity to learn the components of fitness concepts and conditioning techniques used for obtaining optimal physical fitness. Students will learn how to safely use various exercise equipment, the basic fundamentals of strength training, aerobic training, and overall fundamentals of fitness training and conditioning in the Fitness Center and Gymnasium. Principles of strength training, elements of cardiovascular health, basic anatomy and physiology, and the elements of a personal fitness plan are topics covered during the course. Students will be empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime. All students will receive instruction in hands-only CPR as part of this course.

## **TEAM GAMES 10**

### **5 Credits (#77154)**

This class is designed for students who enjoy participating in team sports (i.e., basketball, soccer, ultimate Frisbee, floor hockey, etc.). In 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 through different games and sports. A great deal of emphasis is placed upon demonstrating good sportsmanship and character qualities, while developing the skills necessary to participate in both competitive and different high and low ropes course challenges. All students will receive instruction in hands-only CPR as part of this course.

## **WELLNESS ACTIVITIES 10**

### **5 Credits (#77924)**

This class is designed to improve muscular strength, endurance, flexibility, posture, balance, and relaxation techniques. Students will gain an 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 work on building self confidence, communication skills, and team cooperation while working on adventure activities and the low ropes course. All students will receive instruction in hands-only CPR as part of this course.

## **Grade 11 REQUIRED**

**Please choose ONE of the following courses to fulfill the Grade 11 Physical Education requirement.**

## **TEAM GAMES 11**

### **5 Credits (#77824)**

This class will provide students with opportunities to enjoy traditional team sports and games (i.e., floor hockey, basketball, volleyball, team handball, etc.) as well as some non-traditional activities like disc golf, low ropes course, high ropes course, etc. In this class, the curriculum is designed to advance students' 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 game play as well as the high and low ropes courses.

*Prerequisite: Passing grade in Sophomore Physical Education Class*

## **WELLNESS ACTIVITIES 11**

### **5 Credits (# 77624)**

This class is designed to improve muscular strength, endurance, flexibility, 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 fitness walking activities as the primary activity. This course will also include the low ropes adventure course, cooperative games and elementary games which will work on building self-confidence, self-esteem, problem solving skills and communication skills.

*Prerequisite: Passing grade in Sophomore Physical Education Class*

## **STRENGTH AND CONDITIONING 11**

### **5 Credits (#76304)**

This course is designed to give students a deeper look into the components of fitness concepts and

conditioning techniques used for obtaining optimal physical fitness. Students will learn advanced fundamentals of strength training, aerobic training, and overall fundamentals of fitness training and conditioning in the Fitness Center and Gymnasium. Principles of strength training, elements of cardiovascular health, anatomy and physiology, and the elements of a personal fitness plan will be worked on in this course. Students will be empowered to make healthy choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime. *Prerequisite: Passing grade in Sophomore Physical Education Class*

## **Grade 11/12 ELECTIVES**

### **ADVANCED PHYSICAL EDUCATION (PE)**

#### **5 Credits (#76204)**

This is an elective option for juniors and seniors who enjoy participating in team sports (i.e., basketball, capture the flag, soccer, ultimate Frisbee, mat ball, floor hockey, etc.). In Advanced PE, 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 the 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, and developing the skills necessary to participate in different team sports, lifetime sports, as well as the high and low ropes courses.

### **TECHNIQUES AND PRINCIPLES IN ATHLETIC TRAINING**

#### **5 Credits (#77524)**

The purpose of this class is to prepare students in skills used in the fields of Sports Medicine-and-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.

### **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. Selection into this course will be based on an application process in addition to the student's scheduling needs.

## HEALTH and WELLNESS

### Grade 9 Required Course

#### **LIFE MANAGEMENT SKILLS - CP**

##### **5 Credits (#73024)**

This course is designed to assist students in making positive choices related to physical, mental/emotional, and social health. This class focuses on developing students' skills in the areas of: accessing valid & reliable information; analyzing influences; interpersonal communication skills; decision making skills; goal setting; and advocacy. The content of this course will focus on: leading causes of death and prevention; stress management, time management, and mental health; dating, relationships; substance, use, abuse, and addiction; nutrition and fitness; and responsible social media use. 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.

#### **Grade 12 Required**

Please choose 1 of the three following health and wellness courses listed below to fulfill the graduation requirement during your Senior year. A second or third course can still be taken as an elective outside of this graduation requirement in either your Junior or Senior year. Taking a health elective your Junior year does not replace the required health class your Senior year.

#### **REALITY CHECK - CP**

##### **5 Credits (#75024)**

The Reality Check course is open to juniors and seniors in High School who want to gain the health skills and tools necessary to move on to the next step of their lives after high school and to set the foundation for a lifetime of health and wellness. This course will focus on the reality of today and assist students in identifying the skills necessary to navigate through that reality. They will build skills in:

- Understanding and analyzing influences on one's health behaviors;
- Using interpersonal communication for their personal and family's health and wellness;
- Making decisions that improve health outcomes;
- Setting goals for a health-enhancing lifestyle;
- Managing oneself to better health;
- Becoming an advocate for one's own health and wellbeing.

Students are invited into a classroom environment geared toward each of them building their own skills while gaining and refining their personal skills in order to become an effective member of their Reality Check Team.

*Prerequisite: Passing grade in Life Management Skills Class*

#### **NUTRITION: THE POWER OF CHOICE - CP **BIO 108****

##### **5 Credits (#75324 (CP), #75344 (DE))**

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? In this class, students will develop the following skills all

within the context of nutrition: goal setting; your personal nutritional needs; food labeling; measurement and portion control; fuel analysis; meal prep and meal planning; and fitness planning. The Power of Choice is yours!  
*Prerequisite: Passing grade in Life Management Skills Class*

## **MODERN TOPICS OF HEALTH SCIENCES – CP**

### **5 Credits (Need course #75224)**

This course explores contemporary issues and advancements in the field of health sciences, offering students a strong foundation for future academic and professional pursuits in health-related fields. Students will explore key units such as medical ethics, where they will analyze real-world case studies and ethical dilemmas in modern medicine, and epidemiology, focusing on the patterns, causes, and impacts of disease outbreaks. The course also examines human infectious diseases, providing insights into their prevention, treatment, and global implications. In the public health unit, students delve into healthcare disparities, policies, and international efforts to improve health outcomes. Lastly, the introduction to health professions module explores various careers in the health sector, from medicine and nursing to public health and allied health professions, exploring the required skills, education, and career pathways within these fields.

*Prerequisite: Passing grade in Life Management Skills Class*

## **FAMILY AND CONSUMER SCIENCES**

**Grades 9, 10, 11, & 12**

### **CHILD GROWTH AND DEVELOPMENT- CP EDU 122**

#### **5 Credits (#67024)**

This course provides a chronological overview of the theory and principles of child growth and development from birth through age twelve, exploring the interrelationships between theory, research, and practice. Students will also learn about understanding children with special needs and keeping young children safe and healthy. The focus of this course is to prepare the student with knowledge of growth and development to enhance their ability to provide educational experiences. This course is especially designed for students interested in pursuing course work or careers in education, health, or human services fields. Throughout the course, students will work, on a rotating basis, in the in-house preschool, Lion's Pride North. Students who are 17 & 18-years-old will be asked to fill out a C.O.R.I. form before they begin working with the young children. This course is considered a practical art.

**Grades 10, 11, & 12**

### **DISCOVER TEACHING- CP EDU 150**

#### **5 Credits (#67424)**

This course will explore the major aspects of teaching and learning, and is intended to help students decide if they want to pursue a career in Prek-12 education. Course topics will focus on the field of education as it relates to curriculum development, lesson planning, assessment, licensure as well as an overview of historical and theoretical foundations of education. Students will be introduced to the curricula used in the Chelmsford Public Schools: Math Expressions, Foundations, and Fountas and Pinnell. Included will be discussions around

diversity, equity, and inclusion and will provide students with time to combine classroom instruction with hands-on participation working with preschool children in the Lion's Pride North Preschool (our in-house preschool). Students who are 17 & 18-years-old will be asked to fill out a C.O.R.I. form before they begin working with the young children.

*Prerequisite: Successful completion of Child Growth and Development.*

## *Grades 11 & 12*

### **SUPERVISED EDUCATION PRACTICUM AND SEMINAR- CP EDU 100 10 Credits (#67623)**


In this full-year field-based practicum, students will progress from observing, to working with individuals and small groups, to applying what has been learned through coursework and fieldwork experiences in a Prek-8 classroom within the Chelmsford Public Schools. With the help of the supervising teacher and by working with the students in their chosen classroom, students will gain a more comprehensive understanding of the day-to-day operations of teaching. In this course, students will have an opportunity to talk with current educators and administrators in the field of education to broaden their knowledge and help support them in their next steps. The seminar portion of the course will serve as an open forum to self-assess, discuss, and reflect what has been learned from practicum experiences. This course is especially designed for students interested in pursuing course work or careers in education, health, or human services fields. Students who are 17 & 18-years-old will be asked to fill out a C.O.R.I. form before they begin working with children in the classroom.

*Prerequisite: Discover Teaching*

## **BUSINESS EDUCATION**


There is an Innovations Pathway for Business and Finance and students are encouraged to apply to this pathway as incoming grades 9 or 10.

Would you like to earn college credit for your high school courses? Most courses in the Business Department are optional Dual Enrollment and for a small fee those courses will earn 3 credits which can be transferred into

some colleges. Just look for the MCC symbol  next to the course name.

The Business department faculty seeks to provide all students with current conceptual and technology skills necessary to meet students' future career goals. The Business courses, develop valuable skills needed in every business such as creativity, critical thinking, problem solving, communication, and collaboration skills sought by business leaders when hiring. The Business curriculum combines the key elements of academic and 21st Century themes, while exposing students to today's global economic concepts. We utilize state of the art 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 an onsite LionsLocker School Store to display and sell student created products.

The Marketing, Accounting 1, Management, Business Ethics, Microsoft Office, and Business Career Pathways courses are part of the Innovations Pathways, an exciting opportunity that gives students four courses to build valuable business skills in preparation for college or career to explore all facets of business.

**ACCOUNTING 1—CP**  **BUS 221**

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

Are you ready to dive into the exciting world of accounting? Accounting 1—CP is a one-semester course designed just for you! In this class, you'll uncover the essential concepts of Financial Accounting, with a strong focus on computerized accounting practices that are vital in today's business environment.

Students will explore the fundamental concepts of Financial Accounting. High emphasis is on computerized Accounting practices by completing a variety of short and long term projects using *Mindtap Online Working Papers* and customized Google Sheets spreadsheet templates. Students will also get a taste of authentic Accounting in action as they observe and assist in the bookkeeping activities of DECA's Lions Locker School Store and Custom Apparel business.

*Prerequisites: No prerequisite for CHS Credit.*

*Prerequisite for DE Credit is Microsoft Office Certification Course #61524*

**BUSINESS ETHICS - CP**  **ETH 102**

**5 Credits (#61324) Open to Grades 10-12**

Step into the world of business where your decisions shape the future! This course provides an introduction to corporate social responsibility and ethics in strategic business settings. Through examining traditional and contemporary ethical philosophies, we look to gain a better understanding of how ethics is applied in business activities. To accomplish this, students will have to examine their own moral decision making in determining right and wrong. This course will develop the ability of each student to read and reason critically. Students will:

- Differentiate the legal point of view from ethical point of view
- Demonstrate an awareness of the primary governmental restraints on business, and to anticipate common occupational hazards
- Read closely, critically analyze and construct arguments
- Communicate effectively via written and oral discourse

Students in this course are also eligible and encouraged to participate in DECA

*Prerequisites: None*

**BUSINESS & CAREER PATHWAYS—CP**  **BUS 110**

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

Where do you see yourself in five years? Regardless of the career path our students choose, having strong business skills and knowledge is essential for success. In this engaging course, we'll explore various career options through research projects, guest speakers, and exciting field trips.

In addition, the American Economy is changing at a rapid pace and we're educating students for careers that aren't even invented yet. Students will gain a general understanding of the major disciplines of business in the 21st century, such as US and Global Business Environments, Entrepreneurship, Marketing and Personal and Business Finance, through the use of hands-on, enjoyable, and challenging activities. Lastly, students will develop skills essential to success in any career such as time management, communication, leadership, social media etiquette, public speaking and accountability. Students in this course are also eligible and encouraged to participate in DECA.

*Prerequisites: None*



## DESIGN AND PRODUCTION - CP

**5 Credits (#62124) Open to Grades 9-12** Do you have a flair for creativity? Are you excited to bring your unique ideas to life? Whether you're interested in designing custom apparel, mugs, phone cases, signs, or more, this course is perfect for you! You'll have access to powerful design software like Adobe Photoshop and Adobe Illustrator, which will help you turn your visions into reality. Students will also be heavily involved in the custom product operations of the Lions Locker school store. Students will create products incorporating their designs using state of the art heat presses, sublimation printing, and vinyl cutting equipment. The creative outlets for students in the class are endless. All levels of experience with design and design software are welcome. You'll learn teamwork, communication, problem-solving, and project management skills.

Students in this course are eligible for DECA team and competition. *Prerequisites: None*



## ENTREPRENEURSHIP - CP **BUS 130**

**5 Credits (#64124) Open to Grades 10-12**

Are you ready to bring your ideas to life and make an impact? In this course, you'll explore what it means to think like an entrepreneur and learn how to turn opportunities into thriving ventures. Dive into the dynamic world of business innovation, where decision-making and problem-solving are the keys to success. From identifying opportunities to creating value, this hands-on course blends theory and real-world case studies, to give you a 360-degree view of entrepreneurship. You'll develop your entrepreneurial mindset. This course is your launchpad for future success—whether you dream of starting your own business, driving innovation at a company, or simply learning how to think outside the box. Learn:

- How to spot opportunities and turn them into real-world solutions.
- Key decision-making and problem-solving skills used by successful entrepreneurs.
- Master the art of written and oral communication to pitch ideas and connect with experts.
- Dual Enrollment Opportunity: Earn college credit while you sharpen your entrepreneurial skills.
- Join DECA: Compete, network, and showcase your creativity with peers and industry leaders.

*Prerequisites: None*



## MICROSOFT OFFICE CERTIFICATION I - CP **CAP 101**

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

Ready to become a tech-savvy pro in the world's most widely used business software? This hands-on course will teach you how to master Microsoft Word, PowerPoint, Excel, and even introduce you to the Access Database. Through interactive tutorials, real-world projects, and instructor-led demonstrations, you'll learn the tips and tricks to use Microsoft Office efficiently and creatively. By the end of the course, you'll have the confidence to tackle academic assignments, manage data, and deliver standout presentations like a true professional.

*Prerequisites: None*



## MONEYSMART - CP **IDS 120**

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

Master Your Money, Master Your Future Are you ready to take control of your financial future? In this interactive and practical course, you'll learn the essential skills for financial success in today's world. Whether it's saving for college, managing credit, or making smart investments, MoneySmart equips you with the tools to make informed financial decisions for life. Through hands-on activities, simulations, and engaging presentations by banking professionals, you'll develop the confidence to take charge of your personal finances. From budgeting and car loans to the stock market and credit cards, this course turns complex financial concepts into skills you can use every day.

Key Topics Include:

- Education, Employment, and College Financing
- Managing Credit and Debit Cards
- Creating and Sticking to a Budget
- Saving, Investing, and Understanding Credit Use
- Consumer Decision-Making and Insurance Basics

Students will take part in a variety of realistic experiences throughout the semester including Personal Finance Simulation as well as a customized Investopedia stock market game. Banking professionals will engage the students in several interactive presentations. Financial Planning students are eligible for DECA competition.

*Prerequisites: None*

## MARKETING —CP BUS 240 5 Credits (#65024) Open to Grades 9-12

Dive into the exciting world of marketing and unlock your entrepreneurial potential! This dynamic course is your ticket to understanding how businesses connect with consumers, create effective advertising strategies, and make their mark in the global marketplace. Learn to craft compelling commercials, analyze consumer behavior, and develop marketing campaigns that truly resonate. You'll gain real-world skills beyond the classroom through hands-on experiences like filming with Chelmsford CHSTv and participating in DECA competitions. Discover the psychology behind buying decisions, master the art of market targeting, and unleash your creative potential in a course that's part classroom, part business bootcamp. Ready to transform your future? Join us and turn your marketing dreams into reality!

*Prerequisites: None*

## MANAGEMENT —CP BUS 210 5 Credits (#65424) Open to Grades 9-12

Discover the World of Business Leadership! Join an exciting semester-long journey that unlocks how businesses come to life and thrive! This dynamic course offers offering hands-on experiences that transform students into future business leaders. You'll explore the core skills of management - from strategic planning to effective leadership - while developing critical communication and decision-making abilities. Get ready for interactive computer simulations that bring business concepts to life! Plus, students have the incredible opportunity to showcase their skills by competing in DECA events, where classroom learning meets real-

world application. Whether you dream of launching your own startup or climbing the corporate ladder, this course is your ultimate launchpad to success in the business world!

*Prerequisites: None*

**E-COMMERCE MARKETING - CP  BUS 141**

**5 Credits (#65124) Open to Grades 9-12**

Dive into the exciting world of online business with our E-Commerce Marketing course! Designed for students in grades 9-12, this CP level course is perfect for those eager to explore how to successfully conduct business in the digital realm. Students implement technology that engage cardholders, merchants, issuers, payment gateways and other parties in electronic transactions. The importance of proper integration between an e-commerce website and various social media promotions will be a heavy focus of this course. You'll also consider the competitive landscape while constructing a solid online business model. The creative possibilities are endless, allowing you to express your ideas and innovations! In this experiential learning students will evaluate and update a working internet commerce site for the Lions Locker, CHS school store. Students will learn the importance of positioning a retail brand against target consumers, choosing category assortment, negotiating certain terms with vendors, setting prices and promotions, managing inventories, developing messaging and advertising through traditional methods as well as social media marketing while factoring in competition, and constructing a viable online business model. The creative outlets for students in the class are endless. Students in this course are also eligible and encouraged to participate in DECA. This Dual Enrollment course gives students the opportunity to produce and market products in today's heavily e-commerce environment.

*Prerequisites: None*

**SENIOR CAPSTONE EXPERIENCE**

Starting in the Spring of 2020, Seniors at Chelmsford High School will be granted the opportunity to embark on a Senior Capstone Experience. Seniors are encouraged to participate in the 4th quarter experience in one of the following ways: **Please speak to your counselor about this opportunity!**

**WORKPLACE EXPERIENCE: Senior Internship Preparation Course**

**5 Credits (#72302)**

**FOR SENIORS WHO ARE IN GOOD ACADEMIC STANDING**

This course is designed to be a precursor to the work that is done during the 4th term, Senior Internship Program. Students will begin to develop critical skills to be successful in the workforce in years to come. Specific skills addressed include: writing a resume; crafting a cover letter; and developing interview skills. Students will also complete career interest surveys and aptitude tests to support informative decisions in career choice for their future. During the third term, students will also be working on securing their internship for the fourth term. At the beginning of the fourth term, the course transitions to “real-world” experiences as students spend all of term four.

- **Internships:** Work experience for students that is structured to help demonstrate practical applications for academic learning. These experiences help students focus on career goals, motivate them in school, and may even lead to future employment. This requires you to spend 30 hours per week for the last 6 weeks of the school year on site working in your potential future field. You will work under the supervision of your site mentor and gain hands on experience. **This cannot be a paid job that you already have.**
- **Community Service:** Students volunteer their time in hospitals, nursing homes, or other community agencies. Previous sites include volunteering at the Cameron Senior Center, Lowell

Humane Society or Habitat for Humanity. At least half of the student's weekly community service hours must be spent in direct contact with the organization for which they are volunteering.

## GUIDANCE

Questions about course selections and/or levels for students in the <i>Class of 2029</i> should be directed to the counselors at the student's middle school.			
McCarthy Middle School	Ms. Moya Charig	978-251-5122	charigm@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 <i>Classes of 2026, 2027, and 2028</i> 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	Mr. Daniel McGrath	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 Ellis	Ext. 5560

## DEPARTMENT COORDINATORS

Curriculum-related questions should be directed to the corresponding Department Coordinator (978) 251-5111 at the following extensions:			
English	Abbey Dick	Ext. 5667	dicka@chelmsford.k12.ma.us
Fine & Performing Arts	Christy Whittlesey	Ext. 5602	whittleseyc@chelmsford.k12.ma.us
Guidance	Shannon Bischoff	Ext. 5601	bischoffs@chelmsford.k12.ma.us
Mathematics	Katherine Richard	Ext. 5552	richardkl@chelmsford.k12.ma.us
Physical Education, Family and Consumer Science, Health & Wellness	Kathryn Simes	Ext. 5553	simesk@chelmsford.k12.ma.us
Practical Arts: Technology Business & Media	Marilyn Sweeney	Ext. 5639	sweeneym@chelmsford.k12.ma.us
Reading and ESL	Kelly Rogers	Ext. 5546	rogersk@chelmsford.k12.ma.us
Science and Technology/Engineering	Jonathan Morris	Ext. 5659	morrisj@chelmsford.k12.ma.us

Social Science	Stephanie Quinn	Ext. 5520	quinns@chelmsford.k12.ma.us
Special Education	Shawna Mottram	Ext. 5584	mottrams@chelmsford.k12.ma.us
World Language	Danja Mahoney	Ext. 5686	mahoneyd@chelmsford.k12.ma.us



## PROGRAM OF STUDIES ~ 2024 – 2025

### Practical Arts Courses

#### COMPUTER PROGRAMMING COURSES

Intro to Programming CP	10 Credits	#17423	Grades 10, 11, 12	<i>Prerequisite: Completion of Algebra 1</i>
AP PLTW Computer Science Principles	10 Credits	#17163	Grades 10, 11, 12	<i>Prerequisite: None</i>
AP PLTW Computer Science A	10 Credits	#17513	Grade 10,11, 12	<i>Prerequisite: Completion of Computer Programming 1 or Teacher Recommendation</i>
Computer Apps	5 Credits	#17624	Grade 9, 10, 11, 12	<i>Prerequisite: None</i>
Creative Coding	5 Credits	# 69424	Grade 9,10,11,12	<i>Prerequisite: None</i>
Video Game Development	5 Credits	# 69524	Grade 9,10,11,12	<i>Prerequisite: None</i>

#### FAMILY AND CONSUMER SCIENCES

Exploring Early Childhood 1—CP	5 Credits	#67024	Grades 10, 11, 12	<i>Prerequisites: None</i>
Exploring Early Childhood 2— CP	5 Credits	#67424	Grades 10, 11, 12	<i>Prerequisite: Exploring Early Childhood 1</i>
Exploring Early Childhood 3/Directed Study — CP	10 Credits (Dual Enrollment)	#67623	Grade 11, 12	<i>Prerequisite: Exploring Early Childhood 2</i>

#### BUSINESS EDUCATION

Business & Career Pathways CP	5 Credits (Dual Enrollment)	#62024	Grades 9-12	<i>Prerequisites: None</i>
Business Ethics CP	5 Credit (Dual Enrollment)	#61324	Grades 10-12	<i>Prerequisites: None</i>
Accounting 1 CP	5 Credits (Dual Enrollment)	#62424	Grades 9-12	<i>Prerequisites: None</i>
Entrepreneurship CP	5 Credits	#64124	Grades 10-12	<i>Prerequisites: None</i>
Marketing CP	5 Credits (Dual Enrollment)	#65024	Grades 9-12	<i>Prerequisites: None</i>
MoneySmart CP	5 Credits (Dual Enrollment)	#61424	Grades 9-12	<i>Prerequisites: None</i>

Management CP	5 Credits (Dual Enrollment)	#65424	Grades 9-12	<i>Prerequisites: None</i>
Design and Production	5 Credits	#62124	Grades 9 - 12	<i>Prerequisites: None</i>
E-Commerce Marketing CP	5 Credits (Dual Enrollment)	#65124	Grades 9-12	<i>Prerequisites: None</i>
Microsoft Office Certification CP	5 Credits (Dual Enrollment)	#61524	Grades 9-12	<i>Prerequisites: None</i>
Communication/Media 1 CP	5 Credits	#81004	Grades 9-12	<i>Prerequisites: None</i>
TV & Broadcasting- CP	5 Credits	#81204	Grades 9-12	<i>Prerequisites: Teacher approval #81004</i>

### **DIGITAL LITERACY**

Technology Troubleshoot and Repair CP	5 Credits	#68024	Grades 9-12	<i>Prerequisites: None</i>
Student HelpDesk Internship CP	5 Credits	#68124	Grades 9-12	<i>Prerequisites: #68024</i>

### **TECHNOLOGY/ENGINEERING**

Tools and Woodworking I CP	5 Credits	#69223	Grade 9 – 12	<i>Prerequisites: None</i>
Introduction to Architecture and Civil Engineering	10 Credits	#69523	Grade 9 – 12	<i>Prerequisites: None</i>
Robotics- CP	5 Credits	#69724	Grade 9 - 12	<i>Prerequisites: None</i>
PLTW: Introduction to Engineering Design -CP H	10 Credits (Dual Enrollment)	#25323 #25313	Grade 9 - 12	<i>Prerequisites: None</i>
PLTW: Principles of Engineering - H	10 Credits	#25423	Grade 9 - 12	<i>Prerequisites: None</i>
PLTW Computer Integrated Manufacturing H	10 Credits	#25513	Grade 10 - 12	<i>Prerequisites: None</i>

### **ENGLISH**

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 SCIENCE**

Speech and Debate	5 Credits	# 34021	Grades 10 - 12	<i>Prerequisites: None</i>
Civics	5 Credits	#38724	Grades 11-12	<i>Prerequisites: None</i>
AP Research	10 Credits	#06213	Grade 12	<i>Prerequisites: AP Seminar</i>





## Scheduling Instructions

Directions:

-> Log on to your STUDENT X2 account.

-> Click the “My Info” top tab and then “Requests” left side tab

-> Graduation Progress – Be sure to check your Graduation Progress prior to making your course selections

### Primary Requests (70 credits)

1. Review your teacher recommendations.

A. Exit Entry Mode (The button is located under the word Reports)

i. Review all of your teacher’s recommendations

ii. Most AP and Honors courses require a teacher recommendation.

B. Select the box next to each department to make additional requests.

C. If you disagree with any of the recommendations, contact your teacher

D. If you wish to remove a teacher recommendation for an AP or Honors Course

Write a note in the “notes for counselor” section at the bottom

2. Select your Elective Courses

Select enough courses to have a total of 70 credits

### Alternate Requests

1. You are required to select 4 Alternate Courses.

2. Rank the courses 1 to 4 in the “Alternate Priority” Column. Select OK

**Check your work!** You should have 4 Alternate Requests and 70 Credits

**Notes to your counselor:** Use the “Notes” section to give your counselor any additional information they may need.

**Post Your Selections:** Clicking the “Post” button will save your work and share it with your counselor.