



Concord-Carlisle Regional High School

2025-2026

Program of Studies

Class of 2026 – Seniors

Class of 2027 – Juniors

Class of 2028 – Sophomores

Class of 2029 – 9th Grade

500 Walden Street
Concord, MA 01742
(978) 318-1400

Language Support

If you are unable to read English well enough to understand school documents or information, please contact Mr. Miller or Ms. Stahl, CCHS Co-Principals, at 978-318-1400. The school will provide assistance.

CHINESE

如果你读不懂有关学校文件及信息的英文版, 请联系校长Miller先生。他的电话号码是978-318-1400。学校将提供帮助。

FRENCH

Aide en anglais: Si vous ne parvenez pas à lire l'anglais suffisamment bien pour comprendre les documents ou les informations de l'école, veuillez contacter M. Miller ou Mme. Stahl, co-directeurs de CCHS, au 978-318-1400. L'école vous fournira de l'aide.

GERMAN

Hilfe bei Englisch: Wenn Sie nicht gut genug Englisch lesen können, um die Schulunterlagen oder -informationen zu verstehen, wenden Sie sich bitte an Herrn Miller oder Frau Stahl, CCHS-Co-Schulleiter, unter der Telefonnummer 978-318-1400. Die Schule wird Hilfe leisten.

ITALIAN

Aiuto con l'inglese: Se non si è in grado di leggere abbastanza bene l'inglese per comprendere documenti o informazioni sulla scuola, si prega di contattare il sig. Miller o Ms. Stahl, Co-Presidi CCHS, al numero 978-318-1400. La scuola fornirà assistenza.

SPANISH

Asistencia con el inglés: Si usted tiene dificultad para leer en inglés los documentos y las comunicaciones de la escuela por favor póngase en contacto con el Sr. Miller o la Sra. Stahl, codirectores de CCHS, a 978-318-1400. La escuela proporcionará asistencia.

UKRAINIAN

Довідка з англійської мови: Якщо ви не в змозі прочитати англійську мову досить добре, щоб зрозуміти шкільні документи чи інформацію, будь ласка, зв'яжіться з паном Міллером або пані Шталь, співдиректорами CCHS, за номером 978-318-1400. Школа надаватиме допомогу.

JAPANESE

英語のサポート: 学校の文書や情報を理解するのに十分な英語が読めない場合は、CCHSプリンシパルのMiller氏(978-318-1400)に連絡してください。学校が支援を提供します。

RUSSIAN

Помощь с английским языком: Если вы не можете читать по-английски достаточно хорошо, чтобы понять школьные документы или информацию, пожалуйста, свяжитесь с CCHS, по телефону 978-318-1400. Школа окажет помощь.

SWEDISH

Hjälp med engelska: Om du inte kan läsa engelska tillräckligt för att förstå skoldokument eller information, vänligen kontakta Mr. Miller eller Ms. Stahl, CCHS Co-principals, på 978-318-1400. Skolan kommer att ge hjälp.

VIETNAMESE

Trợ giúp với tiếng Anh: Nếu bạn không thể đọc tiếng Anh đủ tốt để hiểu các tài liệu hoặc thông tin của trường, xin vui lòng liên hệ với ông Miller hoặc bà Stahl, Đồng hiệu trưởng CCHS, theo số 978-318-1400. Nhà trường sẽ cung cấp hỗ trợ.

PORTUGUESE

Ajuda com inglês: Se você não conseguir ler o inglês suficientemente bem para entender os documentos ou informações da escola, entre em contato com o Sr. Miller ou a Sra. Stahl, co-diretores do CCHS, 978-318-1400. A escola prestará assistência.

KOREAN

영어 지원 : 학교 문서 나 정보를 이해하기에 충분히 영어를 읽을 수 없다면 CCHS 교장 Miller (978-318-1400)에게 연락하십시오. 학교가 도움을 제공 할 것입니다

DUTCH

Hulp bij Engels: Als u niet goed genoeg Engels kunt lezen om schooldocumenten of informatie te begrijpen, neem dan contact op met Mr. Miller of Ms. Stahl, CCHS Co-Principals, op 978-318-1400. De school zal assistentie verlenen.

GREEK

Βοήθεια με τα Αγγλικά: Εάν δεν μπορείτε να διαβάσετε αρκετά καλά αγγλικά για να κατανοήσετε τα σχολικά έγγραφα ή πληροφορίες, επικοινωνήστε με τον κ. Miller ή την κα Stahl, Συνδιευθυντές του CCHS, στο 978-318-1400. Το σχολείο θα παρέχει βοήθεια.

POLISH

Pomoc w języku angielskim: Jeśli nie jesteś w stanie czytać w języku angielskim wystarczająco dobrze, aby zrozumieć szkolne dokumenty lub informacje, skontaktuj się z panem Millerem lub panią Stahl, współdyrektorami CCHS, pod numerem 978-318-1400. Szkoła zapewni pomoc.

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Introductory Materials

Administration

CONCORD-CARLISLE HIGH SCHOOL ADMINISTRATION

Brian Miller, Co-Principal

Katie Stahl, Co-Principal

Dr. Darius Green, Assistant Principal Teaching and Learning

Meghan Maines, Assistant Principal Student Life

Amy Geer, Special Education Administrator

Malintha Fernando, Interim METCO Director

Aaron Joncas, Athletic Director

CONCORD-CARLISLE REGIONAL SCHOOL DISTRICT ADMINISTRATION OFFICE

Ripley School Building

120 Meriam Road

Concord, Massachusetts 01742

REGIONAL SCHOOL DISTRICT ADMINISTRATION

Dr. Laurie Hunter, Superintendent

Shelly Chin, Interim Asst. Supt. of Teaching and Learning

Robert Conry, Asst. Supt. of Finance and Operations

Andrew K. Nyamekye, Director of Diversity, Equity, Inclusion, and Belonging

REGIONAL SCHOOL COMMITTEE MEMBERS

Julie Viola, Chair

Alexa Anderson, Vice Chair

Andrew Herchek

Tracey Marano

Cynthia Rainey

Carrie Rankin

Brian Waterson

CONCORD-CARLISLE PARENTS ASSOCIATION

Executive Board

Matt Boger, President

Kimber Lynn Drake, Vice President

Rachel Cornforth, Vice President

Carolyn Hallinan, Treasurer

Jennie Garofalo, Clerk

Equal Education Opportunity Statement

No person shall be excluded from or discriminated against in admission to the public schools of Concord and the Concord-Carlisle Regional School District, for admittance to State and Federally funded grant programs, or in obtaining the advantages, privileges, and courses of study presented in these schools, on account of race, color, gender, gender identity, homelessness, disability, sexual orientation, religion, or national origin. This non-discrimination applies to all persons, whether or not the individual is a member of a conventionally defined “minority group.” The system promotes a positive learning environment in which individual differences are valued and harassment or discrimination, of any form, including hazing and bullying, will not be tolerated and may result in temporary or permanent removal from the school community.

Core Values and Beliefs

The mission of the Concord Public Schools and the Concord-Carlisle Regional School District, as partners with our families and communities, is to maximize each student’s opportunities for intellectual and personal development, so as to perform effectively in and become productive citizens of a rapidly changing world, by providing a rigorous and varied educational experience as measured against best educational practice, guided by highly competent and caring staff in a supportive and safe environment consistent with the communities’ historic commitment to social consciousness, mutual respect, intellectualism and public education.

Accreditation Statement

The New England Association of Schools and Colleges, Inc., a non-governmental, nationally recognized organization whose affiliated institutions include elementary schools through collegiate institutions offering post-graduate instruction accredits Concord-Carlisle High School. Accreditation of an institution by the New England Association indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer group review process. An accredited school or college is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation. Accreditation by the New England Association is partial but applies to the institution as a whole. As such, it is not a guarantee of the quality of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding the status of an institution’s accreditation by the New England Association should be directed to the administrative staff of the school. Individuals may also contact the Association:

New England Association of Schools and Colleges, Inc.
1115 Westford Street, Third Floor
Lowell, MA 01851
neasc.org

Declaration of Compliance

All Concord-Carlisle High School operations and procedures comply with applicable state and federal legislation. All programs, activities and employment opportunities are offered without regard to race, color, sex, homelessness, religion, national origin, sexual orientation and disability. Provided below are those statutes that are particularly relevant. Any questions about the legislation, school policies and practices referenced in this section and/or other legislation or school policies and practices may be directed to the Coordinator or Contact Person indicated or to one of the Co-Principals at (978) 318-1400. Individual concerns may also be directed to one of the Assistant Principals.

1. Section 504 of the Rehabilitation Act of 1973 (Federal)

“No otherwise qualified, handicapped individual...shall, solely by reason of his/her handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program of activity receiving Federal financial assistance. (Coordinator: Ms. Shelly Chin Interim Asst. Supt. of Teaching and Learning, Concord-Carlisle Regional School District, 120 Meriam Road, Concord, MA 01742 – Tel.: (978) 318 - 1500, x8104)

2. Chapter 282 of the Acts of 1993, General Laws Chapter 76

(§5 amends Chapter 622 discrimination prohibition in the public schools of the Commonwealth of Massachusetts). 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, national origin or sexual orientation. (Coordinator: Ms. Shelly Chin, Interim Asst. Supt. of Teaching and Learning, Concord-Carlisle Regional School District, 120 Meriam Road, Concord, MA 01742 – Tel.: (978) 318-1500, x8104)

3. Title I of the Americans with Disabilities Act of 1990

Prohibits discrimination, exclusion from participation, and denial of benefits on the basis of disability in the areas of employment. (Coordinator: Ms. Shelly Chin, Interim Asst. Supt. of Teaching and Learning, Concord-Carlisle Regional School District, 120 Meriam Road, Concord, MA 01742 – Tel.: (978) 318-1500, x8104)

4. Title II of the Americans with Disabilities Act of 1990

Prohibits discrimination, exclusion from participation, and denial of benefits on the basis of disability in the areas of educational programming and activities. (Coordinator: Ms. Shelly Chin, Interim Asst. Supt. of Teaching and Learning, Concord-Carlisle Regional School District, 120 Meriam Road, Concord, MA 01742 – Tel.: (978) 318-1500, x8104)

5. Title VI of the Civil Rights Act of 1964

Prohibits discrimination, exclusion from participation, and denial of benefits based on race, color and national origin. (Coordinator: Ms. Shelly Chin, Interim Asst. Supt. of Teaching and Learning, Concord-Carlisle Regional School District, 120 Meriam Road, Concord, MA 01742 – Tel.: (978) 318-1500, x8104)

6. Title IX of the Educational Amendments of 1972

(Prohibition of discrimination on the basis of sex). No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance. (Coordinator: Ms. Shelly Chin, Interim Asst. Supt. of Teaching and Learning, Concord-Carlisle Regional School District, 120 Meriam Road, Concord, MA 01742 – Tel.: (978) 318-1500, x8104)

INTRODUCTION

Before you start to read the course descriptions and choose your courses for next year, consider the information in this introductory section. In addition to your academic program during the regular school day you may decide to take part in the co-curricular program (clubs, activities, and interscholastic sports) during the afternoon. You may choose to work in the afternoon or you may choose to become involved in community service to fulfill your 40-hour graduation requirement. Before making decisions about your program, consider how you will spend your entire day. It is inadvisable to over-commit your own resources of time, energy, and interest as it is to under-utilize available opportunities.

Please Note:

The description of a course in this Program of Studies indicates the ability of the Concord-Carlisle High School staff to provide the experience. However, if an inadequate number of students select a specific course, it will not be possible to offer the course. In cases where courses are oversubscribed, priority for enrollment will be given first to seniors, then juniors, then sophomores, and finally 9th grade students, provided they satisfy course prerequisites. Students who are unable to be enrolled in a course for their first choice will be offered an alternate course to ensure a six course minimum program.

9th Grade Academy

The 9th Grade Academy has been designed to foster a smooth transition to Concord-Carlisle High School by creating a supportive first-year experience that inspires students and promotes intellectual curiosity, personal growth, and academic achievement. Central to the mission is cultivating an inclusive and compassionate educational community that builds a foundation for a healthy and fulfilling experience at CCHS and beyond.

The 9th Grade classes are placed into 4 cohorts (Elm, Willow, Oak, Maple) of 80-90 students. A core team of faculty works with each cohort and connects with every student to meet their academic and social-emotional challenges. The goal is to help every student to feel confident and engaged by the end of their first year and excited to return to make the most of their next three years at CCHS. Students will also be able to take other classes with students of all grades taught by teachers from all over the school. Students will also see students in other cohorts during lunch and during extracurriculars.

How To Use The Program of Studies

Review the graduation requirements that are printed in this booklet. There are certain required courses, as well as a required overall credit total that must be earned. A specified number of credits are required from the course clusters. It will be necessary to plan ahead so that you will have satisfied all graduation requirements by the end of your senior year.

Note that in certain departments, courses are organized by level. Where levels exist, class enrollment tends to be homogeneous. In all other courses, enrollment tends to be heterogeneous.

For those that have them, level designations for courses mean the following:

*ENRICHED (E) courses either move at a somewhat faster pace than our standard college preparatory courses and/or include some additional materials that expand on topics being covered. Therefore, more homework can be anticipated both in volume and in degree of difficulty. While these courses provide some practice and repetition in the classroom, it is assumed that students will be able to grasp material with only a moderate amount of teacher direction. Students are expected to show initiative in class discussions and in the approach to and completion of assignments.

*HONORS LEVEL (H) courses are recommended for students who have demonstrated exceptional academic achievement through a combination of ability and motivation. These courses contain considerable enrichment and acceleration. Instruction will assume that students are able to grasp concepts on initial presentation, and will, therefore, emphasize observation, analysis, synthesis, and problem solving. There will be little practice or repetition within the classroom. Students are expected to be able to organize their time, to plan long-term assignments, and to seek help when necessary, all on their own initiative. Placement in honors courses is by teacher recommendation only.

All courses without a level designation are considered College Preparatory courses, unless otherwise noted.

Schedule your program with the future in mind. Make your decisions carefully, and take advantage of all of the advice available from your parents, teachers, and counselor. If you have a question regarding the types of courses you should take, consult with your counselor. Below you will find information from the Massachusetts State College System and broad guidelines for colleges and universities in general.

CCHS Graduation Requirements

Overall - Minimum of 100 credits requiring the following distribution:

English - 20 credits

Social Studies - 10 credits

Math - 10 credits

Science - 10 credits

App. Tech/Comp. Sci./Fine Art/Perf. Art/World Lang. - 10 credits

*Must be completed in two or more disciplines

Health & Fitness - 5 credits

Additional Credits - 35 credits

Community Service - 40 hours

Massachusetts State University & University of Massachusetts Minimum Admission Requirements

High School Unit Requirements

Minimum subject matter requirements must be met (see chart below). The rigor of the curriculum is strongly considered. We appreciate applicants who take challenging courses, including honors, Advanced Placement (AP) or International Baccalaureate (IB) courses, if available.

When assessing academic achievement, course grades as well as grade trends are important, including course selection and grades in relation to the desired major. A strong senior schedule helps show the applicant's commitment to higher education. If the high school provides a class rank, that is taken into consideration as well.

Units

- English: 4
- Mathematics (Algebra II minimum): 4 including math in the senior year of high school
- Natural Science (3 labs): 3
- Social Science (one course in US history): 2
- Foreign Language: 2 of same language
- Electives (from areas above, arts and humanities, or computer science): 2

Applicants to the College of Engineering, Isenberg School of Management, or the Computer Science major must have four math units including an advanced math course, such as pre-calculus, calculus or trigonometry. Applicants to the College of Engineering must also have chemistry and physics.

Architecture, Art, Dance, and Music Majors

Applicants to the Architecture, Art, Dance, and Music majors are encouraged to contact the appropriate department and apply as early as possible to allow enough time for an audition or portfolio review. Students must have their admission application on file with Undergraduate Admissions before auditions or portfolio reviews will be scheduled.

General Guidelines for Colleges and Universities

If you are planning to go to a four-year liberal arts college, you should consider electing:

4 years of English (required)

2-4 years of math (2 years are required)

2-4 years of world languages

Note: (A sequence of one language is preferred, and schools rarely allow meeting this requirement with only a single year of language study.)

3-4 years of science, including one laboratory course (2 years are required)

3-4 years of social studies (World Cultures and Civilizations and US History are required)

Elective courses in the fine and practical arts (1 semester is required)

If you are planning to go to a science or engineering college, you should consider electing:

4 years of English (required)

4 years of math (2 years are required)

3-4 years of science, including biology, chemistry, physics (2 years are required)

2-3 years of world language

Note: (A sequence of one language is preferred, and schools rarely allow meeting this requirement with only a single year of language study.)

2-3 years of social studies (World Cultures and Civilizations and US History are required)

If you are planning to go to a two-year college or technical school, you should consider electing:

4 years of English (required)

2-3 years of math, including algebra (2 years are required)

2-3 years of science including biology and chemistry (2 years are required)

2-3 years of social studies (World Cultures and Civilizations and US History are required)

Additional Information

SCHEDULING:

The process begins with the distribution of the Program of Studies in January and concludes with the electronic distribution of schedules in late May. Although we do our best to schedule each student in their requested courses, scheduling conflicts requiring alternate course selections are possible.

ATTENDANCE:

The school keeps a record of attendance for each course and for the school year.

PERFORMANCE REPORTS:

Report cards are issued four times a year. In addition, teachers, counselors, and administrators may provide information on performance through letters, progress report forms, telephone calls, or emails as necessary.

ELIGIBILITY:

Remember, **Fall** eligibility for athletic and non-athletic co-curricular programs is based on a student accruing a minimum of 20 credits during the previous school year. Eligibility for **Winter** and **Spring** participation is based on the preceding quarter's grades. A student must be passing the equivalent of four full-year courses.

FORMAL RECORDS:

- **TEMPORARY RECORD** - Contains all school information in the student record which is not contained in the permanent record. The temporary record may include standardized test results, report cards, transfer reports, test summaries, extracurricular activities, evaluations by teachers, counselors, and other school staff. This file is located in the guidance office and may be reviewed by a student or parent upon request for an appointment.
- **PERMANENT RECORD** - The permanent record consists of the transcript and a record of MCAS results that prove competency determination. A transcript is maintained for each student and includes courses taken, grades awarded, credits accrued, and year completed. An "unofficial" copy of the transcript can be obtained through the student's Aspen account. For an "official" transcript, please contact the CCHS Registrar.

9TH GRADE ACADEMY:

The 9th Grade Academy has been designed to foster a smooth transition to Concord-Carlisle High School by creating a supportive first-year experience that inspires students and promotes intellectual curiosity, personal growth, and academic achievement. Central to the mission is cultivating an inclusive and compassionate educational community that builds a foundation for a healthy and fulfilling experience at CCHS and beyond.

The 9th Grade classes are placed into 4 cohorts (Elm, Willow, Oak, Maple) of 80-90 students. A core team of faculty works with each cohort and connects with every student to meet their academic and social-emotional challenges. The goal is to help every student to feel confident and engaged by the end of their first year and excited to return to make the most of their next three years at CCHS. Students will also be able to take other classes with students of all grades taught by teachers from all over the school. Students will also see students in other cohorts during lunch and during extracurriculars.

COMMUNITY SERVICE

The Concord-Carlisle High School Community Service Program provides students with the opportunity to involve themselves in a variety of enriching, useful and practical experiences, which serve the school and community. Forty hours of community service are required for graduation. Through community service a student can learn new skills, assume responsibilities, become aware of the needs of others and learn the importance of serving and giving. Each student at CCHS is required to perform forty hours of community service between the date of entrance as a 9th grade student and the end of senior year. The community service requirement may be satisfied by participation in any one or a combination of approved activities. Students who do not attend CCHS all four years are expected to do ten hours of community service for each year they are in attendance. The completion of ten hours of community service prior to the 11th grade is one requirement for open campus privileges junior year, and the completion of thirty hours of community service prior to the 12th grade is one requirement for off-campus privileges senior year.

COMPUTER SCIENCE

Computer Science courses at CCHS focus on innovation and creativity and encourage exploration and invention. All Computer Science courses at CCHS are taught through a combination of direct instruction, exploration, and hands-on project work to build foundational skills in the given coding language and apply those skills to real-world scenarios. For students that have no experience with computer science and are not sure they are ready to fully learn and master a programming language like Java, Python, or Javascript, the introductory course *Computer Science Discoveries* is recommended.

The *Computer Science Principles*, *Computer Science A*, and *Python* courses are all full programming language courses, with *Computer Science Principles* and *Python* both being more appropriate for beginners and *Computer Science A* being more well-suited to students with some coding background or strong abstract thinking and mathematical skills.

INTRODUCTORY LEVEL COURSES

Computer Science Discoveries
Computer Science Principles
Introduction to Python Programming

ADVANCED LEVEL COURSES

AP Computer Science Principles
Advanced Python Programming
Java Programming 1 & 2
AP Java Programming

COMPUTER SCIENCE DISCOVERIES

COURSE #781

SEMESTER – 2.5 CREDITS

For students in grades: 9, 10, 11 and 12

Prerequisites: No prior background in computer science required.

Description: This semester-long course introduces students to the foundational concepts of computer science using Code.org’s Computer Science Discoveries curriculum. Ideal for students who are new to computer science or prefer a slower-paced introduction, this course emphasizes problem-solving, creativity, and collaboration. Topics include basic programming, web development, physical computing, and the societal impact of technology.

Through hands-on projects, students will build digital products such as websites and games while developing the confidence and skills to pursue the more advanced computer science offerings.

Evaluation: Students will be evaluated based on projects, homework and classwork assignments, and in-class assessments.

COMPUTER SCIENCE PRINCIPLES

COURSE #783

FULL YEAR - 5.00 CREDITS

For students in grades: 9, 10, 11 and 12

Prerequisites: No prior background in computer science required.

Description: This full-year course provides a broad and engaging introduction to the foundational concepts of computer science, including programming, algorithms, data analysis, the internet, and the societal impacts of technology. Students will develop creativity, problem-solving skills, and collaboration through hands-on projects such as app development, data analysis, and interactive simulations.

Programming is taught using JavaScript, giving students a strong foundation in a widely-used language.

Evaluation: Students will be evaluated based on projects, homework and classwork assignments, and in-class assessments.

AP COMPUTER SCIENCE PRINCIPLES

COURSE #784

FULL YEAR - 5.00 CREDITS

For students in grades: 9, 10, 11 and 12

Prerequisites: No prior background in computer science required.

Description: This full-year AP course provides an engaging introduction to the foundational concepts of computer science, including programming, algorithms, data analysis, the internet, and the societal impacts of technology, with an advanced focus for motivated students.

Students will build creativity, problem-solving, and collaboration skills through hands-on projects such as app development, data analysis, and interactive simulations. Programming is taught using JavaScript, giving students a strong foundation in a widely-used language. This AP course prepares students for success on the AP Computer Science Principles exam and further studies in computer science.

Evaluation: Students will be evaluated based on projects, homework and classwork assignments, and in-class assessments. In addition, students will be required to complete AP preparation materials and assessments throughout the semester.

INTRODUCTION TO PYTHON PROGRAMMING

COURSE #785

SEMESTER – 2.5 CREDITS

For students in grades: 9, 10, 11 and 12

Prerequisites: No prior background in computer science required.

Description: Coding is about combining problem-solving with creativity. In this course students

will be introduced to Python, a powerful and widely used programming language that also provides easy access for beginners. Dropbox, Instagram, Spotify, and Reddit are examples of apps that are built, at least partially, using the Python language. Students will learn the syntax and semantics of a large part of Python, with a focus on creating their own projects, while being exposed to the criteria for developing well-structured, readable, maintainable, and useful programs. Concepts covered include writing and debugging code, data types, variables, keywords, operators, input/output, turtle graphics, for and while loops, the range function, math and random modules, writing functions, using conditionals, and algorithm design.

Evaluation: Students will be evaluated based on projects, homework and classwork assignments, and in-class assessments.

ADVANCED PYTHON PROGRAMMING

COURSE #787

SEMESTER - 2.5 CREDITS

For students in grades: 9, 10, 11 and 12

Prerequisites: Successful completion of *Introduction to Programming through Python* or permission of the instructor.

Description: This course continues to build on the foundation of the *Intro. Python* course. Topics include String methods, lists and list methods, working with files and dictionaries, the development of object-oriented programming in Python, image processing, and working with the GUI module *tkinter* and other advanced modules. The focus of this second semester will be on larger programming projects.

Evaluation: Students will be evaluated based on projects, homework and classwork assignments, and in-class assessments.

JAVA PROGRAMMING 1

COURSE #793

SEMESTER - 2.5 CREDITS

For students in grades: 10, 11 and 12 (rising 9th graders may enroll only with instructor's permission)

Prerequisites: Completion of any other Computer Science course offered at CCHS

Description: Coding is about combining problem-solving with creativity. Twitter, Amazon, GoogleDocs, Android apps, Angry Birds, and many other apps or applications are partially or completely written in the Java language. This course will introduce software development through working on projects using a large part of the Java language, while being exposed to the criteria for developing well-structured, readable and maintainable programs. The course will cover the basic skills of programming, including variable definition, basic I/O, operators, conditionals, looping mechanisms, method definition, 1D and 2D arrays and ArrayLists, introduction to objects, and some basic graphics. This course, if taken along with Java Programming 2, gives a good preparation for the Advanced Placement Computer Science A exam.

Evaluation: Students will be evaluated based on projects, homework and classwork assignments, and in-class assessments.

JAVA PROGRAMMING 2

COURSE #794

SEMESTER - 2.5 CREDITS

For students in grades: 10, 11 and 12 (rising 9th graders may enroll only with instructor's permission or if they have completed Java Programming 1)

Prerequisites: Successful completion of *Java Programming 1* or permission of the instructor.

Description: Object-oriented methodology will be used throughout this course. This advanced course will address deeper concepts in object-oriented programming including inheritance, file I/O, exceptions, interfaces, and graphics, including frames, layout managers, panels, buttons and event listeners.

Evaluation: Students will be evaluated based on projects, homework and classwork assignments, and in-class assessments.

AP JAVA PROGRAMMING

COURSE #795

FULL YEAR - 5.00 CREDITS

For students in grades: 10, 11 and 12

Prerequisites: Completion of any other Computer Science course offered at CCHS

This year-long course introduces students to the fundamentals of software development using the Java programming language while preparing them for the Advanced Placement Computer Science A exam. Students will learn to combine problem-solving skills with creativity to develop well-structured, readable, and maintainable programs.

In the first semester, students will master the foundational skills of programming, including variable definition, basic input/output, operators, conditionals, loops, method definition, 1D and 2D arrays, ArrayLists, and an introduction to object-oriented programming and basic graphics.

The second semester will deepen their understanding of object-oriented programming by exploring advanced concepts such as inheritance, interfaces, file input/output, exception handling, and graphical user interface design using frames, layout managers, panels, buttons, and event listeners. Throughout the course, object-oriented methodology will be emphasized to build robust and scalable software solutions.

By the end of the course, students will have developed a strong foundation in Java programming, ready to tackle the AP Computer Science A exam and pursue further studies or careers in computer science.

Evaluation: Students will be evaluated based on projects, homework and classwork assignments, and in-class assessments. In addition, students will be required to complete AP preparation materials and assessments throughout the semester.

COUNSELING PROGRAMS

WORK EXPERIENCE PROGRAM

COURSE #929

For students in grades: 9, 10, 11, and 12

Students who desire to develop their personal, social and job skills through work, and are working at least 10 hours per week during the school year, are eligible for participation in this program. Academic credit is awarded on the basis of quarterly supervisory evaluations. Interested students should see their counselor for details.

TEACHING ASSISTANT (TA) PROGRAM

In order to be a Teaching Assistant (TA), students must have permission from the classroom teacher, and there is no expectation that a teacher must have a TA. At the beginning of the year, the TA and classroom teacher will meet to discuss the individual goals and expectations for the year.

Tier 1

- Open to students in grades 9, 10, 11, 12
- Student must attend at least half of the scheduled class times
- Student can be a TA for one semester or full year
- Help with administrative tasks – photocopying, handing out papers/tests, setting up classrooms/labs, and miscellaneous administrative tasks (excluding grading).
- Student will receive community service credit based upon the number of hours completed
- Students are responsible for entering their completed hours into 2Volunteer
- No grade or credit associated with this position

Tier 2

- Prerequisite: students must be a junior or senior, and have received at least a B in the course and level (or level above) which you will be a TA.
- Students must attend every class meeting
- Tasks may include helping students during class/lab time, helping students in need of extra help or who were absent, collecting assignments, taking class notes, classroom set up, and miscellaneous administrative tasks (excluding grading).
- Students will be graded on a Pass/Fail basis, and will receive 2.5 credits for a full-year or 1.25 credits for one semester; grades will be entered by the classroom teacher.
- This course will count towards the overall graduation credits, but will not count towards distribution requirements (see your guidance counselor).

ENGINEERING

Engineering Courses are designed to expose students to some of the major concepts they would encounter in a post-secondary engineering course of study. Students will have an opportunity to investigate engineering and high-tech careers and to employ engineering and scientific concepts in the solution of engineering design problems. The introductory engineering course is designed to cover concepts in Engineering Design, Construction Technologies, Communication Technologies, and Energy and Power Technologies (Fluid, Thermal and Electrical Systems). In addition to the introductory course, courses are available in Mechanical Engineering and Electrical Engineering. In the future, if there is a demand we hope to increase the number and variety of engineering courses.

The core engineering courses can be taken as semester electives, or students may choose to complete the requirements for our ENGINEERING CERTIFICATE. The successful completion of the Engineering Certificate indicates the student has earned a minimum of five electives in the fields of computer-science, engineering, and technology while maintaining a high level of rigor in math and science during their high school career. Students who complete the certificate will be recognized with a letter highlighting their impressive accomplishment, which will be included in their transcript package.

[Engineering Certificate](#)

COURSES OFFERED:
Introduction to Engineering
Mechanical Engineering
Electrical Engineering
Explorations: Robotics

INTRODUCTION TO ENGINEERING

COURSE #551

SEMESTER – 2.50 CREDITS

For students in grades: (9, semester 2) 10, 11 and 12

Prerequisites: None

Students will learn important technological and engineering related skills and concepts. These concepts cover Engineering Design, Construction Technologies, Communication Technologies, and Energy and Power Technologies (Fluid, Thermal and Electrical Systems). Students will be designing, building and testing prototype models that cover these concepts. Students will learn product design, accurate measurements using a variety of instruments and technologies, application of algebra to engineering problems, and application of physics concepts to the real world. Students also learn how to document their work and communicate their solutions to peers and members of the professional community.

Evaluation will be based on class assignments, participation, projects, quizzes and exams.

MECHANICAL ENGINEERING

COURSE #552

SEMESTER – 2.50 CREDITS

For students in grades: 10, 11 and 12

Prerequisites: Introduction to Engineering

This course is designed to expose students to some of the many forms of engineering. In this class students will explore Mechanical and Structural engineering concepts. In the Mechanical Engineering portion of this course students will learn about gearing, pulleys, and lever systems. Students may have the opportunity to use AutoCAD and C.N.C. machinery to manufacture individual projects they have engineered to meet specific criteria. In the Structural Engineering portion of this class students will learn processes of design construction. The students will explore various techniques of engineering roof trusses, and floor beams able to carry dead and live loads. Using a variety of materials the students will be able to build and test scale model trusses and beams to determine the amount of loads they can handle. This course, along with “Electrical Engineering,” is ideal for students exploring the field of engineering as a career pathway.

Evaluation will be based on class assignments, participation, projects, quizzes and exams.

ELECTRICAL ENGINEERING

COURSE #553

SEMESTER – 2.50 CREDITS

For students in grades: 10, 11 and 12

Prerequisites: None

This course is designed to expose students to some of the many forms of engineering. In this class the students will learn extensively about Electrical Engineering and other forms of Power

Technology. The students will design and develop working electronic circuits and be able to calculate resistance, voltage and current using Ohm's law and Kirchhoff's current and voltage laws. The students will build and test circuits that contain resistors, capacitors, diodes, transistors, and small integrated circuits. The students will use and understand certain test equipment such as multi-meters and oscilloscopes. High voltage residential wiring techniques will also be covered. This course, along with "Mechanical Engineering," is ideal for students exploring the field of engineering as a career pathway.

Evaluation will be based on class assignments, participation, projects, quizzes, and exams.

EXPLORATIONS: ROBOTICS

COURSE #554E

SEMESTER – 1.25 CREDITS - 2X PER WEEK

For students in grades: 9, 10, 11 and 12

Robotics is a lab-based course utilizing a hands-on approach to introduce the basic concepts of robotics, focusing on the construction and programming of mobile robots. Students will work in teams to design, build, program, document, and test increasingly more complex robots. Students have the option of participating in local robotic competitions. Robot design specifications and construction materials will be determined based on student interest and experience.

Evaluation will be based on class assignments, participation, projects, quizzes, and exams.

ENGLISH

Successful completion of a four-year English program is a requirement of Concord-Carlisle High School. All courses are designed to strengthen skills in reading, writing, listening, and speaking. Areas of major emphasis are language development, critical thinking, composition, literature study, drama, and media. Through the study of literature, students gain access to other worlds, experiences, emotions, and ideas. As they learn to explore and analyze texts, they develop their understanding of language as a medium and grow as writers themselves. Technology serves as a tool in each course to develop writing and presentation skills, and to explore thematic issues in the course readings. A student who fails English must either repeat the course or take an appropriate summer school alternative that covers the same general literary themes and requires the student to continue improving writing skills in a manner consistent with the expectations of our courses.

For the 9th grade, sophomore and junior years, and the fall semester of the senior year, each student is recommended for a level, following a review of the previous year's performance and the recommendation of his or her current English teacher. During the junior year, English is separated into two semesters. During Semester I, students take the literature-based Junior English. During Semester II, students take a writing-based course—either Rhetoric (Honors) or Writing Workshop—both to ensure that they have the writing skills necessary for senior year work and to give them the opportunity to work on their personal narrative writing in preparation for college applications. All seniors choose their Semester II course from three high interest, senior-only electives, designed to be accessible and challenging to students of all abilities.

**Juniors who have consistently earned grades in the A range in their English classes and have enrolled in Rhetoric are encouraged to consider taking the English Language and Composition Advanced Placement Test.

**Seniors who have consistently earned grades in the A range in their English classes and have enrolled in Senior Honors English are encouraged to consider taking the English Literature Advanced Placement Test.

Information is available to students interested in taking AP exams through the English Department.

COURSES OFFERED:

9th Grade English

Sophomore English

Junior English

Writing Workshop

Rhetoric and Advanced Language

History & Literature: A Twice Told Tale

Senior English

World Literature

Creative Writing

Visions of the Future

9th Grade ENGLISH

COURSE #111

9th Grade ENGLISH (H)

COURSE #112

FULL YEAR - 5.00 CREDITS

For students in grade 9 (Required)

Prerequisites: Students are placed in the appropriate level based on the recommendation of their 8th grade teacher.

The 9th Grade Program concentrates on developing skills in written expression, critical thinking and literary analysis using poetry, drama, fiction, and nonfiction. Written expression is emphasized throughout the year, with the goal of enabling students to write essays with an analytical, interpretive, or persuasive thesis using textual support for the claims and inferences in their essays. The course also stresses systemic vocabulary building, the development of oral expression, and grammar review. Technology serves as a tool in this course to develop writing and presentation skills, and to explore thematic issues in the course readings. Core texts are centered around the theme of the Discovery of the Self: *Romeo and Juliet*, *A Raisin in the Sun*, and *Binti*; other texts may include *Of Mice and Men*, *The Hate U Give*, *American Born Chinese*, *The Strange Case of Dr. Jekyll and Mr. Hyde*, *The Curious Incident of the Dog in the Night-time*, *Hiroshima*, and *Into Thin Air*.

ENGLISH COURSE #111: This class offers greater teacher support for students whose writing skills—including mechanics, grammar, and sentence/paragraph structure—are still developing. Additional emphasis is placed on teaching students to develop academic and interpersonal skills in order to become more productive and independent learners.

Evaluation is based on class participation, quizzes, tests, projects, written compositions, and a midterm and final examination.

ENGLISH COURSE #112 (H): This class assumes that students are independent learners who can work with limited teacher support. Students are advanced and enthusiastic readers who can make inferences, draw connections, and comprehend texts with sophisticated themes and vocabulary at a fairly fast pace. Students' expository and narrative writing demonstrates a strong familiarity with the rules of grammar, mechanics, spelling and sentence/paragraph structure.

SOPHOMORE ENGLISH

COURSE #131

SOPHOMORE ENGLISH (H)

COURSE #132

FULL YEAR - 5.00 CREDITS

For Students in grade 10 (Required)

Prerequisites: Sophomore English (H) requires a B- or higher in 9th Grade English (H) or teacher recommendation; Sophomore English requires completion of a 9th grade English course.

Sophomore English continues to emphasize written expression with the expectation that students

will reach a greater level of sophistication in their expository, critical, and narrative writing. Along with detailed attention to the writing process, students learn the skills involved in writing a documented essay and prepare for the English Language Arts portion of the MCAS test. Students will also complete a research project.

Technology serves as a tool in this course to develop writing and presentation skills, and to explore thematic issues in the course readings. The literature component of the sophomore year features American works in all major genres, centered on the unifying theme of the Individual Identity versus Society. All students will read *Clap When You Land*, *The Great Gatsby*, and a play (*Fences* or *The Crucible*); other texts may include *The Catcher in the Rye*, *When the Emperor Was Divine*, *Into The Wild*, *The Way To Rainy Mountain*, and excerpts from *Walden*.

ENGLISH COURSE #131: This class offers greater teacher support, and continues to emphasize and execute the foundations of good writing (grammar, mechanics, spelling and sentence/paragraph structure). Students continue to develop reading skills with teacher support, focusing especially on comprehension and attention to detail.

ENGLISH COURSE #132 (H): This class assumes that students are independent learners who can work with limited teacher support. Students are advanced and enthusiastic readers; they can make inferences, draw connections, comprehend and appreciate texts with sophisticated vocabulary and themes read at a fast pace. Students are strong expository and narrative writers who understand grammar, mechanics, spelling and sentence/paragraph structure.

Evaluation is based on class participation, quizzes, tests, projects, written compositions, and a midterm and final examination.

JUNIOR ENGLISH

COURSE #151

JUNIOR ENGLISH (H)

COURSE #152

SEMESTER 1 – 2.50 CREDITS

For Students in Grade 11 - (Required)

Prerequisites: Junior English (H) requires a B- or higher in Sophomore English (H) or teacher recommendation; Junior English requires completion of a Sophomore English course.

Junior English expands students' ability to use written expression for their expository, critical, and narrative essays. Students read from a variety of genres using a critical lens to analyze literature in class discussions and for assignments outside of the classroom. Students participate in curriculum-centered activities that engage them in critical thinking, and technology serves as a tool in this course to forward projects, presentations, and writing assignments. The literature component of the junior year features all major genres, centered on Justice and Judgment. All students will read *Things Fall Apart*; other texts may include *Their Eyes Were Watching God*, *Macbeth*, *Everything I Never Told You*, *Patron Saints of Nothing*, *The Other Americans*, and other works of fiction and nonfiction.

ENGLISH COURSE #151: This class offers teacher support and reinforces the tenets of good

writing (grammar, mechanics, spelling and sentence/paragraph structure). Students read extensively, focusing especially on narrative and attention to detail.

Evaluation is based on class participation, quizzes, tests, projects, written compositions, and a semester examination.

ENGLISH COURSE #152 (H): This class assumes that students have a scholarly interest in literature and have the time and motivation to complete extensive reading and writing assignments. Honors students are sophisticated readers who make inferences, draw connections, and comprehend and appreciate texts with advanced vocabulary and structure; they should also be comfortable with and interested in reading 25 plus pages of pre-20th century texts. Students are excellent expository and narrative writers who can use grammar, mechanics, spelling and sentence/paragraph structure correctly.

WRITING WORKSHOP

COURSE #153

SEMESTER 2 – 2.50 CREDITS

For students in grade: 11

Prerequisites: Junior English

This is a writing course designed to reinforce previously taught writing skills with moderate to significant teacher support. The course concentrates on the process and techniques of effective writing. Units include exercises and writing assignments on diction, the audience, point of view, sentence strategy, grammar, paragraphing, and essay writing. Students keep individual journals for daily writing exercises. In addition to the primary focus of the course, learning experiences may be provided in the following areas: personal narrative, persuasive writing, and speech writing.

Evaluation is based on progress made commensurate with ability and takes into account the quality of all writing assignments, the improvement in writing achieved by thorough and thoughtful rewriting, journal writing, class participation, tests, and a semester examination

RHETORIC & ADVANCED LANGUAGE (H)

COURSE #154

SEMESTER 2 – 2.50 CREDITS

For students in grade: 11

Prerequisites: a B- or higher in Junior English (H) or teacher recommendation.

The course focuses on effective and persuasive writing and speaking; the students of Rhetoric learn the methods and patterns of clear organization, the function of detail, and the rhetorical quality of words and sentences. Students learn to use grammar and punctuation as an element of style; they examine professional essays for the function of voice, and develop their own writing voice through imitation and creation. Students may also practice synthesizing critical information with documents-based essay writing. Students practice the art of public speaking through activities such as writing and giving speeches or through the basic forensics of formal debate.

Evaluation is based on contribution to class discussion, a written and presented speech, written assignments, quizzes, tests, projects and presentations, and a semester examination.

While Rhetoric is not explicitly designed to prepare students to take the English Language and Composition Advanced Placement Test, it does cover much of the material in the AP course. Juniors who have consistently earned grades in the A range in English and are enrolled in Rhetoric are encouraged to consider taking the English Language and Composition AP test. If interested, they should go to the AP website for more information about the specifics of the test:

http://apcentral.collegeboard.com/apc/members/exam/exam_information/2001.html.

HISTORY & LITERATURE: A TWICE TOLD TALE

COURSE #160 - History & Literature: A Twice Told Tale - English

COURSE #161 - History & Literature: A Twice Told Tale - English (H)

SEMESTER 1 - 2.50 CREDITS

For students in grade: 11

Prerequisites: 10 credits in English and successful completion of World Cultures and U.S. History. Students must also sign up for Social Studies Course #260 or #261 for Honors.

In History, Literature, & Psychology: A Twice-Told Tale, we explore the human experience through literature, history and psychology. Students will employ literature as a case study to analyze universal human dilemmas and specific obstacles created by cultural circumstances. Students will also examine literary, historical, and psychological theory centered on the desire to reconcile the outside world with internal reality. Texts include “Epic of Gilgamesh,” The Bacchae by Euripides, The Ballad of Mulan, Siddhartha by Hermann Hesse, , the writing of Langston Hughes, poetry of Martín Espada, Junot Díaz, Jamaica Kincaid, Robin Wall Kimmerer, and V for Vendetta by Alan Moore.

The course integrates an English teacher and a Social Studies teacher with fifty students in the same classroom and takes place in two blocks. The course is an elective for upperclassmen. Students receive a total of 5 credits: English (2.5) and Social Studies (2.5).

Evaluation will be based on preparation for class, written reports, unit tests, individual projects, and a semester exam.

SENIOR ENGLISH

COURSE #171

SENIOR ENGLISH (H)

COURSE #172

SEMESTER 1 – 2.50 CREDITS

For Students in grade 12 - (Required)

Prerequisites: Senior English (H) requires a B- or higher in Junior English (H) or teacher recommendation; Senior English requires completion of a Junior English course.

Senior English further expands students’ ability to use written expression for their expository,

critical, and narrative essays. Students read from a variety of genres using a critical lens to forward analysis for class discussion and assignments outside of the classroom. Students participate in curriculum-centered activities that engage them in critical thinking, and technology serves as a tool in this course to forward projects, presentations, and writing assignments. The literature component of the senior year features all major genres.

Text may include *Passing*, *The Things They Carried*, *The Best We Could Do*, *Interpreter of Maladies*, *Exit West*, *Frankenstein*, *Hamlet*, and other works of fiction and nonfiction.

ENGLISH COURSE #171: This class offers teacher support and reinforces the tenets of good writing (grammar, mechanics, spelling and sentence/paragraph structure). Students read extensively, focusing especially on narrative and attention to detail. Evaluation is based on class participation, quizzes, tests, projects, written compositions, and one exam.

ENGLISH COURSE #172 (H): This class assumes that students have a scholarly interest in literature and have the time and motivation to complete extensive reading and writing assignments. Honors students are sophisticated readers who make inferences, draw connections, and comprehend and appreciate texts with advanced vocabulary and structure; they should also be comfortable with and interested in reading pre-20th century texts. Students are excellent expository and narrative writers who can use grammar, mechanics, spelling and sentence/paragraph structure correctly.

WORLD LITERATURE

COURSE #173

SEMESTER 2 – 2.50 CREDITS

For students in grade: 12

Prerequisites: Successful completion of seven semesters of English

This course introduces students to both traditional and contemporary works from such areas as Asia, Latin America, Africa, and the Middle East. Texts are studied at a moderate to fast pace with teacher support. The syllabus includes prose, poetry, drama, and film as students study not only the literature from distant lands but some of the history and culture as well.

Works may include those by Gabriel Garcia Marquez (Colombia), Dai Sijie (China), Mahmoud Darwish (Palestinian Territories), Banana Yoshimoto (Japan), Yehuda Amichai (Israel), Marjane Satrapi (Iran), and Athol Fugard (South Africa). The course opens to students a world and daily experiences very different from their own.

Evaluation is based on class participation, quizzes, tests, essays, independent projects, oral reports, and a semester examination.

CREATIVE WRITING

COURSE #174

SEMESTER 2 – 2.50 CREDITS

For students in grade: 12

Prerequisites: Successful completion of seven semesters of English

This course is designed to offer all students the opportunity to write original poetry, short fiction, creative nonfiction, and/or drama. Students read literature and engage in the writing process through teacher prompts, using their creative voices as well as analytical skills acquired in earlier courses. Students are expected to write daily, to read for class, to edit and revise pieces over the course of the semester, and to participate in peer editing classmates' work. Since reading is integral to writing, students will read and respond to a variety of both assigned and independently selected literature with the purpose of learning about writing from the masters. Over the course of the semester, students work toward the goal of producing a coherent body of creative writing bound by a common thread, which may include work in different genres, and which involves drafting and revision as part of the process. Skills developed in this course may include: proficiency in writing various poetic styles; proficiency in identifying the qualities of exemplary writing in published work prose and dramatic forms; and, ability to use various literary devices effectively.

Evaluation is based on participation in-group assignments, on the quality of work produced, and on demonstrated ability to revise creative pieces through several stages of development. Assessment also considers self-reflections on this process, the quality of the student's portfolio, and an oral presentation of selected work.

VISIONS OF THE FUTURE

COURSE #176

SEMESTER 2 – 2.50 CREDITS

For students in grade: 12

Prerequisites: Successful completion of seven semesters of English

This is a literature-based course that exposes students to a diverse selection of "visions of the future" through a variety of fictional works, including short stories, novels, and films. This course takes a close and timely look at the ways in which the choices we make now, the lifestyles we pursue today, and the plans we make for the future will have consequences. Students read/view and analyze these works using skills they have developed in previous English classes, examining both the purposes and messages behind them and the differing ways in which authors fulfill these purposes and express these messages. The course involves reading, analytical and creative writing, and project-based learning.

Works may include *The Handmaid's Tale*, *The Road*, *Never Let Me Go*, *Ready Player One*, *Station Eleven*, *1984*, *The Parable of the Sower*, and *The Power*, among other works of fiction and nonfiction.

Evaluation is based on class discussion, quizzes, tests, oral work, essays, independent projects, and a final assessment.

FINE ARTS & APPLIED **TECHNOLOGY**

Students may choose from a variety of electives or focus on one area of interest; advanced level classes require successful completion of the introductory class with a grade of (B) or better, or permission of the instructor. Advanced classes may be taken multiple times for credit.

INTRODUCTORY LEVEL COURSES

Introduction to Darkroom Photography

Explorations: Photography

Digital Photography

Techniques of Sustainable Fashion

Multimedia Studio: Cultural Narratives in Contemporary Art

Two-Dimensional Art

Ceramics I: Introduction to Clay Artistry

Ceramics II: Wheel Throwing and Advanced Techniques

Sculpture

Filmmaking

Explorations: Film History & Appreciation

3D Graphics

Computer Game Design

Architectural Drafting and Design

Introduction to Animation

Introduction to Digital Arts

ADVANCED LEVEL COURSES

Advanced Darkroom Photography (Semester & Full Year)

Advanced Digital Photography (Semester & Full Year)

Advanced Two-Dimensional Art

AP Studio Art: Two-Dimensional Design

AP Art History

AP Ceramics

Advanced Sculpture (Semester)

Advanced Filmmaking (Semester & Full Year)

Advanced 3D Graphics

Advanced Architectural Drafting and Design

Advanced Animation

Advanced Digital Arts

INTRODUCTION TO DARKROOM PHOTOGRAPHY

COURSE #711

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: None

In this course students learn the basics of black and white film photography. Topics covered include using a 35mm camera, principles and processes, exposing and developing film, and darkroom printing techniques. In addition to learning basic skills, students will begin to use photography as a tool for seeing and exploring the world in expressive and personal ways. Students will complete various assignments, photographing both at home and in class. Projects will emphasize image composition, camera technique, and the exploration of student's personal interests. Students will look at and discuss the work of important historical and contemporary photographers, and have occasional written homework projects. Students may use their own 35mm cameras or borrow one from the school.

Evaluation will be based on class work, projects, class participation, and a final portfolio critique.

EXPLORATIONS: PHOTOGRAPHY

COURSE #713E

SEMESTER – 1.25 CREDITS - 2X PER WEEK

For students in grades: 9, 10, 11, and 12

Prerequisites: None

In this course students will learn the essentials of photography. Students will shoot on campus using digital cameras, edit images on their laptops, and make digital inkjet prints of their best work. Students will explore the traditional photographic darkroom by experimenting with techniques that may include painting with developer, hand coloring black and white images, photograms and making cyanotypes. Students may watch films about photography, look at photography books, and learn about photo history. While not as in depth as a 2.5 credit photography course, this course will give students a basic, fun introduction to the world of photography.

Evaluation will be based on class participation. This course is graded pass/fail.

ADVANCED DARKROOM PHOTOGRAPHY - SEMESTER

COURSE #717

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: Grade (B) or better in Introduction to Darkroom Photography or permission of the instructor. Students entering their senior year may request the fall term.

This course is for students who have completed at least one semester of Darkroom Photography or can demonstrate a thorough knowledge of basic darkroom techniques. Students will explore

advanced photographic techniques and work with various film and camera formats. They will work on individual projects to further their understanding of photography as an expressive medium. Subjects of study may include alternative and historic processes, hand coloring, photojournalism, and collage. The course will consist of photographic projects, technical demonstrations, the study of the history of photography, and regular class critiques and discussions. Students may use their own 35mm cameras or borrow one from the school. Medium format film cameras are available for use from the school.

*The full year course is similar in content to the semester advanced course, though the full year format allows for more concentrated study.

Evaluation will be based on class work, projects, class participation, and a final portfolio critique.

AP DARKROOM PHOTOGRAPHY

COURSE #720

FULL YEAR – 5.0 CREDITS

For students in grades: 10, 11 and 12

Prerequisite: Introduction to Darkroom Photography with a grade of B or better

This full year AP level course offers a comprehensive exploration of film-based photography with an emphasis on darkroom techniques. Students will delve into both historical and contemporary themes in photography, mastering the technical skills needed to produce high-quality photographic prints while developing their own artistic voice. This rigorous and rewarding course is designed for students with a passion for photography who are eager to push their creative boundaries and develop a sophisticated understanding of the medium.

Course Highlights:

Advanced Darkroom Techniques: Students will refine their skills in film processing, printmaking, and alternative photographic processes.

Historical and Contemporary Context: The course will examine the evolution of photography, analyzing the work of influential photographers and exploring how historical trends inform contemporary practice.

Portfolio Development: Throughout the year, students will build a portfolio of their photographic work, culminating in a final presentation and critique.

Critical Analysis: Students will develop their ability to analyze and critique photographic works, both their own and those of others.

DIGITAL PHOTOGRAPHY

COURSE #721

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: None

This course introduces students to the art of Digital Photography, from technology, to shooting,

editing and presenting their images. Students will learn how to use a DSLR camera to acquire digital negatives, edit their images using Adobe Lightroom, and make full color, large format inkjet prints. Each student will create and customize their own photo website. Students will work on a variety of projects to further their understanding of photography as an expressive medium. Subjects of study may include: working with color vs. black and white, creating photo stories or books, studio portraits, architecture, landscape and street photography. The course will consist of assignments, technical demonstrations, responding to working photographers, and regular class discussions. Photography assignments will consist of in-class work with some photography outside of class (on location).

Evaluation will be based on class work, projects, writing and class participation.

ADVANCED DIGITAL PHOTOGRAPHY - SEMESTER

COURSE #723

SEMESTER – 2.50 CREDITS

For students in grades: 10, 11, and 12

Prerequisites: Grade (B) or better in Introduction to Digital Photography or permission of the instructor.

This course is for students who have completed at least one semester of Digital Photography. Students will refine their digital camera and visual thinking skills, adding depth, sophistication and meaning to their images. Students will learn advanced post processing-techniques, including raw processing and layering images using Adobe Lightroom and Photoshop. Students will work on an in-depth independent project of their choosing. Other opportunities for Advanced Digital Photography students may include a visit with a professional guest photographer and a day-long field trip to take photos in Boston. Students may finish this course with a portfolio of their best images, presented online and as large format exhibition prints in a gallery setting.

*The full year course is similar in content to the semester advanced course, though the full year format allows for more in-depth study. Students in the full year course will have more time to learn advanced technology, pursue independent projects, and build their portfolio.

Evaluation will be based on class work, projects, written assignments and class participation.

TECHNIQUES OF SUSTAINABLE FASHION

COURSE #726

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: None

This course will focus on four areas of sustainable fashion: materials, technique, sourcing and ethics. We will investigate the raw materials used to make textiles from renewable plant-based resources to non-renewable petroleum-based fibers. Students will learn “slow-fashion” hand-sewing skills for various techniques of clothing repair such as attaching buttons, patching, and darning. Ambitious students can take on full redesigns of garments or investigate fashion illustration to build a portfolio suitable for applying to collegiate level fibers programs.

Unit projects in this course may include, hand sewing: embroidery from cultures around the world, hand-dying: the role of indigo in the fiber arts of Asia, and quilting: the sustainable roots of an African American tradition.

Evaluation will be based on portfolio assessment, show reviews, and participation in discussions.

MULTIMEDIA STUDIO: Cultural Narratives in Contemporary Art

COURSE #729

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: None

This studio art course centers on exploring contemporary art created by ALAANA (African, Latiné, Asian, Arab, Native American) artists from around the world. We will take a nurturing, inclusive, and informed approach to art by exploring the diverse voices and perspectives within both ALAANA and LGBTQIA communities. This hands-on studio class is designed to draw inspiration from the techniques and themes present in contemporary art to develop a broad range of technical skills informed by the practices of underrepresented communities in the global art landscape. Multimedia Studio is a course designed to give students a voice in proposing what materials best suit their student-driven assignments. Through the work of investigating the identities of others, we will develop the tools to create artistic expressions about our own identities and world views.

Evaluation will be based on portfolio assessment, project outline proposals, and participation in discussions.

TWO-DIMENSIONAL ART

COURSE #733

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: None

Anyone can learn to draw, and this is your opportunity! In this fun course students learn the basics of painting and drawing through a variety of exciting and creative opportunities. Through the practice of simple procedures, students will develop an easy confidence with observational drawing, color theory, shading, proportion and composition. Projects will emphasize elements and principles of design, technique, and the exploration of students' personal interests. Students will look at and discuss the work of important historical and contemporary artists as well as the creative inventions of their peers. There is occasional drawing homework where students reinforce the skills they are exposed to in class. The art studio is open to students during unscheduled blocks throughout the day.

Evaluation will be based on class projects, homework exercises and class participation.

ADVANCED TWO-DIMENSIONAL ART

COURSE #735

SEMESTER – 2.50 CREDITS

For students in grades: 10, 11, and 12

Prerequisites: Grade (B) or better in Two-Dimensional Art or permission of the instructor.

This exciting course is for students who have completed one semester of Two-Dimensional Art and are eager to make a commitment to their artistic development. Students have the opportunity to explore advanced techniques as they work on original ambitious projects aimed to further their understanding of personal and expressive design and compositional strategies. Projects may consist of alternative and historic processes, painting, mixed media, and illustration. The course consists of studio practice, technical demonstrations, art history presentations and regular class critiques. There are some at-home projects that are required for the final portfolio. The art studio is open during unscheduled blocks throughout the day. The curriculum cycles every two to three years so students can take this course multiple times for credit.

Evaluation will be based on class work, class participation and homework projects.

AP STUDIO ART: TWO DIMENSIONAL DESIGN

COURSE #739

FULL YEAR - 5.00 CREDITS (H)

For students in grades: 10, 11 and 12

Prerequisites: Grade (B) or better in Introduction to Two-Dimensional Art or the equivalent

This Honors level course is for students who have completed one semester of Two- Dimensional Art and are eager to make an authentic commitment to their artistic development. The course utilizes the Advanced Placement curriculum. Students are challenged to master advanced techniques as they work on original ambitious projects aimed to further their understanding of personal and expressive design and compositional strategies. Projects may consist of alternative and historic processes, painting, book making, mixed media, and illustration. The course consists of studio practice, technical demonstrations, art history presentations, and regular class critiques. There are some at-home projects that are required for a final portfolio. The art studio is open during unscheduled blocks throughout the day. The curriculum cycles every two to three years so students can take this class multiple times for credit.

Evaluation will be based on class work, class participation, homework projects.

AP ART HISTORY

COURSE #740

FULL YEAR – 5.00 CREDITS

For students in grades: 10, 11, and 12

Prerequisites: None

AP Art History is a deep exploration of art through analysis, discussion, journaling, and occasional studio art projects. CollegeBoard asks that “students must know, be able to do, with a focus on the big ideas”, therefore this course balances academic study and creative practice to develop a well-rounded understanding of art from the ancient world to modern times.

The AP Art History course is organized into 10 units to prepare students to understand works of art from diverse cultures, including placing these works in context to highlight the relationships among them. These units are: Global Prehistory, Ancient Mediterranean, Early Europe and Colonial Americas, Later Europe and Americas, Indigenous Americas, Africa, West and Central Asia, The Pacific, and lastly South, East, and Southeast Asia as well as Global Contemporary to the present.

Evaluation: Based on written assignments, journal artifacts, and participation in discussions.

CERAMICS I: INTRODUCTION TO CLAY ARTISTRY - SEMESTER

COURSE #741

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: none

Ceramics I: Introduction to Clay Artistry is a foundational course that aims to provide students with a comprehensive understanding of clay as an artistic medium. This semester-long course will cover various clay modeling and decoration techniques through engaging and challenging projects. Students will develop a strong foundation in the properties of clay and explore individual and creative solutions to design problems. Emphasis will be placed on hands-on learning and building essential skills in clay manipulation.

Topics Covered:

1. Basics of clay properties and handling.
2. Fundamental clay modeling techniques.
3. Introduction to the principles and elements of design and how it relates to clay.
4. Exploration of individual creative solutions in design.
5. Study of past and contemporary ceramic artists and trends.
6. Class critiques to enhance artistic understanding.
7. Portfolio development as a key assessment component.

Evaluation: Portfolio assessment, Class critiques, Participation and effort, Cleanliness and Safety

Note: This course sets the stage for advanced study in ceramics and provides a solid foundation for further exploration in Ceramics II.

CERAMICS II: WHEEL THROWING AND ADVANCED TECHNIQUES - SEMESTER COURSE #743
SEMESTER - 2.50 CREDITS
For students in grades: 9, 10, 11, and 12
Prerequisite: Ceramics I or instructor approval

Ceramics II: Wheel Throwing and Advanced Techniques is a follow-up course that builds upon the foundation laid in Ceramics I. This semester-long course focuses on the basics of working on the potter's wheel, offering students an in-depth exploration of wheel throwing techniques. Building on the skills acquired in Ceramics I, students will delve into advanced ceramic techniques and projects. The course will also include a deeper study of past and contemporary ceramic artists and trends, providing a broader context for artistic development.

Topics Covered:

1. Basics of working on the potter's wheel.
2. Advanced wheel throwing techniques.
3. Complex ceramic projects and challenges.
4. In-depth exploration of individual artistic expression.
5. Continued study of past and contemporary ceramic artists and trends.
6. Show reviews to refine artistic understanding.
7. Portfolio refinement and development.

Evaluation: Portfolio assessment, Show reviews, Participation and effort, Cleanliness and Safety
Note: Successful completion of Ceramics II equips students with advanced skills for further study in Advanced Ceramics: Mastery in Clay Artistry. The course encourages a deeper exploration of personal artistic style and expression.

AP CERAMICS
COURSE #746

FULL YEAR - 5.00 CREDITS

For students in grades: 10, 11, and 12

Prerequisites: Successful completion of Ceramics II with a grade of B or above, or permission of the instructor. Can be taken multiple times for credit.

In this college-level AP Ceramics class, students will develop a creative body of work in ceramics both in and outside of class. The student will create an inquiry-based portfolio centered around a sustained investigation and essential questions they develop in ceramics. Students will learn how to synthesize materials, processes, and ideas in their ceramic artwork, as well as document their creative process and exploration specifically within the realm of ceramics and glaze mixing. The AP Ceramics Portfolio focuses entirely on ceramics as the medium of artistic exploration.

AP Art & Design is a way of thinking. The first 9 weeks will be dedicated to the development of their sustained investigation within the field of ceramics, which they will work on over the course of the year. Students are expected to document their inquiry, keeping a sketchbook of their

ceramic ideas and process throughout the course. These sketchbooks are a crucial part of their portfolio that they will be submitting in March, and as such, they should be very well developed.

It is important to note that this AP Ceramics class requires a time commitment above and beyond the school day. To be successful in the AP Ceramics Portfolio, it requires time, dedication, and commitment from the student. It also demands resourcefulness and independence.

Two Parts of the AP Ceramics Portfolio:

1. **Sustained Investigation 60%:** Sustained Investigation is composed of 15 images showing how inquiry guided students' creative process specifically in ceramics. This could showcase finished ceramic work, as well as ceramic details, brainstorming, and well-developed ceramic sketches. There is no minimum or maximum amount of ceramic pieces. There is also a written component explaining the ceramic portfolio to the reader.
2. **Selected Works 40%:** Selected Works are of the highest quality and can include ceramic pieces that were part of the sustained investigation, but they don't have to be. These ceramic works cannot have been previously submitted to the AP Portfolio. This should also show the synthesis of materials, ideas, and processes specifically within the realm of ceramics and glaze mixing. They should represent the student's expertise in craftsmanship, ideas, and 3D design within ceramics.

Learning Objectives: The learning objectives remain the same, but with a specific focus on ceramics and glaze mixing as the primary mediums of exploration and expression.

SCULPTURE

COURSE # 749

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: None

Sculpture is a course designed for all students who are ready to expand and explore their creative potential. Projects invite and encourage students to be curious and expressive with a variety of 3d materials. The studio is filled with wire, plaster, cardboard, wood, string, and found objects – all to be used in new and unexpected ways. In addition to these traditional sculptural materials, this course also introduces contemporary modes of making in sculpture, such as starting with an idea or theme and using whatever means necessary to explore and express it. This may include newer elements such as video projection, sounds, music or light. Students can work independently or collaboratively to create projects that range from objects to performances to interactive installations to civic engagement events. This is a great course for any student looking to develop and practice their power of creative thinking, make cool stuff, and become a more confident creative person. The possibilities are endless!

Evaluation will be based on portfolio assessment, participation and effort.

ADVANCED SCULPTURE

COURSE #750

SEMESTER - 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: Grade (B) or better in Sculpture or permission of the instructor.

Advanced Sculpture may be taken more than once for credit.

With greater confidence working across a range of 3d mediums, students in *Advanced Sculpture* will apply and build upon their previous experience and continue to develop their own artistic work flow. A series of thematic and open-ended projects will inspire students to take aesthetic risks, discover new territory, develop original ideas, and expand upon well established concepts. Students can choose to work independently and/or collaboratively as they push their creative efforts to new heights and expand their expressive horizons. Ultimately, the goal is for students to hone their art making skills, develop their unique voice, and work towards portfolio quality pieces.

Evaluation will be based on projects, reflections and participation in class work and discussions.

FILMMAKING

COURSE #751

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: A B or better in one semester of Digital Photography or Darkroom Photography, or instructor approval.

In this course, students will plan, shoot and edit their own productions. Using a hands-on approach, students will learn the skills involved in working with a crew, operating high definition camcorders, and editing on professional applications such as Final Cut Pro or Adobe Premiere. Students will make both fiction and non-fiction (documentary) digital short films. Students will talk about and critique their own work and films shown in class from both a creative and technical point of view.

Evaluation will be based on projects, reflections, class work and participation in discussions.

EXPLORATIONS: FILM HISTORY AND APPRECIATION

COURSE #753E

SEMESTER – 1.25 CREDITS - 2X PER WEEK

For students in grades: 9, 10, 11, and 12

Prerequisites: None

In this course students will learn about the history of cinema, from its beginnings as silent films, to the development of the Hollywood Studio system, to the present state of independent, international, multicultural cinema. Students will learn through film screenings each class, accessible lectures and informal discussions. Students will gain exposure to different genres, like Film Noir, the Western and so on, and important film directors, such as Orson Welles, Alfred Hitchcock, Akira Kurosawa, Lee (Ang and Spike), Coppolla (Francis and Sofia), Sajit Ray, and

Wes Anderson. Along the way, we will explore how movies are made: cinematography, editing, writing, and producing.

Evaluation will be based on class participation. This course is graded pass/fail.

ADVANCED FILMMAKING - SEMESTER

COURSE #755

SEMESTER – 2.50 CREDITS

ADVANCED FILMMAKING - FULL YEAR*

COURSE #757

FULL YEAR – 5.0 CREDITS

For students in grades: 10, 11, and 12

Prerequisites: Successful completion of Filmmaking with a grade of B or above, or permission of the instructor.

This course is geared towards students interested in making short films at a more advanced level. Students will complete challenging exercises and will produce their own independent films, which they will write and direct in crews. Students have access to more advanced equipment to complete their projects, such as mirrorless cameras with a variety of lenses, boom and lavalier microphones, studio lights, gimbals and a drone. Students will go deeper into the advanced features of digital editing and effects applications, such as Final Cut Pro, Adobe Premiere and Adobe AfterEffects. Students will also study the style and technique of significant filmmakers, gaining a broader understanding of video and film production from a historical perspective.

* The full year course is similar in content to the semester advanced course, though the full year format allows for more in-depth study. Students in the full year course will have more time to learn advanced technology and create independent films. The Full Year Advanced Filmmaking course will culminate with a film festival, awards ceremony and “filmmaker talkback,” curated and run by the Advanced students, to include work from all the Filmmaking classes.

Evaluation will be based on projects, reflections and participation in class work and discussions.

3D GRAPHICS

COURSE #761

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: None

In this course students will learn to understand and manipulate digitally simulated 3D space using primarily Cinema4D and Mudbox. Starting from primitives, students create 3D models, scenes, and basic animations. Students will undertake multiple projects utilizing conventional and non-conventional modeling and lighting techniques. Students use Adobe Photoshop to explore multiple texture-mapping techniques and basic animations of objects and scenes.

Students generate high resolution rendered scenes that meet the criteria of each lesson and final project. Students will have an introductory level exposure to 3D printing.

Evaluation will be based on projects, reflections and participation in class work and discussions. A final grade of B or above is required in order to advance to the Advanced 3D Graphics.

ADVANCED 3D GRAPHICS

COURSE #763

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisite: Successful completion of 3D Graphics receiving a grade of B or above, or instructor approval.

In this course, students will further learn to understand and manipulate digitally simulated 3D space. This course is designed for students seeking continued development of their talents to a higher level, and to experience more advanced aspects of the 3D art making process. The content of the course is geared towards students who are looking for projects based on real world applications, and who wish to excel and really push the limits of their creative potential. Students will apply 3D graphics knowledge and skill toward producing more specific, individual and team-based projects. Students are exposed to various advanced-level 2D and 3D computer graphic tools and techniques currently being used to create artwork, animations, and 3D printed models. Students integrate a combination of tools and techniques that best suit the needs and fulfill the prescribed outcomes of their projects. Programs used are: Cinema4D, Adobe AfterEffects and Mudbox. Students also use Adobe Photoshop and Adobe Illustrator to refine their texture-mapping techniques and support the production quality of their projects.

Evaluation will be based on projects, reflections and participation in class work and discussions.

COMPUTER GAME DESIGN

COURSE #765

SEMESTER - 2.50 CREDITS

For students in grades: 9, 10, 11 and 12

Prerequisites: None

Students in Computer Game Design conceptualize, create, edit and refine multiple computer games. Students use Adobe Photoshop, Cinema 4D, Unity and Unreal Engine to create assets and construct game environments. Units begin with small independent projects which result in team driven, collaborative work on larger scale game ideas. The games designed range from two-dimensional side scrollers, top view third person, all the way up to fully immersive three-dimensional environments. Students will be responsible for writing game design documents, creating characters and modeling 3D world levels. Students will determine all aspects of the newly designed game experience from overall concept to creating an effective user interface, including cutscenes and simulated physics behaviors. The course will also focus on the history of video gaming and the rise of the eSports industry. Projects will be developed to run on MacOS and mobile platforms.

Evaluation will be based on class work, individual projects, group project work, written design documents, class participation and the quality of final outcomes.

ARCHITECTURAL DRAFTING AND DESIGN

COURSE #767

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: None

Ever want to design your own dream home? Well, this course will give you the awareness and skills you will need. Basic concepts of architectural design and philosophy will be taught through creative challenges involving sketching, linear perspective, floor plan and elevation design as well as three dimensional model building. Projects may include designing small houses, furniture, monuments as well as gardens/landscapes. Studying the evolution of architectural styles and how they have been influenced by ecology, technology and society will provide students with a taste of the creative challenges facing architects today. Visits to the DeCordova Museum, Gropius House and other local sites are often important aspects of the course. There are also exciting homework exercises and projects. Projects and themes vary from year to year, so this course may be repeated for credit with instructor permission.

Evaluation will be based on class projects, homework exercises and class participation.

ADVANCED ARCHITECTURAL DRAFTING AND DESIGN

COURSE #768

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: Architecture Drafting and Design

This course is for students who want to expand upon their perspective drawing skills and model making. Students will have the opportunity to complete similar projects from Architectural Drafting and Design, or design their own building and drawing projects.

Based on personal interest and teacher collaboration, students will have the opportunity to create a portfolio of design works from an umbrella of choice based design projects including but not limited to furniture design, interior architecture, urban design, product design as well as dwelling design.

Evaluation will be based on studio projects, at home projects and class participation.

INTRODUCTION TO ANIMATION

COURSE #769

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: None

The ancient impulse to make pictures and tell stories is alive and thriving in today's world of animation. Animation is a time-based medium that brings images and stories to life through a sequence of frames that, when displayed in rapid succession, create the illusion of movement, or

vitality. In this course, students will learn the history of illustrating motion, examine the long-standing 12 principles of animation, and explore technological advancements in this ever evolving art form. Students will complete a series of choice-based projects that include classic analog animation in easy-to-manipulate mediums such as cut paper, found objects, and chalk. Working in the digital studio, students will also use tools such as Wacom Tablets and stylus', and software such as Krita and Dragon Frame, to advance their skills in computer generated animation. Throughout the semester each student will create a digital portfolio in the form of a website that captures and documents artistic growth and learning.

Evaluation will be based on projects, reflections and participation in class work and discussions. A final grade of B or above is required in order to advance to the Advanced Animation class.

ADVANCED ANIMATION

COURSE #771

SEMESTER - 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: Successful completion of Intro to Animation with a grade of B or above, or instructor approval.

Advanced Animation may be taken more than once for credit.

With greater confidence working in this time-based medium, students in *Advanced Animation* will apply and build upon their previous experience and continue to develop their own artistic work flow. A series of thematic and open-ended projects will inspire students to take aesthetic risks, discover new territory, develop original ideas, and expand upon well established concepts. Students can choose to work independently and/or collaboratively as they push their creative efforts to new heights and expand their expressive horizons. Ultimately, the goal is for students to hone their art making skills, develop their unique voice, and work towards portfolio quality pieces.

Evaluation will be based on projects, reflections and participation in class work and discussions.

INTRO TO DIGITAL ART

COURSE #775

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: None

All students, from the inexperienced novice to the accomplished artist, can enter this class, get some basic first-hand knowledge of digital tools, and begin to imagine the huge range of creative and expressive possibilities a studio has to offer. Many contemporary artists move seamlessly between analog and digital mediums. This course is designed to do just that – allow students to explore analog and digital mediums, and leverage the power and versatility that comes with blending these two worlds together. Throughout the semester, a series of choice-based projects encourage students to use their computers, drawing tablets, scanners, copy stands, and printers to build digital proficiency. Simultaneously, the studio classroom has analog (traditional) supplies and materials for students to use and integrate into their process of making art. In order to

capture and document artistic growth and learning, each student will create a digital portfolio in the form of a website. This course provides a strong foundation for taking additional analog or digital art classes.

Evaluation will be based on projects, reflections and participation in class work and discussions. A final grade of B or above is required in order to advance to the Advanced Digital Art class.

ADVANCED DIGITAL ART

COURSE #777

SEMESTER – 2.50 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: Successful completion of Introduction to Digital Art receiving a grade of B or above, or permission of the instructor.

Advanced Digital Art may be taken more than once for credit.

With greater confidence working between analog and digital mediums, students in *Advanced Digital Art* will apply and build upon their previous experience and continue to develop their own artistic work flow. A series of thematic and open-ended projects will inspire students to take aesthetic risks, discover new territory, develop original ideas, and expand upon well established concepts. Students can choose to work independently and/or collaboratively as they push their creative efforts to new heights and expand their expressive horizons. Ultimately, the goal is for students to hone their art making skills, develop their unique voice, and work towards portfolio quality pieces.

Evaluation will be based on projects, reflections and participation in class work and discussions.

HEALTH AND FITNESS

The Health and Fitness Program is designed to build the skills, knowledge and confidence needed to maintain an active, healthy lifestyle. Health education and physical education are combined to make up the Health and Fitness Program. This is a required program for grades 9-12. All classes are co-educational, and students are placed in groupings of 9th grade, sophomores, and juniors/seniors. At the 9th grade and junior levels health education is a quarter-long unit while the sophomore level program has health education topics integrated within the Health & Fitness course.

9th Grade HEALTH AND FITNESS

COURSE #911

FULL YEAR – 2.5 CREDITS - 2X PER WEEK

For students in grade: 9

Prerequisites: None

The focus of the 9th grade Health and Fitness Program is Personal Fitness. Curriculum includes health topics, fitness concepts, and physical activities both in the classroom and in the gymnasium. Students are assigned an online textbook, Fitness For Life, and complete written homework assignments, tests and fitness assessments. One quarter is dedicated to classroom-based health units, which include: healthy relationships, human sexuality, depression and suicide, alcohol, tobacco and other drugs. All 9th grade students are scheduled two times a week for the entire year.

Evaluation is based on class participation, attendance, effort, preparedness, homework, written assignments and tests. Students receive a letter grade.

SOPHOMORE HEALTH AND FITNESS

COURSE #921

FULL YEAR – 2.5 CREDITS - 2X WEEK

For students in grade: 10

Prerequisites: None

The sophomore program concentrates on the health related and skill related components of physical fitness. Students participate in a wide variety of physical activities and fitness assessments, including a quarter length unit on muscular fitness in the Fitness Center. All sophomores are scheduled two times a week for the entire year. There are also a wide variety of health topics including: CPR, nutrition and prescription drug safety to name a few.

Evaluation is based on class participation, attendance, effort, preparedness, homework, written assignments and tests. Students receive a letter grade.

SOPHOMORE FIRST AID/CPR/AED and HEALTH & FITNESS

COURSE: #922

FULL YEAR – 2.5 CREDITS - 2X PER WEEK

For students in grade: 10

The American Red Cross First Aid/CPR/AED program is designed to help participants recognize and respond appropriately to cardiac, breathing and first aid emergencies. The courses in this program teach participants the knowledge and skills needed to give immediate care to an injured or ill person when minutes matter, and to decide whether advanced medical care is needed. There are no prerequisites for this course.

All sophomores are scheduled two times a week for the entire year. Students will have 1 semester of first aid and an opposite semester of Health and Fitness. Evaluation is based on class participation, attendance, effort, preparedness, homework and written assignments.

SOPHOMORE LIFEGUARD TRAINING and HEALTH and FITNESS

COURSE #923

FULL YEAR – 2.5 CREDITS - 2X PER WEEK

For students in grade: 10

Prerequisites for Lifeguard Training: Must be 15 years of age, have the ability to swim 300 yards of front crawl and breaststroke without stopping, be able to swim one length of the pool then retrieve a 10 pound object from a depth of 10 feet and complete the lap while carrying the object, and tread water without use of hands for 2 minutes. Failure to meet this prerequisite will require students to drop Lifeguard Training and enter into a Sophomore Health and Fitness course.

Lifeguard Training is an American Red Cross certification course which teaches the skills required to be a lifeguard. Students will learn about the professional responsibilities of being a lifeguard such as risk management, water rescues, and first aid. Students will also experience fitness promoting activities. All sophomores are scheduled two times a week for the entire year. This semester one course is coupled with the Sophomore Health and Fitness course semester two to complete the year-long requirement.

Evaluation is based on class participation, attendance, effort, preparedness, homework, written assignments and American Red Cross issued standard lifeguard written tests and skill tests. Students receive a letter grade.

SOPHOMORE UNIFIED PHYSICAL EDUCATION and HEALTH and FITNESS

COURSE #926

FULL YEAR – 2.5 CREDITS - 2X PER WEEK

For students in grade: 10

Prerequisites: None

This course brings together students of all abilities to engage in developmentally appropriate activities, including lifetime fitness, physical activities, and sports. Students will collaborate to

build competence and confidence across a variety of physical pursuits, while fostering teamwork and mutual support. Through leadership opportunities, participants will be empowered to help create a more inclusive and accepting school culture. All students will earn Health and Fitness course credit. This semester one course is coupled with the Sophomore Health and Fitness course semester two to complete the year-long requirement.

Students who are requesting this elective may sign up during the course selection process and **MUST** submit an application with the H&F Department for entry into this course. All applications will be reviewed and selected by the Health and Fitness Department and Special Education teachers.

JUNIOR HEALTH AND FITNESS

COURSE #931

SEMESTER – 1.25 CREDITS - 2X WEEK

For students in grades: 11

Prerequisites: None

The junior program is a one-semester requirement that meets two times a week in either semester one or semester two. For one quarter students participate in sports, games, a muscle fitness unit that explores a variety of muscular fitness training programs and complete fitness assessments. In the other quarter, students participate in the Life Skills Health course. This health course considers many topics, including dating and domestic violence, human sexuality (pregnancy prevention and the prevention of sexually transmitted diseases), and alcohol, marijuana and prescription drug misuse prevention. Students explore these topics through a discussion-based program, in-class activities, student presentations, and a brief research project.

Evaluation for all junior programs is based on class participation, attendance, effort, preparedness, homework, written assignments and tests. Students receive a letter grade.

JUNIOR/SENIOR LIFEGUARD TRAINING

COURSE #933

SEMESTER – 1.25 CREDITS - 2X PER WEEK

For students in grades: 11 or 12

Prerequisites: None

NOTE: This is an elective course that does not count towards your Health and Fitness graduation requirement. This course must be taken in addition to (not in replacement of) 931, 935, or 937.

Prerequisites for Lifeguard Training: Must be 15 years of age, have the ability to swim 300 yards of front crawl and breaststroke without stopping, be able to swim one length of the pool then retrieve a 10 pound object from a depth of 10 feet and complete the lap while carrying the object, and tread water without use of hands for 2 minutes. Failure to meet this prerequisite will require students to drop this elective Lifeguard Training course.

The junior program is a semester elective that meets two times a week. Junior/Senior Lifeguard Training is an elective class. Lifeguard Training is an American Red Cross certification course which teaches the skills required to be a lifeguard. Students will learn about the professional responsibilities of being a lifeguard such as risk management, water rescues, and first aid. Students will also experience fitness promoting activities.

Evaluation is based on class participation, attendance, effort, preparedness, homework, written assignments and American Red Cross issued standard lifeguard written tests and skill tests. Students receive a letter grade.

JUNIOR HEALTH AND FITNESS and ADVANCED MUSCLE FITNESS

COURSE #935

SEMESTER – 1.25 CREDITS - 2X WEEK

For students in grades: 11

Prerequisites: Successful completion of grade 9 and grade 10 muscular fitness units

The Junior H&F and Advanced Muscle Fitness course is a one-semester elective that meets twice a week in either the first or second semester and fulfills the H&F requirement. For one quarter, students engage in advanced muscular fitness activities in the fitness center, with participation in all class strength training exercises being mandatory. The course covers advanced concepts and skills in muscle fitness training, offering various strength training methods. Students learn how to increase muscular strength, muscular endurance, and through developing the skills in proper weight training techniques, and they also complete required fitness assessments. In the other quarter students participate in the Life Skills Health course. This health course considers many health topics, including dating and domestic violence, human sexuality (pregnancy prevention and the prevention of sexually transmitted diseases), and alcohol, marijuana and prescription drug misuse prevention. Students explore these topics through a discussion-based program, in-class activities, student presentation, and a brief research project.

Evaluation for all junior programs is based on class participation, attendance, effort, preparedness, homework, written assignments and tests. Students receive a letter grade.

JUNIOR/SENIOR ADVANCED MUSCLE FITNESS

COURSE #936

SEMESTER – 1.25 CREDITS - 2X WEEK

For students in grade: 11 or 12

Prerequisites: Successful completion of grade 9 and grade 10 muscular fitness units

NOTE: This is an elective course that does not count towards your Health and Fitness graduation requirement. This course must be taken in addition to (not in replacement of) 931, 935, or 937.

Junior/Senior Advanced Muscle Fitness is a semester elective course. The course covers advanced concepts and skills in muscle fitness training and a variety of different strength training options. Muscle Strength, muscular endurance, skill and technique in weight training exercises are part of

this program. In class, students will follow their workout routine as they apply the concepts learned and strive to improve their fitness.

Evaluation for AMF elective is based on class participation, attendance, effort, preparedness, homework, written assignments and tests. Students receive a letter grade.

JUNIOR HEALTH AND FITNESS and YOGA

COURSE #937

SEMESTER – 1.25 CREDITS - 2X WEEK

For students in grades: 11

Prerequisites: None

The junior H&F and Yoga elective course is a one semester elective that fulfills the H&F requirement and meets two times a week in either semester one or semester two. For one quarter students will participate in a yoga unit and be exposed to some mindfulness-based stress reduction techniques and complete fitness assessments. In the other quarter students participate in the Life Skills Health course. This health course considers many topics, including dating and domestic violence, human sexuality (pregnancy prevention and the prevention of sexually transmitted diseases), and alcohol, marijuana and prescription drug misuse prevention. Students explore these topics through a discussion-based program, in-class activities, student presentations, and a brief research project.

Evaluation for all Junior Programs is based on class participation, attendance, effort, preparedness, homework, written assignments, and tests. Students receive a letter grade.

JUNIOR/SENIOR YOGA

COURSE #938

SEMESTER – 1.25 CREDITS - 2X WEEK

For students in grade: 11 or 12

Prerequisites: None

NOTE: This is an elective course that does not count towards your Health and Fitness graduation requirement. This course must be taken in addition to (not in replacement of) 931, 935, or 937.

Junior/Senior Yoga is a semester elective. Students participate in a variety of yoga styles and, when possible, there will be an optional field trip to a hot yoga studio. The course provides students with the knowledge and skills necessary to practice yoga during class time as well as to be able to practice yoga on one's own, outside of class time. The course will also include instruction in mindfulness-based stress reduction techniques. Students will have an opportunity to improve their flexibility, muscular strength, muscular endurance, balance and stress management techniques.

Evaluation for Yoga elective is based on class participation, attendance, effort, preparedness, homework, written assignments and tests. Students receive a letter grade.

JUNIOR/SENIOR UNIFIED PHYSICAL EDUCATION

COURSE #939

SEMESTER 2 – 1.25 CREDITS - 2X PER WEEK

For students in grades: 11 and 12

Prerequisites: None

This course brings together students of all abilities to engage in developmentally appropriate activities, including lifetime fitness, physical activities, and sports. Students will collaborate to build competence and confidence across a variety of physical pursuits, while fostering teamwork and mutual support. Through leadership opportunities, participants will be empowered to help create a more inclusive and accepting school culture.

All students will earn elective course credit and are also required to sign up for their grade level Health and Fitness course. Students who are requesting this elective may sign up during the course selection process and **MUST** submit an application with the H&F Department for entry into this course. All applications will be reviewed and selected by the Health and Fitness Department and Special Education teachers.

SENIOR WELLNESS PROJECT

COURSE #941

INDEPENDENT – 1.25 CREDITS

For students in grade: 12

Prerequisites: It is preferred that students successfully complete the grade 9, 10 and 11 curricula prior to enrolling in the Senior Wellness Project. When that is not possible, at a minimum, successful completion of fitness testing and enrollment will be considered on a case-by-case basis.

The Senior Wellness Project is an independent project that is completed during the senior year. Students design a plan to reach personal fitness and wellness goals and implement their plan independently or on a CCHS varsity sports team. Students must then keep a journal of their activities, write a summary and critique of three research articles, and write a self-evaluation.

Evaluation will be based on completion of a minimum of 27 hours of physical activity and all written assignments. A detailed grading rubric is included in the information packet available on the CCHS website. Students receive a letter grade.

RESPONDING TO EMERGENCIES: FIRST AID/CPR/AED - Not offered 2025-2026

COURSE #950

SEMESTER – 1.25 CREDITS - 2X PER WEEK

For students in grades: 9, 10, 11, and 12

Prerequisites: None

Comprehensive First Aid/CPR/AED program to help students recognize and respond appropriately to cardiac, breathing and first aid emergencies. The courses in this program teach students the knowledge and skills needed to give immediate care to an injured or ill person and to

decide whether advanced medical care is needed. This program is designed primarily for use in secondary schools, colleges, universities and other settings that require a curriculum of greater length than the American Red Cross First Aid/CPR/AED program. The core course, Responding to Emergencies Adult and Pediatric First Aid/CPR/AED, will also include additional emergency lessons and will teach participants the knowledge and skills needed to give immediate care to an injured or ill person and to decide whether advanced medical care is needed, covers a wide variety of emergency situations.

NOTE: This is an elective course outside that does not count towards your health and fitness graduation requirement.

NOTE: Not offered 2025-2026

MATHEMATICS

The Mathematics Department offers instruction in algebra, number and quantity, functions, modeling, geometry, and statistics and probability. As teachers match their instructional approaches to the predominant learning styles of each class, they strive to enable all students to make progress in their ongoing development of the following mathematical practices: making sense of problems and persevering through solving them, reasoning abstractly, communicating their knowledge and constructing viable arguments, flexibility with multiple representations of concepts, making connections among math topics, procedural fluency, and self-assessment skills.

The Mathematics Department also provides support to all students who would like assistance with math homework, make-up assignments, or review of learned concepts. The Math Resource Center (MARC) is staffed by math tutors and is available to students throughout the school day.

Students are reminded that while successful completion of two years of mathematics is required for graduation at CCHS, many students need four years of mathematics to be prepared to matriculate at most colleges and universities.

COURSES OFFERED:

Geometry Essentials

Blended Algebra 1 and Geometry

Geometry

Algebra 2

Precalculus

Calculus

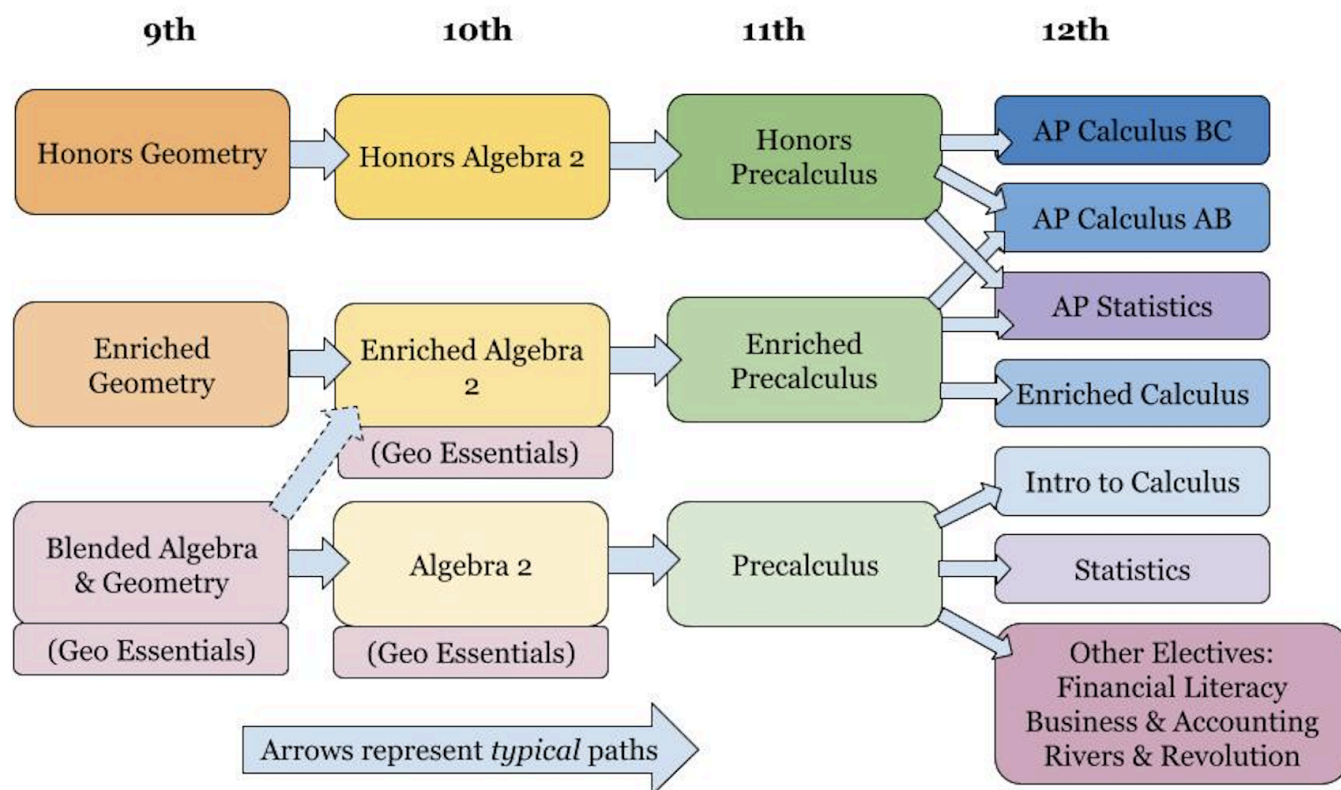
Statistics

Accounting and Business Math (Semester)

Financial Literacy (Semester)

MATHEMATICS PROGRAM: TYPICAL COURSE SEQUENCES

Note: Arrows indicate *typical* paths through the Mathematics sequence and *do not* preclude other movement between levels. Teachers make course and level recommendations based on course prerequisites and are guided by their knowledge of a student's strengths in order to make a recommendation that will help to ensure the student's success.



GEOMETRY ESSENTIALS

COURSE #407

FULL YEAR – 2.5 CREDITS - 2X PER WEEK

For students in grades: 9 or 10

Prerequisites: 8th grade or Blended Algebra 1 and Geometry teacher recommendation.

This course is for students who enter 9th grade in Blended Algebra 1 and Geometry and are interested in taking an Algebra 2 class during 10th grade. Geometry Essentials is taken concurrently with Blended Algebra 1 and Geometry or an Algebra 2 class. It exposes students to

highlighted common core geometry concepts that prepare them for Enriched Precalculus in 11th grade. Topics include but are not limited to congruent triangles, rigid motion transformations, parallel lines and related figures, the Pythagorean Theorem, an introduction to trigonometry, circles, surface area and volume.

Evaluation: Students will be evaluated based on their level of achievement of the common core standards as demonstrated through homework, quizzes, tests, and semester examinations.

BLENDED ALGEBRA 1 and GEOMETRY

COURSE #413

FULL YEAR – 5.00 CREDITS

For students in grade: 9

Prerequisites: 8th grade teacher recommendation

This course consists of the topics covered in a first year Algebra course blended with an introduction of Geometry topics. Such algebra topics include the language of algebra, integer operations, functions, solving linear functions, graphing linear functions, solving 1-variable linear equalities, applications of linear equations and 1-variable inequalities, systems of linear equations and inequalities, polynomials (operations, factoring quadratics, solving quadratic equations), properties of exponents and radicals. While not a Geometry course, the Blended course prioritizes some geometric concepts students need in real life and for standardized assessments, such as: geometric definitions related to angles, triangle properties and congruence, parallel lines in a plane, properties of quadrilaterals, triangle similarity, areas of polygons, properties and areas of circles.

Evaluation: Students will be evaluated based on their level of achievement on the common core learning standards as demonstrated through homework, quizzes, tests and semester examinations.

GEOMETRY (E)

COURSE #415

FULL YEAR – 5.00 CREDITS

For students in grade: 9 or 10

Prerequisites: 8th grade teacher recommendation or successful completion of Blended Algebra 1 and Geometry

This is a fast paced, proof-based course consisting of topics generally included in a Euclidean Geometry course such as geometric definitions, theorems, and symbols related to angles, triangle properties and congruence, triangle inequalities, parallel lines in a plane, coordinate geometry, quadrilateral properties, triangle similarity, areas of polygons, properties and area of circles, and surface area and volume of solids. This course emphasized the logic and abstract reasoning necessary to write paragraph proofs, formal two-column proofs, and indirect proofs. It is expected that students have strong Algebra 1 skills that require little review.

Evaluation: Students will be evaluated based on their level of achievement of the common core standards as demonstrated through homework, quizzes, tests, and semester examinations.

GEOMETRY (H)

COURSE #417

FULL YEAR – 5.00 CREDITS

For students in grade: 9

Prerequisites: 8th grade teacher recommendation

This is an intensive, very fast-paced, proof-based course consisting of all topics in a Euclidean Geometry course such as geometric definitions, theorems, and symbols related to angles, triangle properties and congruence, triangle inequalities, parallel lines in a plane and in space, coordinate geometry, quadrilaterals, transformations of geometric figures in the coordinate plane, similarity, areas of polygons, circles, spheres, and geometry of three-dimensional figures. This course emphasizes the logic and abstract reasoning necessary to write informal proofs, both direct and indirect using definitions, postulates and theorems. It is expected that students have retained all of their Algebra 1 skills.

Evaluation: Students will be evaluated based on their level of achievement of the learning standards as demonstrated through homework, quizzes, tests, optional original exercises and semester examinations.

ALGEBRA 2

COURSE #423

FULL YEAR – 5.00 CREDITS

For students in grade: 10

Prerequisites: Successful completion of Geometry or Geometry Essentials, or teacher recommendation.

This course reviews and extends the topics introduced in Algebra 1 and contains topics in a second-year college preparatory course in Algebra. Topics include the language of algebra, properties and operations of the real number system, solving equations (linear, absolute value, linear systems, quadratic, rational and radical) solving one- and two- variable inequalities, functions (defining, evaluating, graphing (linear and quadratic), writing equations for, compositions, and transformations), polynomials and factoring, rational expressions, exponents and radicals, complex number systems, and arithmetic and geometric sequences and series.

Evaluation: Students will be evaluated based on their level of achievement on the common core learning standards as demonstrated through homework, quizzes, tests and semester examinations.

ALGEBRA 2 (E)

COURSE #425

FULL YEAR – 5.00 CREDITS

For students in grade: 10

Prerequisites: Successful completion of Enriched Geometry, Blended Algebra 1 and Geometry with Geometry Essentials, or teacher recommendation. *Score on the Algebra 2 Placement Exam will also be considered.*

This course consists of topics in a standard second-year college preparatory course in Algebra.

These topics include the language of algebra, the real number system, functions (notation and properties of, transformations and compositions, inverses, domain and range), systems of equations and inequalities, real-world applications, arithmetic and geometric sequences and series, the study of quadratic functions, polynomials and factoring, exponents and radicals, complex numbers, and rational expressions and related equations.

Evaluation: Students will be evaluated based on their level of achievement on the common core learning standards as demonstrated through homework, quizzes, tests and semester examinations.

ALGEBRA 2 (H)

COURSE #427

FULL YEAR – 5.00 CREDITS

For students in grade: 10

Prerequisites: Successful completion of Honors Geometry or teacher recommendation.

Score on the Algebra 2 Placement Exam will also be considered.

This intensive course features the more demanding methods and problems in a second-year college preparatory course in Algebra. The topics, studied at a fast pace, includes the language of algebra, solving equations and inequalities, linear equations and systems, function notation and properties of functions, polynomials and factoring, rational expressions, quadratic functions, conic sections, complex number systems, radicals, exponents and arithmetic and geometric progressions and series.

Evaluation: Students will be evaluated based on their level of achievement on the common core learning standards as demonstrated through homework, quizzes, tests and semester examinations.

PRECALCULUS

COURSE #433

FULL YEAR – 5.00 CREDITS

For students in grade: 11

Prerequisites: Successful completion of Algebra 2.

This course begins with a review of prerequisite Algebra 2 topics then progresses to advanced algebra topics that include polynomial, exponential, and logarithmic functions. Other course topics include evaluating trigonometric functions, solving trigonometric equations, trigonometric identities, graphs of the trigonometric functions, inverse trigonometric functions, Law of Sines and Law of Cosines.

Evaluation: Students will be evaluated based on their level of achievement of the learning standards as demonstrated through homework, quizzes, tests and semester examinations.

PRECALCULUS (E)

COURSE #435

FULL YEAR – 5.00 CREDITS

For students in grade: 11

Prerequisites: Successful completion of Enriched Algebra 2 or teacher recommendation.

This course consists of topics generally included in an advanced algebra course including polynomial functions, exponential and logarithmic functions, conics and rational functions. Trigonometric topics include evaluating trigonometric functions, solving trigonometric equations, trigonometric identities, graphs of the trigonometric functions, inverse trigonometric functions, Law of Sines and Law of Cosines.

Evaluation: Students will be evaluated based on their level of achievement of the learning standards as demonstrated through homework, quizzes, tests and semester examinations.

PRECALCULUS (H)

COURSE #437

FULL YEAR – 5.00 CREDITS

For students in grade: 11

Prerequisites: Successful completion of Honors Algebra 2 or teacher recommendation.

This is a fast-paced, intensive course which provides an in-depth study of the following topics: polynomial functions and applications, exponential and logarithmic functions and applications, limits and graphing of rational functions, combinatorics and probability, the binomial theorem, trigonometry (including: trigonometric equations, trigonometric identities, graphs of the trigonometric functions, inverse trigonometric functions, Law of Sines, Law of Cosines), polar coordinates, DeMoivre's Theorem, roots of complex numbers, parametric equations and vectors.

Evaluation: Students will be evaluated based on their level of achievement on the common core learning standards as demonstrated through quizzes, tests and semester examinations. Students receive some credit for their homework.

INTRODUCTION TO CALCULUS

COURSE #443

FULL YEAR – 5.00 CREDITS

For students in grade: 12

Prerequisites: Successful completion of Precalculus or teacher recommendation.

This course reinforces Precalculus skills and provides a more in-depth study of functions, introduces concepts and applications of differential calculus to students who plan to study calculus in college. The course focuses on polynomial functions, rational functions, logarithmic functions, exponential functions, trigonometric and inverse trigonometric functions, composite and inverse

functions, graphing, limits and continuity. This course also focuses on average and instantaneous rates of change of a function, the derivative and its applications to physics, economics and the social sciences.

Evaluation: Evaluation will be based on the student's level of achievement of the learning standards as demonstrated through homework, quizzes, tests and semester examinations.

CALCULUS (E)

COURSE #445

FULL YEAR – 5.00 CREDITS

For students in grade: 12

Prerequisites: Successful completion of Enriched Precalculus or teacher recommendation.

This full-year course is the equivalent of a first-semester college level Calculus course. Topics include limits of functions, derivatives and their applications, rules of differentiation, optimization, integrals and their applications, an introduction to differential equations, exponential growth and decay, and volumes of solids of revolution.

Evaluation: Evaluation of student progress will be based on a student's level of achievement of the learning standards as demonstrated through daily problem solving in class, homework, quizzes, tests and semester examinations.

AP CALCULUS AB (H)

COURSE #447

FULL YEAR – 5.00 CREDITS

For students in grade: 12

Prerequisites: B or higher in Enriched Precalculus, successful completion in Honors Precalculus, or teacher recommendation.

This college-level course is designed for students who are able to proceed at an accelerated pace. The course introduces the traditional calculus concepts of limit, derivative and integral from both a historical, theoretical base and through the lens of modern technology. We attempt to reach a middle ground between rigor and intuition. Topics include limits of functions, derivatives and their applications, rules of differentiation, optimization, integrals and their applications, an introduction to differential equations, exponential growth and decay, and volumes of solids of revolution. Diverse applications are selected from physics and engineering, economics and business, and the life sciences. While it is not a requirement, students who enroll in this course should be prepared to take the Advanced Placement College Board Examination in Calculus (Level AB) in May.

Evaluation: Students will be evaluated based on their level of achievement of the learning standards as demonstrated through homework, quizzes, tests and semester examinations.

AP CALCULUS BC (H)

COURSE #449

FULL YEAR – 5.00 CREDITS

For students in grade: 12

Prerequisites: Successful completion of Honors Precalculus or teacher recommendation.

This intensive, fast-paced Advanced Placement course consists of two semesters of college calculus, including limits of functions, derivatives and their applications, rules of differentiation, optimization, integrals and their applications, an introduction to differential equations, exponential growth and decay, volumes of solids of revolution, the calculus of polar, parametric, and vector functions, and the calculus of infinite series. Diverse applications are selected from physics and engineering, economics and the life sciences. This course is recommended only for students who have completed Honors Precalculus or its equivalent with confidence in their ability to handle this material. Successful completion of this advanced placement course will enable students to begin sophomore or other more advanced mathematics at most high competitive undergraduate institutions. Students who enroll in this course should be prepared to take the Advanced Placement College Board Examination in Calculus (Level BC) in May.

STATISTICS

COURSE #451

FULL YEAR – 5.00 CREDITS

For students in grade: 12

Prerequisites: This is a senior elective. Minimum prerequisite is full completion of Algebra 2 (any level).

This course is a non-calculus-based introductory level statistics course. Included topics are descriptive statistics (summarizing, analyzing, and interpreting both quantitative and qualitative real-world data), probability and probability distributions (including Normal distributions), estimating population parameters and testing hypotheses. Students will develop competency with several appropriate technologies, including dynamic computer demonstrations and other statistical software.

Evaluation: Students will be evaluated based on their level of achievement of the learning standards as demonstrated through homework, quizzes, short-term assignments, tests, mid-year exam and a final culminating project.

AP STATISTICS

COURSE #453

FULL YEAR – 5.00 CREDITS

For students in grade: 12

Prerequisites: This is a Junior or Senior elective. Successful completion of Enriched Precalculus or Honors Precalculus, or concurrent enrollment in Honors Precalculus is required.

This course is designed for students who wish to complete studies equivalent to a one-semester,

non-calculus-based, college course in statistics. The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data.

Students are exposed to four broad conceptual themes:

1. Exploring Data: Describing patterns and departures from patterns
2. Sampling and Experimentation: Planning and conducting a study
3. Anticipating patterns: Exploring random phenomena using probability and simulation
4. Statistical Inference: Estimating population parameters and testing hypotheses Problem solving, documentation of work and interpretation of results is stressed in the course. While not a requirement, students who enroll in this course will be prepared to take the Advanced Placement College Board Examination in statistics in May.

Evaluation: Students will be evaluated based on their level of achievement of the learning standards as demonstrated through tests, semester exams, and a final culminating project.

ACCOUNTING AND BUSINESS MATH

COURSE #461

SEMESTER 1 OR 2 – 2.50 CREDITS

For students in grades: 11 or 12

Prerequisites: Successful completion of Algebra 2 or 10th grade Geometry. This is a senior elective, however juniors taking Rivers and Revolutions can take this as their mainstream math in whichever semester they are not in Rivers.

This is an introductory course on the mathematical concepts related to the world of work! Students explore the fundamental principles and practices of financial accounting, the steps in the accounting cycle and the use and interpretation of the balance sheet, income statement, and statement of cash flows. We will also cover mathematical concepts needed in other business areas such as wages, benefits, sales & marketing, and more.

Evaluation: Students will be evaluated based on their level of achievement on the Mass Frameworks in Business Technology as demonstrated through homework, quizzes, tests, and semester examinations.

**Not yet approved as a core course for NCAA Div. I/Div. II eligibility.*

FINANCIAL LITERACY

COURSE # 463

SEMESTER 1 OR 2 – 2.50 CREDITS

For students in grades: 11 or 12

Prerequisites: Successful completion of Algebra 2 or 10th grade Integrated Math. This is a senior elective, however juniors taking Rivers and Revolutions can take this as their mainstream math in whichever semester they are not in Rivers.

**Not yet approved as a core course for NCAA Div. I/Div. II eligibility.*

This is an unleveled, one semester elective designed to introduce students to the mathematical

concepts related to financial literacy. This course will provide students with the knowledge and skills they need to become self-supporting and able to make critical decisions regarding personal finances. Topics will include banking services, opening and managing a bank account, obtaining and maintaining good credit, financial planning, money management, loans, credit cards, mortgages, investment options, retirement planning, and more. Upon completion of this course students should gain an increased confidence in their mathematical ability and be able to make informed decisions about several real life financial situations of today.

Evaluation: Students will be evaluated based on their level of achievement as demonstrated through homework, quizzes, engagement, and projects.

PERFORMING ARTS

The Performing Arts Department offers courses designed to contribute to the musical and aesthetic education of students with a wide variety of abilities and interests. The program provides opportunities to increase proficiency with a musical instrument or the musical voice through solo and group performance, or to experience music as a form of expression. In addition to courses, which may be scheduled during the school day, additional opportunities are provided through the annual musical, and tuition-based private lesson program.

The Music Program's instrumental ensembles (Concert Band, Wind Ensemble, Pep Band, Orchestra, Jazz Band) and vocal ensembles (Concert Chorus, Select Choir, Melodies, and Men's Chorus) are designed to help the student develop musical skills essential for quality performance in musical organizations. Each of the courses provides experience with a variety of musical styles that encourage the student to appreciate music as a vehicle for expression. In addition, through rehearsals and concerts, the student is able to recognize and comprehend the value of a disciplined collaboration and to take pleasure from the resulting harmony.

COURSES OFFERED:

Theatre Workshop

Explorations: Theatre Workshop

Concert Band - *No audition required*

Concert Band Honors - *Contact Mr. Noce for Approval*

Wind Ensemble - *No audition required; by Placement*

Wind Ensemble Honors - *Contact Mr. Noce for Approval*

Orchestra

Orchestra Honors - *Contact Mr. Noce for Approval*

Jazz Ensemble - *Contact Mr. Noce for Approval*

Pep Band - *must be in a performing ensemble (Semester 1 only)*

Explorations: Musicianship Workshop

Explorations: Music Theory 1

Explorations: Music Theory 2

Melodies

Melodies (H)

Select Choir - *Placement by audition*

Select Choir (H)

Concert Chorus

Men's Chorus

Men's Chorus (H)

*** Placements for ensembles take place in January of the previous year.**

THEATRE WORKSHOP - SEMESTER**COURSE #810****SEMESTER – 2.50 CREDITS****Prerequisites: None****THEATRE WORKSHOP - FULL YEAR****COURSE #811****FULL YEAR - 5.0 CREDITS****For students in grades: 9, 10, 11 and 12****Prerequisites: None**

This course is open to all students interested in learning more about Theatre through experiential, hands-on units. We focus on building a supportive ensemble, the physical and vocal aspects of characterization, the nuts and bolts of staging a scene, and warm-up and improvisation techniques. The first quarter will focus on the development and preparation of a monologue and the second quarter will focus on a scene study, both incorporating a practical study of drama theory as it pertains to the pieces they prepare. A portion of the syllabus will include a student-selected study depending on the interest of the class, such as playwriting, directing, stage makeup, etc. Both new and experienced theatre students are welcome.

EXPLORATIONS: THEATRE WORKSHOP - SEMESTER**COURSE #810E****SEMESTER - 1.25 CREDITS (2x per week)****Prerequisites: None****EXPLORATIONS: THEATRE WORKSHOP - FULL YEAR****COURSE #811E****FULL YEAR - 2.5 CREDITS (2x per week)****For Students in grades: 9, 10, 11 and 12****Prerequisites: None**

This course is open to all students interested in learning more about Theatre through experiential, hands-on units. We focus on building a supportive ensemble, the physical and vocal aspects of characterization, the nuts and bolts of staging a scene, introduction to tech and production elements, and warm-up and improvisation techniques. The first quarter will focus on ensemble building and the development and preparation of a monologue and the second quarter will focus on a scene study, both incorporating a practical study of drama theory as it pertains to the pieces students prepare. A portion of the syllabus will include a student-selected study depending on the interest of the class, such as playwriting, directing, etc. Both new and experienced theatre students are welcome as content will be differentiated for students of all levels. This course can be repeated as new material will be covered each semester.

The Theatre Explorations course offers students exposure to the material covered in Theatre Workshop two times per week.

CONCERT BAND

COURSE #817

FULL YEAR – 5.00 CREDITS

Prerequisites: Ability to play a band instrument; Students Placed by Ability

CONCERT BAND (H)

COURSE #819

FULL YEAR – 5.00 CREDITS

Prerequisites: Approval by Mr. Noce

For students in grades: 9, 10, 11 and 12

Concert Band is the larger of our two bands at CCHS and is open to all students who play a band instrument, have demonstrated proficiency on that instrument, and are interested in improving their playing skills and increasing their knowledge of music.

There is no audition for the bands at CCHS, but students are placed in the ensemble that suits them best based on their ability, experience and the ensemble's needs.

Evaluation will be based on regular demonstration of repertoire preparation, attendance at performances, and class participation.

CONCERT BAND (H) #819

Concert Band is offered for Honors credit. Honors level students are still obligated to complete all of the core expectations of Course #817. Additional requirements are as follows, but not limited to:

- Students will participate in the CCHS Pep Band
- Students will perform in two Solo and/or Chamber Music Concerts
- Students will prepare and audition for the MMEA Eastern District Sr. or Jr. Festival
- Students will complete an Independent Project
- Students will complete recital hours and volunteer/community service hours related to the Performing Arts

WIND ENSEMBLE

COURSE # 820

FULL YEAR – 5.00 CREDITS

Prerequisites: Two years of Concert Band or Approval by Mr. Noce; students placed by ability

WIND ENSEMBLE (H)

COURSE #822

FULL YEAR - 5.00 CREDITS

For students in grades: 9, 10, 11 and 12

Prerequisites: Approval by Mr. Noce

Wind Ensemble is the smaller of our two bands at CCHS and is open to students who have demonstrated the highest level proficiency on that instrument and are interested in further honing their skills and musicianship in a rigorous wind-band setting.

There is no audition for the bands at CCHS, but students are placed in the ensemble that suits them best based on their ability, experience and the ensemble's needs. Instrumentation in Wind Ensemble is largely 1 to a part.

Evaluation will be based on regular demonstration of repertoire preparation, attendance at performances, and class participation.

WIND ENSEMBLE (H)

Wind Ensemble is offered for Honors credit. Honors level students are still obligated to complete all of the core expectations of Course #820. Additional requirements are as follows, but not limited to:

Students will participate in the CCHS Pep Band

Students will perform in two Solo and/or Chamber Music Concerts

Students will prepare and audition for the MMEA Eastern District Sr. or Jr. Festival

Students will complete an Independent Project

Students will complete recital hours and volunteer/community service hours related to the Performing Arts

ORCHESTRA

COURSE #823

FULL YEAR – 5.00 CREDITS

Prerequisites: Ability to play an orchestra string instrument

ORCHESTRA (H)

COURSE #825

FULL YEAR – 5.00 CREDITS

Prerequisites: Approval by Mr. Noce

For students in grades: 9, 10, 11 and 12

This course is designed for students who play a string instrument (violin, viola, cello, or string bass or harp), have demonstrated proficiency on that instrument, and are interested in performing string and orchestra literature in an ensemble. Topics considered in this course include: musical styles and vocabulary, review of all of the elements of music (melody, harmony, and rhythm), technical issues in string performance, and exploration of string orchestra and orchestral repertoire in a variety of styles. Due to the cumulative nature of ensemble learning, it is required that students commit for the entire year. Evaluation will be based on repertoire preparation, attendance at concerts and on class participation.

ORCHESTRA (H)

Orchestra is also offered for Honors credit. Honors level students are still obligated to complete all of the core expectations of Course #823. Additional requirements are as follows, but not limited to:

- Students will perform in two Solo and/or Chamber Music Concerts
- Students will prepare and audition for the MMEA Eastern District Sr. or Jr. Festival
- Students will complete two Independent Projects
- Students will complete recital hours and volunteer/community service hours related to the Performing Arts

JAZZ ENSEMBLE

COURSE #831

FULL YEAR – 2.50 CREDITS - 2X PER WEEK

For students in grades: 9, 10, 11 and 12

Prerequisites: Approval by Mr. Noce - must be a member of an instrumental performing ensemble (rhythm section instruments are exempt from this requirement)

This is an advanced level course designed for the student with significant interest and a moderate level of experience in the art of jazz performance. Though the instrumentation is not limited, some repertoire will focus on the traditional big band instrumentation: 4 trumpets, 4 trombones, and 5 saxophones (two alto, two tenor and one baritone) and four rhythm musicians (bass, guitar, piano and drum set.) It is not required, but recommended that students be at least familiar with swing, ballad, Latin and contemporary styles. Guitar, bass and piano students must be experienced in jazz chord reading and voicing and be able to “comp” accompaniment patterns appropriate for the previously listed styles. The class meets two times per week during school and has frequent rehearsals and performances outside of school.

Evaluation will be based on class attendance, class participation, and attendance at performances.

PEP BAND

COURSE #840

SEMESTER 1 – 1.25 CREDITS

For students in grades: 9, 10, 11 and 12

Prerequisites: None

Students taking Pep Band for credit will attend all rehearsals and home games, including play-off games which will not be determined until the 3rd week of October. Participation in additional community events and the Thanksgiving home game is also required.

Evaluation is Pass/Fail and will be based on regular demonstration of repertoire preparation, attendance at performances. * *Pep Band is required of all Honors Band students.*

EXPLORATIONS: MUSICIANSHIP WORKSHOP

COURSE #845E

SEMESTER – 1.25 CREDITS - 2X PER WEEK

For students in grades: 9, 10, 11, and 12

Prerequisites: None

This exciting and fun "how-to" course will provide students of all levels of musical ability the opportunity to make music with others in a small ensemble setting. We will focus on rock, pop, R&B, hip-hop, and other contemporary styles, exploring genre and instrumentation through listening, discussing, and creating music. No previous experience necessary – just a love of music!

Evaluation will be based on class participation. This course is graded pass/fail.

EXPLORATIONS: MUSIC THEORY 1**COURSE #848E****SEMESTER – 1.25 CREDITS - 2X PER WEEK****For students in grades: 9, 10, 11 and 12****Prerequisite: None**

This course will develop individual student musicianship by covering the foundations of music theory, including (but not limited to) topics such as: time signatures; dotted rhythms; articulation; form; tetrachords/major scales/circle of fifths; chromatic scales; major/minor/perfect/augmented/diminished intervals; solfege and transposition; triads and dominant 7th chords. *A recommended supplement to performing ensemble classes such as band, orchestra, and chorus.*

Evaluated via regular tests/quizzes.

EXPLORATIONS: MUSIC THEORY 2**COURSE #849E****SEMESTER – 1.25 CREDITS - 2X/ WEEK****For students in grades: 9, 10, 11 and 12****Prerequisite: Instructor Approval**

This course will develop individual student musicianship in four distinct, but related, areas: terminology/notation, performance/aural skills, analysis, and composition. Sight-reading, rhythmic/melodic/harmonic dictation, and composition are explored in a variety of settings. Students will explore the construction and use of scales, keys, intervals, and basic harmony. *Previous musical experience (enrollment in theory 1 or performing ensemble class) required.*

Evaluated via regular tests/quizzes.

MELODIES**COURSE #855****FULL YEAR – 5.00 CREDITS****MELODIES (H)****COURSE #856****FULL YEAR – 5.00 CREDITS****For students in grades: 9, 10, 11 and 12****Prerequisites: None**

Melodies is an inclusive, tight-knit vocal ensemble for Soprano and Alto (Treble) voices, that explores repertoire from a variety of genres and traditions, including pop, classical, Broadway, and more. This course consists of 4 days of rehearsal per week; honors credit optional. Melodies is excellent preparation for acceptance into Select Choir.

Evaluation will be based on regular demonstration of repertoire preparation, attendance at concerts, and class participation. Mandatory evening performances and evening dress rehearsals are required for this class.

Melodies is also offered for Honors credit. Honors level students are still obligated to complete all of the core expectations of Course #856. Additional requirements are as follows, but not limited to:

- Maintain a grade of 90 or higher in their ensemble
- Audition for MMEA District Festival (Junior or Senior)
- Perform in a CCHS Music Department recital (see calendar)
- Attend two performances per semester (one per quarter) as an audience member and complete a brief reflection -- via Google Form
- Complete two independent musical endeavors

SELECT CHOIR

COURSE #859

FULL YEAR – 5.00 CREDITS

Prerequisites: Acceptance is by audition only

SELECT CHOIR (H)

COURSE #860

FULL YEAR – 5.00 CREDITS

For students in grades: 9, 10, 11 and 12

Prerequisites: Acceptance is by audition only

Our most elite vocal ensemble, Select Choir is a mixed chorus of Soprano, Alto, Tenor, and Bass voices. This course consists of 4 days of rehearsal per week; honors credit optional. Singers in Select Choir will be challenged by advanced music in a wide variety of styles, languages, and traditions, with emphasis on a cappella repertoire from eras as far back as the Renaissance and as current as college-style a cappella.

Evaluation will be based on regular demonstration of repertoire preparation, attendance at concerts and events, and class participation. Mandatory evening performances and evening dress rehearsals are required for this class.

Select Choir is also offered for Honors credit. Honors level students are still obligated to complete all of the core expectations of Course #859. Additional requirements are as follows, but not limited to:

- Maintain a grade of 90 or higher in their ensemble
- Audition for MMEA District Festival (Junior or Senior)
- Perform in a CCHS Music Department recital (see calendar)
- Attend two performances per semester (one per quarter) as an audience member and complete a brief reflection -- via Google Form
- Complete two independent musical endeavors

CONCERT CHORUS

COURSE #861

FULL YEAR – 2.50 CREDITS - 2X PER WEEK

For students in grades: 9, 10, 11 and 12

Prerequisites: None.

Concert Chorus is the largest performing vocal ensemble at Concord-Carlisle. Concert Chorus is a mixed ensemble of Soprano, Alto, Tenor, and Bass voices. Students in this course will sing a wide variety of music from different eras and genres, including traditional rep. and popular music of today. This group will sing alone in concert as well as in combination with Select Choir and/or Melodies/Men's. This course consists of 2 days of rehearsal per week.

There is no audition for this chorus. All that is required is a love of music and a desire to sing. Music reading skills and vocal technique are developed in this ensemble.

Evaluation will be based on class participation and attendance at performances and events. Mandatory evening performances and evening dress rehearsals are required for this class.

MEN'S CHORUS

COURSE #863

FULL YEAR – 5.00 CREDITS

Prerequisites: None

MEN'S CHORUS (H)

COURSE #865

FULL YEAR – 5.00 CREDITS

For students in grades: 9, 10, 11 and 12

Prerequisites: None

Do you enjoy performing in front of an appreciative audience?! Men's Chorus is the group that always brings the house down at concerts. This is a non-auditioned vocal ensemble for Bass, Baritone, Tenor, as well as unchanged/cambiata voices. The group sings a wide variety of repertoire designed for lower voices. This course consists of 4 days of rehearsal per week; honors credit optional. Men's Chorus is excellent preparation for acceptance into Select Choir.

Evaluation will be based on regular demonstration of repertoire preparation, attendance at concerts, and class participation. Mandatory evening performances and evening dress rehearsals are required for this class.

Men's Chorus is also offered for Honors credit. Honors level students are still obligated to complete all of the core expectations of Course #863. Additional requirements are as follows, but not limited to:

- Maintain a grade of 90 or higher in their ensemble
- Audition for MMEA District Festival (Junior or Senior)
- Perform in a CCHS Music Department recital (see calendar)
- Attend two performances per semester (one per quarter) as an audience member and complete a brief reflection -- via Google Form
- Complete two independent musical endeavors

RIVERS AND REVOLUTIONS

RIVERS AND REVOLUTIONS

COURSE 620A SEMESTER 1

COURSE 620B SEMESTER 2

For students in grades: 11 and 12 only

Prerequisite: None

Note: This course does not fulfill Health and Fitness course requirements.

Rivers and Revolutions is an interdisciplinary, place-based program that offers CCHS students the opportunity to pursue rigorous, hands-on, experiential learning outside the traditional classroom environment. Throughout the semester students engage in fieldwork and community-facing projects as they consider different ways of understanding and engaging with the world, create connections between seemingly disparate things, and explore links between the content and their own lives.

Students enrolled in Rivers and Revolutions receive 2.5 credits in English, Social Studies, Science, Mathematics, and Art, for a total of 12.5 credits. **Students may elect to enroll in embedded Honors for English, Science, Social Studies, Art, and/or Math. Students may also elect to enroll in Advanced Art.**

Rivers and Revolutions runs every block of the day except for A and B blocks. During A and B blocks, students may enroll in other courses. **The program does not interfere with athletics or co-curricular activities.**

Evaluation will be based on classwork, written work, and interdisciplinary projects.

RIVERS AND REVOLUTIONS ENGLISH

COURSE #621

SEMESTER - 2.50 CREDITS

RIVERS AND REVOLUTIONS ENGLISH (H)

COURSE #622

SEMESTER - 2.50 CREDITS

For students in grades: 11 and 12 only

Prerequisite: None

English in Rivers & Revolutions focuses on skills associated with close reading, journaling, narrative construction, creative and analytical writing, and public speaking. Students engage with course content such as short stories, poetry, essays, and philosophical writing. Skill development and content selection follow the thematic arc of the semester.

RIVERS AND REVOLUTIONS SOCIAL STUDIES

COURSE #623

RIVERS AND REVOLUTIONS SOCIAL STUDIES (H)

COURSE #624

SEMESTER - 2.50 CREDITS

For students in grades: 11 and 12 only

Prerequisite: None

Social Studies in Rivers & Revolutions focuses on our human interaction with the world around us through looking at a mix of local history, economics, and human geography. By examining our relationship with Concord and Massachusetts, investigating revolutionary people and ideas, and contemplating humanity's journey through time, students will develop a better understanding of their place in this society and world. Students visit many field sites around Concord and Massachusetts, from Walden Woods to the Wachusett Dam to Boston, to deepen their understanding of topics such as eminent domain, palimpsest, and migration. The course will encourage students to question their underlying assumptions and give them the option to engage with real world civic issues.

RIVERS AND REVOLUTIONS MATH

COURSE #625

SEMESTER- 2.50 CREDITS

RIVERS AND REVOLUTIONS MATH (H)

COURSE #626

SEMESTER - 2.50 CREDITS

For students in grades: 11 and 12 only

Prerequisite: None

Math in Rivers & Revolutions focuses on developing students' mathematical practices. Students will observe, build understanding, and model mathematical patterns that exist in their lives and the natural world. Students will develop problem solving and analytical skills. There will be an emphasis on applying geometric principles and statistical reasoning.

RIVERS AND REVOLUTIONS SCIENCE

COURSE #627

SEMESTER - 2.50 CREDITS

RIVERS AND REVOLUTIONS SCIENCE (H)

COURSE #628

SEMESTER - 2.50 CREDITS

For students in grades: 11 and 12 only

Prerequisite: None

Science in Rivers & Revolutions focuses on New England natural history and ecology. Students explore our watershed while investigating the glacial and human history that has shaped the

landscape over the last 12,000 years. Students practice wildlife identification skills as they become familiar with birds, trees, fungi and other local species.

RIVERS AND REVOLUTION ART

COURSE #629

RIVERS AND REVOLUTION ART (H)

COURSE #630

SEMESTER - 2.50 CREDITS

For students in grades: 11 and 12 only

Prerequisite: None

Art in Rivers & Revolutions focus on skills characteristic of contemporary art, which value process over product and expand creative thinking through immersive experiences. Students practice being flexible, adaptive and resourceful problem solvers. They apply divergent and convergent thinking strategies and build confidence in their ability to create original and innovative artistic solutions, both as individuals and as a group. Whether you have an extensive background in creating art or no prior experience, the projects in *Rivers and Revolutions* will challenge and expand both your skills and your understanding and appreciation of visual art.

SCIENCE

The Science Program offers courses designed to acquaint students with the means of inquiry used by scientists, to acquire knowledge that comprises the essential structure of each of the sciences, and to develop a respect for and an enduring curiosity about the natural world and the mysteries of the universe. Courses are available in earth and space science, biology, chemistry, and physics. In all of the courses, laboratory work is stressed rather than a lecture-reading method. Emphasis is placed on the recognition of fundamental principles through direct experience.

The sequence chart that follows depicts the normal progression from one course to another within each level. It is noted, however, that some students take courses in an order different from that depicted, based on consultation with the department chairperson. After each year students will be reevaluated to make certain they are placed in the correct level course based on their most recent performance. Course selections should reflect a student's ability, interests, and future educational and career plans. The levels have been designed so that each course will consider essential content but will vary in terms of rigor and breadth and depth of coverage. Students are reminded that two years of science are required for graduation from Concord-Carlisle High School.

COURSES OFFERED:

Planet Earth
AP Environmental Science
Introductory Biology
AP Biology
Human Anatomy & Physiology
Introductory Chemistry
AP Chemistry
Chemistry in the Community
Introductory Physics - Mechanics
Introductory Physics - Electricity & Magnetism
Introductory Physics
AP Physics with Calculus
AP Physics I
The Human Body (Semester)
Advanced Earth Science - Astronomy (Semester)
The Science of Food and Cooking (Semester)
Forensic Science (Semester)
Organic Chemistry (Semester)
Biotechnology (Semester 2)
Marine Biology

SCIENCE DEPARTMENT GOAL

The Science Department's goal is to place students in the proper level that allows them to be in a challenging and enjoyable learning environment. At the end of each year, the department reevaluates all students' progress to assess if their current level is appropriate, or if a change in level is warranted. The potential paths diagrammed **below** are designed to show that each year students can move up a level when their performance merits such a move. Additionally, students can also move down a level when, through a variety of assessment tools, the department determines that their current path is no longer appropriate.

SCIENCE PROGRAM SEQUENCE

Common paths taken by students. Alternative paths can be created with teacher permission.

GRADE	INTRO	ENRICHED	HONORS	
9	Planet Earth		Planet Earth (H)	
10	Intro. Biology		Intro. Biology (H)	
11	Intro. Chemistry	Intro. Chemistry (E) Intro. Physics (E)	Intro. Chemistry (H)	AP Physics I (H)
12	Intro. Physics-Mechanics Intro. Physics- Electricity and Magnetism	Introductory Physics (E) Forensic Science AP Enviro. Science (H) Biotechnology Astronomy Organic Chemistry Anatomy The Human Body Science of Food and Cooking Marine Biology	AP Physics I (H) AP Chem (H) AP Enviro. Science (H)	AP Physics C AP Biology (H) AP Chemistry (H) Intro. Chem (H) AP Enviro. Science (H)

PLANET EARTH

COURSE #511

FULL YEAR – 5.00 CREDITS

For students in grade: 9

Prerequisites: None

The objective of this course is to give students an appreciation of the world around them. This course examines the Earth's place in the Universe, the forces that shape the planet, the anthropogenic factors that affect the earth, and sustainable solutions to protect it. It is an introductory college preparatory science course for students who usually grasp basic concepts on their own. Students will use their text as their primary source of information. Class time will be devoted to detailed study through lectures, discussion, audiovisual presentations, demonstrations and laboratory investigations and will reinforce concepts discussed in the online text. Students will be required to read the text and complete associated homework assignments on a regular basis. These assignments will serve as a starting point for classroom discussion. Group discussion will be encouraged in order to stimulate abstract thinking and to relate the student's own experience and knowledge on the topic. Additionally, students will complete a series of assignments that ask them to make observations of the world around them.

Evaluation will be based on homework, class participation, laboratory work and reports, special projects, tests, and the final examination.

PLANET EARTH (H)

COURSE #513

FULL YEAR – 5.00 CREDITS

For students in grade: 9

Prerequisites: Concurrent enrollment in H or E Math; demonstration of strong reading comprehension and independent learning; recommendation of the previous teacher.

The objective of this course is to give students an appreciation of the world around them. This course is designed for students who are capable of reading a high level, challenging science text and independently comprehending difficult material. This course examines the Earth's place in the Universe, the forces that shape the planet, the anthropogenic factors that affect the earth, and sustainable solutions to protect it. The topics will be covered in-depth and expanded far beyond the classroom. Class time will be devoted to detailed study through lectures, discussions, audio-visual presentations, demonstrations, and laboratory investigations. Laboratory assignments will ask students to create meaningful hypotheses, independently design and conduct controlled investigations, collect data, draw and present insightful conclusions and finally identify possible errors found in the experiments. Students will use their text as one of their resources but will also be expected to read related articles found in recent scientific journals. Students will be required to read the text and complete associated homework assignments on a regular basis. These assignments will serve as a starting point for classroom discussion. Additionally, students will complete a series of assignments that ask them to make observations of the world around them and will also partake in a service-learning project.

Evaluation will be based on homework, class participation, special projects, tests, laboratory work and reports, and the final examination.

ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE (H)

COURSE # 519

FULL YEAR – 5.00 CREDITS

For students in grades: 11 or 12

Prerequisites: Successful completion of Biology, Chemistry, and 1 year of algebra.

Alternatively, students may take Honors Chemistry as a co-requisite.

This course meets one additional period per week for lab.

The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science and culminates in an AP exam in May. In this interdisciplinary course, the topics addressed include earth systems, resources and conservation, the living world, land and water use, human population dynamics, pollution, and global change. The AP Environmental Science course includes a strong laboratory and field investigation component including day and possible overnight trips. The goal of this component is to complement the classroom portion of the course by allowing students to learn about the environment through first-hand observation. The in class portion of the course will be dedicated to lecture, laboratory exploration, and calculations without calculators. Students will be expected to do a summer assignment consisting of math review, graphing, and a reading assignment. Throughout the course students will be expected to do outside reading, independent research, submit reports, and interpret experimental data through mathematical calculations.

Evaluation is based on free response questions, homework and quizzes, tests, labs, projects, and current events.

INTRODUCTION TO BIOLOGY

COURSE #521

FULL YEAR – 5.00 CREDITS

For students in grade: 10

Prerequisites: Teacher recommendation

This introduction to biology course is a college preparatory course for students who can usually grasp basic concepts on their own so that class time can be devoted to oral review of more difficult concepts and to provide open time for discussion and questions. This course will address topics dealing with the nature of life and continuity of life. Other major areas such as microbiology, botany, zoology, human biology and ecology will be covered using a survey approach. Students will use the text as their prime source of information. Students will be required to answer chapter questions and class time will be used to discuss the difficult questions. Group discussion will be encouraged in order to stimulate abstract thinking and to relate students' own experience and knowledge of other fields to this subject matter. Laboratory work will be done during class time or during scheduled laboratory hours. Students will be assigned some outside readings and reports on various topics of interest.

Evaluation will be based on homework, class participation, laboratory work and reports, and tests, and semester examinations.

INTRODUCTION TO BIOLOGY (H)

COURSE #523

FULL YEAR – 5.00 CREDITS

For students in grade: 10

Prerequisites: Concurrent enrollment in honors or E math and/or recommendation of previous teacher.

Honors Biology is an advanced high school level course designed to provide students with an in-depth exploration of fundamental biological concepts, fostering a deep understanding of the principles that govern life. This course is intended for highly motivated and academically inclined students who possess a strong interest in the biological sciences.

Throughout the academic year, students will engage in a comprehensive study of cellular biology, genetics, evolution, ecology, and human anatomy and physiology. The curriculum emphasizes critical thinking, scientific inquiry, and the development of analytical skills through a combination of conceptual learning and hands-on laboratory experiences.

Students will be assessed through a variety of methods, including examinations, laboratory reports, research projects, and homework assignments.

The course places a strong emphasis on the development of scientific inquiry skills, with students encouraged to ask questions, design experiments, and analyze data critically.

ADVANCED PLACEMENT BIOLOGY (H)

COURSE #525

FULL YEAR – 5.00 CREDITS

For students in grades: 11 or 12

Prerequisites: A minimum grade of B+ in Introductory Biology (H), a minimum grade of B in Introductory Chemistry (H) and/or teacher recommendation.

This course meets one additional period per week for lab.

This course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal with the rapidly changing science of biology. Topics include biochemistry, cellular biology, heredity, molecular genetics, evolution, diversity of organisms, and ecology. It is expected that students use the college level text for learning much of the course content. Other sources for learning are class lectures, laboratory experiments and independent research.

Evaluation will be based on laboratory and periodical reports, independent research projects, tests, and semester exams.

HUMAN ANATOMY AND PHYSIOLOGY (E)

COURSE #526

FULL YEAR – 5.00 CREDITS

For students in grades: 11 or 12

Prerequisites for Rising Juniors: Honors Biology (Corequisite of Chemistry)

Prerequisites for Rising Seniors: Honors OR Enriched Chemistry

Students should have strong memorization skills.

This course is a study of the structure and function of the human body. The topics addressed include body systems, comparative anatomy, cell physiology, histology and pathology. Investigations include testing muscle action, recording and analyzing EKG's, lung volume and dissecting specimens including the fetal pig, cat, cow's eye, sheep heart, sheep brain and kidney. Students will be expected to perform, or at a minimum, observe dissections. Students will be expected to do laboratory work, research work, outside reading and to submit reports and presentations on various topics of interest. Students interested in pursuing health sciences or related fields are encouraged to take this course. Students should have strong memorization skills.

Evaluation will be based on homework, laboratory activities, class participation, quizzes, tests, and semester examinations.

HUMAN ANATOMY AND PHYSIOLOGY (H)

COURSE #527

FULL YEAR – 5.00 CREDITS

For students in grades: 11 or 12

Prerequisites for Rising Juniors: Honors Biology (Corequisite of Chemistry)

Prerequisites for Rising Seniors: Honors OR Enriched Chemistry

Students should have strong memorization skills.

This course is a study of the structure and function of the human body. The topics addressed include body systems, comparative anatomy, cell physiology, histology and pathology. Investigations include testing muscle action, recording and analyzing EKG's, lung volume and dissecting specimens including the fetal pig, cat, cow's eye, sheep heart, sheep brain and kidney. Students will be expected to perform, or at a minimum, observe dissections. Students will be expected to do laboratory work, research work, outside reading and to submit reports and presentations on various topics of interest. Students interested in pursuing health sciences or related fields are encouraged to take this course. Students should have strong memorization skills.

Evaluation will be based on homework, laboratory activities, class participation, quizzes, tests, and semester examinations.

INTRODUCTORY CHEMISTRY

COURSE #531

FULL YEAR – 5.00 CREDITS

For students in grade: 11

Prerequisites: Successful completion of two years of math courses, and completion of the departmental math evaluation.

This college preparatory course in introductory chemistry will include most of the topics contained within the Enriched Chemistry offering. However, greater emphasis will be placed on the qualitative treatment of this material. Problem solving will include appropriate math review by the teacher.

Evaluation will be based on homework, laboratory reports and techniques, class participation, quizzes, tests, and semester examinations.

INTRODUCTORY CHEMISTRY (E)

COURSE #532

FULL YEAR – 5.00 CREDITS

For students in grade: 11

Prerequisites: Concurrent enrollment in E math and/or teacher recommendation, and completion of the departmental math evaluation.

This course will involve quantitative and descriptive work in the following areas; stoichiometry, atomic theory, equilibrium, solubility products, hydrolysis, acid/base theory, thermodynamics, colligative properties, rates, gaseous behavior, chemical bonding, and electrochemistry. This course will also examine both the macroscopic and particulate world of chemistry; however, the focus will be on the atomic level. The laboratory investigations will enhance the student's comprehension of the topics. They will be required to make direct observations and collect raw data that can be manipulated to further understand the world around them. Students will gain an appreciation of how chemistry impacts our daily lives.

Evaluation will be based on homework assignments, class participation, laboratory reports, projects, quizzes, tests and semester examinations.

INTRODUCTORY CHEMISTRY (H)

COURSE #533

FULL YEAR – 5.00 CREDITS

For students in grades: 10 or 11

Prerequisites: Exemplary performance in Honors Biology or Honors Planet Earth. Students planning to take this course must demonstrate proficiency in mathematical concepts and computational skills by having success in Geometry (H) and Algebra 2 (H) or receiving high grades in Geometry (E) and Algebra 2 (E), and completion of the departmental math evaluation.

This honors course will include a more intensive and in-depth study of the topics listed in

Introductory Chemistry (E). The program assumes that students are adept at the math that is involved. For this reason, the instructor will assume that students will be able to solve quantitative problems independently. The laboratory investigations are primarily student driven, as the students are often required to develop their own procedures. They are asked to determine the best way to collect meaningful data to achieve a particular goal. The formal laboratory reports are intense assessments and are modeled after scientific journal articles.

Evaluation will be based on homework assignments, class participation, laboratory reports, projects, quizzes, tests and semester examinations.

ADVANCED PLACEMENT CHEMISTRY (H)

COURSE #535

FULL YEAR – 5.00 CREDITS

For students in grades: 11 or 12

Prerequisites: A minimum grade of B+ Introductory Chemistry (H) and/or teacher recommendation.

This course meets two additional periods per week for lab.

AP Chemistry is a second-year course designed to give the student the experience of a college-level general chemistry course and to prepare the student to take the AP Chemistry exam in May. The course is designed to strengthen students' problem solving and critical thinking. With a strong lab component, the students will especially work on connecting data collected through experiments to the theory being studied. The topics in this college level course include atomic theory, chemical bonding, structures and properties, chemical dynamics, equilibrium, electrochemistry, descriptive chemistry, states of matter, reaction types, and kinetics. Students are expected to do a summer assignment that will be assessed in the first week of school.

Evaluation will be based on homework assignments, class participation, laboratory reports, quizzes, tests, and semester examinations.

CHEMISTRY IN THE COMMUNITY

COURSE #537

FULL YEAR – 5.00 CREDITS

For students in grade: 11

Prerequisites: Successful completion of two years of math courses, and completion of the departmental math evaluation.

This is a college preparatory course in introductory chemistry in which topics are organized around societal issues involving chemistry. Emphasis will be placed on the qualitative treatment of the material, and any problem solving will include appropriate math review by the teacher. This course also features activities in which students apply their chemistry knowledge in decision-making situations.

Evaluation will be based on homework, laboratory reports and techniques, class participation, quizzes, tests, and semester examinations.

INTRODUCTORY PHYSICS - MECHANICS

COURSE #541A

SEMESTER 1 – 2.5 CREDITS

For students in grades: 11 and 12

Prerequisites: Completion of two years of math

This course is designed to give students an introduction to some of the basic physical principles that govern the motion of all objects in the universe. Students will learn how the world around them works by applying physics principles and concepts to real life situations and everyday objects. This course employs a hands-on inquiry based instructional approach that facilitates the understanding of concepts. Students will complete two projects that require the application of one or more of the following laws of physics: Newton's Laws of Motion, conservation of momentum, conservation of energy. This course assumes a basic understanding of algebra; additional math skills may be taught in the classroom.

Evaluation will be based on laboratory reports, class participation, homework, tests, projects and semester examinations.

INTRODUCTORY PHYSICS - ELECTRICITY & MAGNETISM

COURSE #541B

SEMESTER 2 – 2.5 CREDITS

For students in grades: 11 and 12

Prerequisites: Completion of two years of math

This course is designed to give students an introduction to some of the basic physical principles that explain the interaction of electricity and magnetism in the universe. Students will learn how the world around them works by applying physics principles and concepts to real life situations and everyday objects. This course employs a hands-on inquiry based instructional approach that facilitates the understanding of concepts. Students will complete two projects that require the application of one or more of the following laws of physics: Conservation of Charge, Joule's Law, Ohm's Law, Oersted's Law & Faraday's Law of Induction. This course assumes a basic understanding of algebra; additional math skills may be taught in the classroom.

INTRODUCTORY PHYSICS (E)

COURSE #542

FULL YEAR – 5.00 CREDITS

For students in grades: 11 and 12

Prerequisites: Completion of two years of E level math and/or teacher recommendation and completion of the departmental math evaluation.

This course is designed to give students an introduction to some of the basic physical principles that govern the universe with an emphasis on connection to daily life. It is a hands-on, laboratory driven course that involves individual and collaborative laboratory work. Students will perform laboratory investigations in response to stated research goals; students are expected to collect

appropriate data and draw meaningful conclusions from the data. Students will be required to document their research in a laboratory notebook modeled after the laboratory reports they would submit in college-level science courses. Other instructional practices include lecture, group discussion, demonstration, and problem solving. The topics addressed in this course include one and two-dimensional motion, Newton's laws, work and energy, momentum, gravitation, waves, sound and light, and electricity. This course assumes that students are skilled in solving algebraic equations; additional math skills may be taught in the classroom.

Evaluation will be based primarily on laboratory reports, class participation, homework, tests, and semester examinations.

ADVANCED PLACEMENT PHYSICS C (H)

COURSE #544

FULL YEAR – 5.00 CREDITS

For students in grade: 12

Prerequisites: A minimum grade of B in AP Physics 1 (H) along with teacher's recommendation. Co-requisites: Students must be enrolled in E, AB, or BC Calculus. This course meets one additional period per week for lab.

AP Physics C is designed for students who have taken a first year physics course and are enrolled in AB, BC or E Calculus as a co-requisite. The course covers the areas of mechanics and electricity & magnetism. The course stresses both the mathematical and the practical applications of the topics being studied. A significant amount of class time is spent doing laboratory investigations. The topics addressed in this honors course include one and two-dimensional kinematics, Newton's laws, work and energy, momentum, circular motion and gravitation, rotational dynamics, periodic behavior, electrostatics, magnetism, and electromagnetism. Analysis of these topics will use calculus where appropriate. This honors course assumes that students are able to solve quantitative problems independently. Students taking this course will be well prepared for both the AP Physics C: Mechanics and the AP Physics C: Electricity & Magnetism exams.

Evaluation will be based on class participation, homework, laboratory reports, tests, and semester examinations.

ADVANCED PLACEMENT PHYSICS I (H)

COURSE #547

FULL YEAR - 5.00 CREDITS

For students in grades: 11 and 12

Prerequisites: A minimum grade of B+ Introductory Chemistry (H) and/or teacher recommendation. Alternatively, if the student was going to be recommended for Honors Chemistry, they may opt for AP Physics I instead. Completion of Geometry and concurrently taking Algebra II or an equivalent course. This course meets one additional period per week for lab.

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as

Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. After the conclusion of the AP exam, students will continue their study of physics by exploring the topic of electromagnetism.

Evaluation will be based primarily on laboratory reports, class participation, homework, tests, and semester examinations.

THE HUMAN BODY (Intro)

COURSE #558

SEMESTER – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisite: Biology-Intro and Chem-Intro

How do our bodies work? This course is designed as a survey of the human body and will focus on macroscopic topics of the body's organ systems. Students will learn about the major organs and structures of each body system and how they work together to carry out the main physiological processes that contribute to life functions. Students will also learn about diseases and disorders of the systems as well as investigate and apply the information to understand our own body processes. Activities will include mapping receptors in the skin, testing grip strength, measuring lung capacities, investigating the special senses, and more. Dissections will be teacher-led and NOT a requirement.

ADVANCED EARTH SCIENCE - ASTRONOMY (E) - Not offered 2025-2026

COURSE #561

SEMESTER – 2.50 CREDITS

For students in grades: 10, 11 and 12

Prerequisites: Successful completion of Planet Earth

The objective of this course is to provide an overview of the universe and other aspects of space science, including stars, planets, and general cosmology. An emphasis will be placed on the formation of objects in space, along with the evolution of the universe from the Big Bang to today. Class time will be devoted to detailed study through lectures, discussion, audio-visual presentations, demonstrations, and observations. Students will participate in lab investigations (including at least one "star party" to make observations with a telescope), as well as delving into current research and discoveries by spacecraft and telescopes.

Evaluation will be based on homework, class participation, laboratory work and reports, special projects, tests, and the final examination.

NOTE: Not offered 2025-2026

THE SCIENCE OF FOOD AND COOKING (E)

COURSE #564

SEMESTER – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisite: Biology-any level

Corequisite: Chemistry-any level

The Science of Food and Cooking is a laboratory-based, semester-long course designed for motivated, college-bound students interested in the scientific foundations of the culinary arts. Students will investigate how principles of biology, chemistry and physics affect the transformation of raw ingredients into delicious foods, developing as scientists and cooks along the way. Learn why a cast-iron pan always gives the best sear on a steak, how a pinch of baking soda can make quick work of caramelizing onions, and much more!

FORENSIC SCIENCE (E)

COURSE #567

SEMESTER – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: Successful completion of Biology

Forensic science is designed for motivated, college bound students interested in the application of science to criminal investigations. During the semester class, all areas of scientific endeavors will be explored to determine evidential value of a crime scene. Topics covered may include: the crime scene, physical evidence, physical properties, organic analysis, inorganic analysis, the microscope, hairs, fibers, and paint, drugs, forensic toxicology, forensic aspects of arson and explosion investigations, forensic serology, DNA, fingerprints, firearms, tool marks and other impressions, and document examination. Juniors and seniors who have successfully completed biology are eligible for this class.

Evaluation will be based on homework assignments, class participation, laboratory reports, projects, quizzes, tests, and semester examinations.

ADVANCED EARTH SCIENCE - GEOLOGY (E) - Not offered 2025-2026

COURSE #570

SEMESTER 2 – 2.50 CREDITS

For students in grades: 10, 11 and 12

Prerequisites: Successful completion of Planet Earth

The objective of this course is to give students an understanding of the complexity of forces that have shaped the world around them. This course will introduce students to advanced topics in geology such as sedimentology, structural geology, plate tectonics, mineralogy and glacial geology through both classroom and field-based study. Class time will be devoted to detailed study through lectures, discussion, audio-visual presentations, demonstrations and laboratory and field-based investigations and will reinforce concepts discussed in the next text, with a focus on the geology of

New England and the country's National Parks. Students will attend several field trips to view geologic phenomena in situ (including a weekend trip to the coast of Maine).

Evaluation will be based on homework, class participation, laboratory work and reports, special projects, tests, and the final examination.

NOTE: Not offered 2025-2026

ORGANIC CHEMISTRY (E)

COURSE #576

SEMESTER – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: Successful completion of chemistry and a teacher recommendation.

This advanced chemistry course addresses structures, reactions and uses of carbon compounds. The classes of carbon molecules will be studied with emphasis on stereochemistry, reactivity, and reaction mechanisms. Laboratory investigations and model building will enhance the student's comprehension of the topics. Familiarity with organic chemistry is excellent preparation for many types of careers in science such as biology, medicine, biochemistry, chemical and biochemical engineering, pharmacology, among others.

Evaluation will be based on homework assignments, class participation, laboratory reports, projects, quizzes, tests, and semester examinations.

ORGANIC CHEMISTRY (H)

COURSE #578

SEMESTER – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: Successful completion of chemistry and a teacher recommendation.

This advanced chemistry course addresses structures, reactions and uses of carbon compounds. The classes of carbon molecules will be studied with emphasis on stereochemistry, reactivity, and reaction mechanisms. Laboratory investigations and model building will enhance the student's comprehension of the topics. Familiarity with organic chemistry is excellent preparation for many types of careers in science such as biology, medicine, biochemistry, chemical and biochemical engineering, pharmacology, among others.

Evaluation will be based on homework assignments, class participation, laboratory reports, projects, quizzes, tests, journal article reviews and semester examinations.

BIOTECHNOLOGY (E)

COURSE #584

SEMESTER 2 – 2.50 CREDITS

For students in grades: 10, 11, 12

Prerequisites: One semester of Intro Biology

Biotechnology (Enriched level, with embedded honors level, semester course)

Students will gain hands-on experience with current biotechnology tools and techniques in the context of a series of authentic inquiry experiments, including testing grocery store food for genetic modification, performing CRISPR on bacteria, and applying biotechnology to environmental conservation through ELISA assay. Students will engage with a range of important biotechnology techniques including: sterile bacterial cell culturing, micropipette use, DNA extraction, PCR with “MiniPCR” thermocyclers, gel electrophoresis with “MiniOne” gel systems, bacterial transformation and cloning, gene analysis using bioinformatics, ELISA assays, and CRISPR technology. Hands-on lab work will be complimented with relevant current news articles, online materials, and information on career paths. The opportunity for a field trip to an academic research lab and/or guest speakers will enrich the course experience.

BIOTECHNOLOGY (H)

COURSE #586

SEMESTER 2 – 2.50 CREDITS

For students in grades: 10, 11, 12

Prerequisites: One semester of Intro Biology

Biotechnology (Enriched level, with embedded honors level, semester course)

Students will gain hands-on experience with current biotechnology tools and techniques in the context of a series of authentic inquiry experiments, including testing grocery store food for genetic modification, performing CRISPR on bacteria, and applying biotechnology to environmental conservation through ELISA assay. Students will engage with a range of important biotechnology techniques including: sterile bacterial cell culturing, micropipette use, DNA extraction, PCR with “MiniPCR” thermocyclers, gel electrophoresis with “MiniOne” gel systems, bacterial transformation and cloning, gene analysis using bioinformatics, ELISA assays, and CRISPR technology. Hands-on lab work will be complimented with relevant current news articles, online materials, and information on career paths. The opportunity for a field trip to an academic research lab and/or guest speakers will enrich the course experience.

MARINE BIOLOGY (E)

COURSE #588

SEMESTER – 2.50 CREDITS

For students in grades: 10, 11, 12

Prerequisites: Successful completion of Planet Earth

Description: This course will dive into the captivating world beneath the waves to explore the wonders of marine life. After a brief exploration of physical and chemical oceanography, we will

survey the rich biological and ecological diversity of oceans. We will look at the anatomy and physiology of marine life from the smallest plankton to the largest whale. Other major topics will include ocean currents, adaptations by plant and animal sea life to marine environments, biodiversity, conservation topics, and community dynamics in coral reefs, seamounts, and estuaries.

Evaluation: Evaluations will be based on hands-on lab work, reports, quizzes, and a culminating final research project.

MARINE BIOLOGY (H)

COURSE #590

SEMESTER – 2.50 CREDITS

For students in grades: 10, 11, 12

Prerequisites: Successful completion of Planet Earth

Description: This course will dive into the captivating world beneath the waves to explore the wonders of marine life. After a brief exploration of physical and chemical oceanography, we will survey the rich biological and ecological diversity of oceans. We will look at the anatomy and physiology of marine life from the smallest plankton to the largest whale. Other major topics will include ocean currents, adaptations by plant and animal sea life to marine environments, biodiversity, conservation topics, and community dynamics in coral reefs, seamounts, and estuaries.

Evaluation: Evaluations will be based on hands-on lab work, reports, quizzes, and a culminating final independent research project.

SOCIAL STUDIES

Social Studies courses acquaint students with information, concepts, and methods in a variety of the social sciences. Ninth graders take *World Cultures and Civilizations*, which enables students to develop broad historical, cultural, and geographic perspectives. Tenth graders take *United States History*, successful completion of which is required by both CCHS and the State of Massachusetts. For juniors and seniors, the Social Studies department offers a wide range of courses in history and the social sciences.

Learning in an academic classroom with students of varying interests and abilities is an important part of the Social Studies program at CCHS. Engaging in discussions, encountering different views, and appreciating the worth of one's own thoughts as they grow out of analysis of information and concepts are central parts of the social studies experience. All students are asked to think critically, communicate clearly, and develop their skills as thinkers, as learners, and as citizens and we believe that all students can achieve at a high level.

Honors Credit: Social Studies courses can be taken for honors credit, and students can choose whether or not to sign up for the honors option when selecting classes. We are dedicated to helping students who are committed to earning honors credit in social studies be successful at the honors level in our classes.

The course descriptions use terms that may be unfamiliar. Here are some of them, along with definitions.

ANALYSIS – Making interpretations and drawing conclusions based on evidence

SYNTHESIS – Putting parts together to form a new whole

EVALUATION – Making judgments about the material

The required courses, *World Cultures and Civilizations* and *United States History* are offered every year. For junior and senior courses, however, not every social studies course is offered every year. The chart at the beginning of the course descriptions gives a quick summary of when courses are offered. All students must identify first, second, and third choices. We encourage students to select a balanced program of both history and social science courses.

A note on historical sources:

We are living in a historic moment. The language we use today is far different from that used in primary source documents and documentaries. While we strive to use respectful language in our classrooms, we do not want to ignore the ideas and language that shaped the past. We can, however, contextualize it so that we better understand it. Understanding the people, ideas, and events of the past and the roots of our current conflicts will be a part of our journey together.

COURSES OFFERED:
World Cultures and Civilizations (9th grade)
United States History (10th grade)

<u>SEMESTER 1</u>	<u>SEMESTER 2</u>
<p>The Classical World: Rome</p> <p>International Issues</p> <p>The New Nation: 19th Century US History</p> <p>The Presidency and American Politics</p> <p>Psychology: Brain, Mind, & Behavior</p> <p>Revolutions: 1789 to the present</p> <p>Intro to Sociology</p> <p>History, Literature & Psychology: A Twice Told Tale (interdisciplinary)</p> <p>Dictatorships & Democracy: The World Since 1914 (not offered in 2025-2026)</p>	<p>Through it all: The Black Experience in America</p> <p>Constitutional Law</p> <p>Current Affairs (Seniors only)</p> <p>Intro to Economics</p> <p>Human Geography: Place, Power & Human Identity</p> <p>Psychology: Normal & Abnormal Behavior</p> <p>Russia: Past, Present, & Future</p> <p>Senior Psychology (Seniors only)</p> <p>World Religions (not offered in 2025-2026)</p> <p>Making Modern America (not offered in 2025-2026)</p> <p>The Classical World: Founding Myths (not offered in 2025-2026)</p>

WORLD CULTURES AND CIVILIZATIONS

COURSE #205

WORLD CULTURES AND CIVILIZATIONS (H)

COURSE #206

FULL YEAR – 5.00 CREDITS

For students in grade: 9 – All 9th grade students are required to take and pass this course.

Prerequisites: None

This course is a study of the cultures of the world from 500 AD. The focus is on Europe, the Near East, the Middle East, the Far East and Northern Africa. Students are introduced to the geographic, religious, social, and political history of these regions. Emphasis is placed on developing cultural literacy, research skills, critical writing skills and respect for cultural diversity. The course draws upon primary, secondary, artistic, and archaeological sources to supplement the textbook.

Evaluation: Student progress is assessed through homework, research, class participation, quizzes, tests, projects, and semester exams.

UNITED STATES HISTORY

COURSE #209

UNITED STATES HISTORY (H)

COURSE #210

FULL YEAR – 5.00 CREDITS

For students in grade: 10 – All STUDENTS are required to pass this course for graduation.

Prerequisites: None

During the coming school year we will be examining the history of the United States. Our endeavor is complicated by the fact that one clear and cohesive story of our past does not exist. Instead, there are many, often competing versions of the American past. Thus it will be our task this year to see the past through the eyes of Presidents and voters, rich and poor, young and old, and inhabitants whose origins lie in Africa, Asia, Europe and Latin America. In order to do this, we must acknowledge not only the passions and prejudices of past actors, but also those we hold ourselves. Only then can we begin to construct a history of the United States and strive to assess how the actions and ideas of people in the past continue to shape both the nation and our lives.

This course examines how the American republic was formed, how that republic emerged as a world power, and the choices and challenges the nation experienced along the way. We begin our study with the founding of the nation. Thereafter, we focus on the emergence of the United States as a modern nation and the political, economic, and social developments of the Twentieth Century. This course is also designed to develop and reinforce the critical thinking and writing skills of students. Students will gain experience generating arguments, assessing evidence, and articulating clear and cogent positions on issues critical to the history of the United States of America.

Evaluation: Student progress is assessed through homework, research, class participation, quizzes, tests, essays, projects, and semester exams.

THE CLASSICAL WORLD: ROME

COURSE #230

THE CLASSICAL WORLD: ROME (H)

COURSE #231

SEMESTER 1 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: None

Rome in Film and TV: This course is designed for students who:

- Want to connect with history through relatable characters and storylines.
- Are interested in filmmaking and film history
- Are interested in historical fiction & how authors use real sources & artifacts
- Are interested in going beyond a film to separate historical truth from a director's or studio's biased agenda.
- Want to learn about Roman history & culture- women's lives, social class, slavery, religion, city-life. the army, how the "conquered" saw the Romans, Roman baths.

The course will go chronologically, using a case study format. We will use films and TV series as gateways into topics or into a director's particular vision of Rome, contrasting them with actual history and sources. Topics will include Romulus & Remus, Tiberius Gracchus, Spartacus, Julius Caesar, Cleopatra, Nero & the Christians, Gladiators & the Colosseum, and "Barbarians" from Britannia, Germany, and Masada, Israel.

Evaluation will include homework, analytical essays, and a creative project or film review. Some films and episodes will be watched in class while others assigned for home.

Dictatorships & Democracy:

THE WORLD SINCE 1914 - Not offered 2025-2026

COURSE #233

Dictatorships & Democracy:

THE WORLD SINCE 1914 (H) - Not offered 2025-2026

COURSE #234

SEMESTER 1 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: None

The world of the 20th and 21st century has been marked by a struggle between dictatorship and democracy. This course will examine the role of democracy in the world and the challenges posed by dictatorships. We will ask: What factors allow for the rise of dictators? What does resistance to dictatorship look like? How can we support and encourage democracy and resist oppression? We will study European dictators such as Hitler, Stalin, and Mussolini as well as other world dictators including Mao Zedong, Fidel Castro, Pol Pot, and Kim Jung Il. We will also look at current events and the role of dictatorship and democracy in the 21st century. This course will not only give you a greater understanding of the 20th century, it will also provide you with tools for recognizing and responding to dictatorship and oppression in the world today.

Evaluation: Student achievement will be assessed through homework, demonstration of preparation for class through class participation, tests, essays, projects, presentations, and a final project.

NOTE: Not offered 2025-2026

INTERNATIONAL ISSUES

COURSE #236

INTERNATIONAL ISSUES (H)

COURSE #237

SEMESTER 1 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: Successful completion of United States History

Why do countries make the choices they make? Should foreign policy be conducted to promote the interests and power of the state or according to moral standards? Is war inevitable? Is global peace possible? Under what circumstances do countries cooperate? This course is an introduction to international relations and the core principles of global politics. Course units explore the fundamental theories of international relations, international organizations like the United Nations, and global challenges like climate change, nuclear proliferation, migration, and trade. Current global events, as well as historical case studies, will be discussed throughout the course, as students develop research, writing, and analysis skills. Students will participate in a semester-long global simulation of world events to apply their learning. Students will also read and consider a wide variety of news sources regarding current international events.

Evaluation: Student achievement is assessed through tests, essays, individual and group projects, presentations, and class participation.

THE NEW NATION: 19TH CENTURY US HISTORY

COURSE #240

THE NEW NATION: 19TH CENTURY US HISTORY (H)

COURSE #241

SEMESTER 1 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: None

This course examines the many causes of the Civil War and the political, social, and cultural divisions that led to it. We study the emergence of grassroots democratic culture, embodied in the tumultuous Presidency of Andrew Jackson and explore how the institution of slavery shaped this country in the antebellum period and beyond. In addition to political history, there is an emphasis on the emergence of evangelical Christianity, the role of women in reform movements, and the details of Westward expansion, including Indian Removal and the emergence of the Mormon Church. Special emphasis is put on how this period of U.S. history is reflected in modern life. This class culminates in Lincoln's Presidency and his efforts to hold the Union together during the Election of 1860 and the Civil War. The content and approach of this class will help prepare those interested in taking the U.S. History SAT Subject Test and the U.S. History AP exam.

Evaluation will be based on short papers, tests and classroom participation. All written work will be done outside of the classroom.

THE PRESIDENCY AND AMERICAN POLITICS

COURSE #245

THE PRESIDENCY AND AMERICAN POLITICS (H)

COURSE #246

SEMESTER 1 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: None

This course will involve an exploration of the institution of the American Presidency in both the past and the present and how the presidency operates in the bigger American government system. We'll learn about past presidents, but also regularly discuss current politics. This year, in particular, we will focus on the Trump administration's first year back in office and how well he navigates the challenges of his very slim majorities in Congress. We will also take an in-depth look at what the Democratic party needs to do differently if it wants to be competitive in the 2026 midterm and 2028 Presidential elections. Do they need a new messenger, a new message, a new strategy for reaching voters in the modern media landscape or all of the above?

We will also explore the office of the Presidency and consider questions such as: What did the Founders intend when they designed the Presidency? How has the office evolved over time? How did Presidents such as Washington, Jefferson, Jackson, Lincoln and Teddy and Franklin Roosevelt define and redefine the office? In our current times, does the President have too much power or does they actually have far too little ability to control events in Washington? How does the President interact with Congress and the Supreme Court? How have certain presidents' characters and personalities enhanced or doomed their presidencies? Case studies from many different presidencies will be used.

Evaluation: Student achievement will be assessed through written work, projects/assessments, and active participation in class discussions and debates.

PSYCHOLOGY: BRAIN, MIND & BEHAVIOR

COURSE #249

PSYCHOLOGY: BRAIN, MIND & BEHAVIOR (H)

COURSE #250

SEMESTER 1 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: None

Psychology is an in-depth study of human behavior. Topics are chosen that focus on the individual as a functioning organism. During the first semester these topics include the biological bases of behavior, learning, intelligence, memory, perception, and altered states of consciousness. Students, who take both psychology courses #216 & #219 will have had the equivalent of an introductory course in psychology at the college level. Discussion is central to the class and

requires an ability to view all perspectives and behaviors with an open mind. Students must be able to synthesize material and apply content and concepts in novel situations.

Evaluation: Will be based on preparation for class, written reports, unit tests, individual projects and a semester exam.

REVOLUTIONS: 1789 TO THE PRESENT

COURSE #253

REVOLUTIONS: 1789 TO THE PRESENT (H)

COURSE #254

SEMESTER 1 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: None

Revolutions in their many forms have touched every generation. As revolutions continue to define the modern world, we will consider both the past and the present and how revolutionary leaders and revolutionary ideas change society. Beginning with the French Revolution in 1789, this course will examine a number of political, social, and cultural revolutions around the world, from Haiti to the Velvet Revolution, the Arab Spring, and any revolutionary events that may arise during the semester. We will consider the impact of social and cultural revolutions and ask the question, “what does it take to be a revolutionary?” In addition to studying revolutions, students will look at education through a revolutionary lens and explore what it means to be both a teacher and a student. Students will have the opportunity to develop research and presentation skills and participate in debates, discussions, and simulations.

Evaluation: Student achievement will be assessed through homework, demonstration of preparation for class through class participation, tests, essays, presentations, and projects.

INTRODUCTION TO SOCIOLOGY

COURSE #256

INTRODUCTION TO SOCIOLOGY (H)

COURSE #257

SEMESTER 1 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: None

How do we learn the rules of social life? Why do we act differently around our friends compared to how we act with our families? What is the difference between counterculture, subculture and dominant culture? What is race and why does racial inequality persist in modern American society? What is the difference between gender and sex? Why do sociologists still read Karl Marx? The introductory sociology class will answer these questions while showing you the logic that sociologists use when analyzing the social world. This class emphasizes classroom listening and discussion and all students should be willing to question the social roles they play and the values they hold. Readings come from a demanding textbook - as well as classic and contemporary publication in the field.

Evaluation will be based on papers, projects, tests and a final examination.

HISTORY & LITERATURE: A TWICE TOLD TALE

COURSE #260

COURSE # 261 Honors

ENGLISH #160

ENGLISH #161 Honors

SEMESTER 1 - 2.50 CREDITS

For students in grade: 11

Prerequisites: 10 credits in English and successful completion of World Cultures and U.S. History; students must also sign up for English 160 (H) or English 161.

In History, Literature, & Psychology: A Twice-Told Tale, we explore the human experience through literature, history and psychology. Students will employ literature as a case study to analyze universal human dilemmas and specific obstacles created by cultural circumstances. Students will also examine literary, historical, and psychological theory centered on the desire to reconcile the outside world with internal reality. Texts include “Epic of Gilgamesh,” The Bacchae by Euripides, The Ballad of Mulan, Siddhartha by Hermann Hesse, , the writing of Langston Hughes, poetry of Martín Espada, Junot Díaz, Jamaica Kincaid, Robin Wall Kimmerer, and V for Vendetta by Alan Moore.

The course integrates an English teacher and a Social Studies teacher with fifty students in the same classroom and takes place in two blocks. The course is an elective for upperclassmen. Students receive a total of 5 credits: English (2.5) and Social Studies (2.5).

Evaluation will be based on preparation for class, written reports, unit tests, individual projects, and a semester exam.

THROUGH IT ALL: THE BLACK EXPERIENCE IN AMERICA

COURSE #265

THROUGH IT ALL: THE BLACK EXPERIENCE IN AMERICA (H)

COURSE #266

SEMESTER 2 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: None

In this course, we begin with the premise that the Black Experience is an unbroken thread that weaves its way through the tapestry of American history. We take up our needle in Africa, run west to the Caribbean, and then north to the land that will become the United States. Once ashore, we zigzag across the seams and hems of a nation determined to survive, expand, define, and measure itself against a beautifully impossible, impossibly beautiful ideal. Along the way, we stitch together the pieces and people who have lived (and are living) the Black Experience – from towers of power to echelons of education; from political circles to media circuses; from palaces to prisons and all the places in between. Myths will be untangled, monoliths will be toppled, and new patterns will be created as we explore and honor those Black Americans who have been, and continue to be, the thread that runs through it all.

Evaluation will be based on performance in group projects and presentations, preparation for class, written work, unit tests, individual projects, and a semester exam.

CLASSICAL AGE: FOUNDING MYTHS - Not offered 2025-2026

COURSE #268

CLASSICAL AGE: FOUNDING MYTHS (H) - Not offered 2025-2026

COURSE #269

SEMESTER 2 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: None

Although they are often mashed together, the Greeks and Romans had very different values and used their myths for different purposes. We will spend the semester examining how each culture used their myths. We will also look at how the myths inspired later art, literature, film and theater such as Broadway's recent "Hadestown". Students will have the chance to research myths of their own choosing as well as read a novel or non-fiction book related to our studies.

While the Greeks used myth to understand all aspects of the human condition, the Romans used myth as teaching tools to promote virtue and as propaganda for their evolving political agendas. We will explore colorful heroes like Achilles and Odysseus, and equally memorable women such as the Amazons, Medea, Circe, and Clytemnestra. We will consider how the Greeks used all these characters, male and female, to wrestle with what it meant to be young, fall in love, win and lose, rage and mourn, and get old and die. Then, for the Romans, we will read about Romulus and Aeneas and the noble Romans who sacrifice themselves for the greater good of the state like Brutus, Lucretia, and Cincinnatus. We will explore how the evolutions of these myths over time paralleled Rome's shift from Republic to a multi-ethnic empire.

Evaluation will be based on homework, discussion, book reports, research projects, tests, and a final exam.

NOTE: Not offered 2025-2026

CONSTITUTIONAL LAW

COURSE #270

CONSTITUTIONAL LAW (H)

COURSE #271

SEMESTER 2 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: Successful completion of U.S. History

Every major issue in United States history has ultimately come before the United States Supreme Court. When disputes have arisen about what speech is protected, where citizens have a reasonable expectation of privacy, or what a fair trial looks like, it is the Supreme Court that has generally decided these questions for the nation. As our country faced challenges dealing with race, gender, and religion, the Supreme Court has played a key part in defining the role of government and the rights of citizens with respect to these issues. In this class, students will learn

about the justices who sit on the Supreme Court, how the Court emerged as a strong branch of the federal government, and how this Court functions today. We will then turn our attention to a selection of landmark Supreme Court cases that students will argue in class. Each student will have the opportunity to act as a justice and, working with a partner, as an attorney. Students will gain experience in legal research and analysis, analytic writing, and public speaking.

Evaluation: Students will be evaluated through homework assignments, tests, essays, class presentations, class participation, and a final exam.

CURRENT AFFAIRS

COURSE #274

CURRENT AFFAIRS (H)

COURSE #275

SEMESTER 2 – 2.50 CREDITS

For students in grade: 12 only

Prerequisites: None

This is a culminating course for Seniors that allows them to discuss current events and issues, further explore and apply what they learned in their other Social Studies courses and learn about many totally new and fascinating topics. Students will read articles and watch documentaries from a wide variety of sources and perspectives. The range of topics is boundless. Political, cultural, social, psychological, sociological and legal issues will all be discussed, as well as current major news stories. Possible units/topics will include gender, criminal justice issues including wrongful convictions and false confessions, gun rights/control, leadership, the role of technology in our lives, parenting, stressors on teenagers today, issues on college campuses, creativity, conspiracy theories, the Trump administration, the Democratic party's need to redefine their message and strategies in order to be competitive in the upcoming 2026 midterm and 2028 presidential elections, real time issues and decisions facing the President and the Supreme Court and many more. The focus will be on students reading, analyzing and intensely discussing and debating the articles and issues in class and developing informed opinions of their own. Students will weigh in on which topics we will cover and individual class members will also explore topics and ideas that particularly excite them and will have a great deal of choice in selecting articles for open response papers. The course will be flexible enough that we can run with breaking news items using a case study method.

Evaluation: Students will be assessed using papers, debates, class participation and article reflections. There are no exams in this course.

INTRODUCTION TO ECONOMICS

COURSE #277

INTRODUCTION TO ECONOMICS (H)

COURSE #278

SEMESTER 2 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: Successful completion of U.S. History

Economics is the study of behavior – the behavior of individuals, of markets, of groups, and of

society as a whole. 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 behavior of individuals and individual businesses (microeconomics); the structure and behavior of the economy at the national, regional, and global level (macroeconomics) including looking at the Great Recession; and theories about monetary and financial systems. We use what we learn to examine current issues, including inequality, the environment, the U. S. budget, international development, and investing. Because this is a social science course, it is focused on human behavior and impacts of human behavior on the world around us, and therefore is not a math-heavy course.

Evaluation: Achievement is assessed through homework, class participation, tests, group and individual projects/presentations and essays.

HUMAN GEOGRAPHY: PLACE, POWER & HUMAN IDENTITY

COURSE #280

HUMAN GEOGRAPHY: PLACE, POWER & HUMAN IDENTITY (H)

COURSE #281

SEMESTER 2 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: Successful completion of United States History

How much of our identity is shaped by the place in which we live? How does geography determine the food we eat, the music we listen to, the clothes we wear? Why does place matter? This course will explore the patterns and processes that have shaped human social organization and interactions as well as its environmental consequences. We will look at our global connectedness through a tour of the continents, exploring themes of food and the environment, power and population, war and peace, health and disease, and cultural shifts across time and space.

Evaluation: Student achievement is assessed through class preparation, class participation, collaborative group projects, class presentations, tests and a final exam.

MAKING MODERN AMERICA:

20TH CENTURY U.S. SOCIETY & CULTURE - Not offered 2025-2026

COURSE #282

MAKING MODERN AMERICA:

20TH CENTURY U.S. SOCIETY & CULTURE (H) - Not offered 2025-2026

COURSE #283

SEMESTER 2 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: None

This course examines the emergence of American society and culture in the 20th century with a focus on race, class, and gender. There is a multicultural emphasis, with specific attention given to the role that African-Americans, Latinos and women play in defining our historical experience. We also look at white culture and how it has been defined regionally and in relation to other ethnic groups over time. The emphasis on culture means that we will be looking at how artistic

movements like the Harlem Renaissance, television in the 1950's and the emergence of black musical forms like jazz, rock n roll and rap defined our popular culture. We look at immigration issues, American attitudes about guns, and the emergence of grassroots movements like Black Lives Matter in response to police violence. We also focus on poems, song lyrics, and music as expressions of cultures and peoples traditionally excluded from the narrative. The approach is thematic and tends to focus on the historical roots of issues currently in the news.

Evaluation: Student assessment is based heavily on projects which allow students a good deal of choice in both topic and approach and also includes short weekly written responses and class participation. There are no content specific tests so the emphasis is on a creative understanding of these topics given each student's unique perspective and learning style.

NOTE: Not offered 2025-2026

PSYCHOLOGY: NORMAL & ABNORMAL BEHAVIOR

COURSE #285

PSYCHOLOGY: NORMAL & ABNORMAL BEHAVIOR (H)

COURSE #286

SEMESTER 2 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: None

Psychology is an in-depth study of human behavior. Topics are chosen that focus on the individual as a functioning organism. During the second semester these topics include human growth and development, personality theory, normal and abnormal behavior, and approaches to addressing abnormal behavior. Students who take both psychology courses #216 and #219 will have had the equivalent of an introductory course in psychology at the college level.

Discussion is central to the class and requires an ability to view all perspectives and behaviors with an open mind. Students must be able to synthesize material and apply content and concepts to novel situations.

Evaluation will be based on preparation for class, written reports, unit tests, individual projects, and a semester exam.

RUSSIA: PAST, PRESENT & FUTURE

COURSE #288

RUSSIA: PAST, PRESENT & FUTURE (H)

COURSE #289

SEMESTER 2 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: None

More than thirty years after the fall of the Soviet Union, Russia has again established itself as a key player on the world stage, with President Vladimir Putin recognized as one of the most influential leaders of our time. This course examines the development of Russia, its unique role in world

history, and the complex, ever-evolving relationships between Russia, its neighbors, and the West. Through a multidisciplinary approach, we will analyze key events and trends that provide deeper insight into current events in Russia, Ukraine, and the surrounding region. We will examine the impact of Russia's famous leaders, including Ivan the Terrible, Catherine the Great, Vladimir Lenin, and Joseph Stalin. We will also study two transformative events of the 20th century-- the Russian Revolution and the fall of the Soviet Union--and analyze their profound influence on Russia's modern identity and geopolitical role. In addition to political and historical analysis, we will explore social history and celebrate the region's rich cultural heritage with opportunities for students to engage with art, literature, and traditions from Russia and neighboring countries.

Evaluation: Student achievement is assessed through class preparation, class participation, individual and group projects, tests, and writing assignments. Students will often have choice within projects and assignments offering opportunities for students to explore topics that spark their interest.

SENIOR PSYCHOLOGY

COURSE #291

SENIOR PSYCHOLOGY (H)

COURSE #292

SEMESTER 2 – 2.50 CREDITS

For students in grade: 12 only

Prerequisites: None

This course is an investigation of issues in developmental psychology from a personal perspective. Topics include the nature of family, parent/child relationships, childhood, adolescence, and search for identity, love and friendship, and developmental issues of adulthood. Students must be able to synthesize materials, apply content and concepts, and integrate the theoretical with the experiential. Students must also be willing to participate actively in class discussions.

Evaluation: Student progress will be assessed through weekly papers, class participation, and a semester exam.

WORLD RELIGIONS

COURSE #295

WORLD RELIGIONS (H)

COURSE #296

SEMESTER 2 – 2.50 CREDITS

For students in grades: 11 and 12

Prerequisites: None

This class explores the origins of religious thought and identifies the themes common to all religions. Students will examine the ethical, moral, and philosophical concepts underlying the religions of the world, while considering key ideas from the discipline of religious studies: the sacred, myth, ritual, community, and the individual. These concepts will be used as lenses to frame and focus the study of beliefs and practices from around the world with special emphasis on

Hinduism, Buddhism, Judaism, Christianity, and Islam in terms of their histories, their theologies, and their contemporary expressions. There is a strong emphasis on interdisciplinary learning through the use of music, art, and other elements of religious practice. Finally, contemporary religious issues will serve as a focus for discussion. An end-of-semester summary will allow for a comparison of the religions studied and an investigation of the relationship between religion, history, philosophy and culture. Students are expected to synthesize material, apply content and concepts, and integrate the philosophical with the experiential.

Evaluation: Student achievement is assessed through on-site visitations, tests, papers and projects.

NOTE: Not offered 2025-2026

WORLD LANGUAGES

Four world languages are available to students, each one offering a sequence of study that can be followed through to senior year: **Chinese, French, Latin and Spanish**. All four languages satisfy distribution requirements for graduation from CCHS; all four may be used to satisfy entrance requirements for college.

In the modern languages, the Chinese, French and Spanish programs seek to develop proficiency in listening, speaking, reading, and writing. The early stages of the programs are primarily concerned with vocabulary acquisition and developing spoken and written interpersonal communication skills needed for interactions in everyday situations. In the more advanced stages, students continue to develop and refine their interpretive and presentational communication skills. Students use the language to investigate, explain, and reflect on the relationship between the practices and perspectives of the cultures studied.

The content of each program also promotes understanding and appreciation of the culture and world contributions of Chinese, French and Spanish speaking people. The ultimate goal of each program is to help students use their new language with proficiency and confidence. All language programs have levels paced to meet the needs of students.

Students in the Chinese Program use mostly simplified Chinese characters for reading and writing. Traditional characters are also included as students advance through the program. Students enhance their learning through the use of audio/video programs, and computer software.

The Latin program concentrates on developing reading skills for the purposes of comprehension and analysis. Students progress from stories on ancient themes to the works of Roman authors. At all stages of the program, the goal is for students to demonstrate their understanding of the text through answering comprehension questions, translating, or reading aloud expressively. Students also come to show their appreciation for an author's style through discussing or writing about how particular choices of words or phrasing serve the author's purpose. The ultimate goal is to make students more sensitive readers, more aware of the possibilities and powers of language.

Based on teacher and student interest, educational travel programs and exchanges are arranged every other year to Chinese-speaking areas France, Italy and Spanish-speaking countries.

COURSES OFFERED:

Chinese 1	French 1	Latin 1	Spanish 1
Chinese 2	French 2	Latin 1H*	Spanish 2
Chinese 2H*	French 2H	Latin 2	Spanish 2H
Chinese 3	French 3	Latin 2H	Spanish 3
Chinese 3H	French 3H	Latin 3	Spanish 3H
Chinese 4	French 4	Latin 3H	Spanish 4
Chinese 4H	French 4H	Latin 4	Spanish 4H
Chinese 5	French Conversation	Latin 4H	Spanish
Chinese 5H	& Culture thru Film	Latin AP	Conversation
Chinese AP	French AP/AP2		& Culture thru Film
			Spanish AP/AP2

*Enrollment for Chinese 2H happens during the first quarter, after the school year has begun. Students interested in Chinese 2H should sign up for Chinese 2. Students interested in Latin 1H should sign up for Latin 1H and not wait until the fall.

Considerations for taking world language courses and enrolling in Rivers and Revolutions:

The World Languages Department recommends that students who would like to complete three years or more of language study while at CCHS enroll in Rivers and Revolutions in their senior year. Please consider the following:

- Seniors who enroll in R&R can take the following semester-length courses: French C&C and Spanish C&C or the 1st semester of Latin 4 and Latin 4H.

BOARD OF REGENTS

The Massachusetts Board of Regents has established a requirement of two years of high school world language for all applicants who wish to enter the state's four-year colleges and universities directly from high school. Ideally, these are consecutive years of study in the same language. Students seeking admission at more competitive colleges and universities, especially those that require three years of language study are urged to complete at least three years of high school language. Again, ideally these are consecutive years of study of the same language. For more information, students should discuss this issue with their guidance counselors.

CHINESE COURSES

CHINESE 1

COURSE #311

FULL YEAR – 5.00 CREDITS

For students in grades: 9, 10, 11, and 12 (all grades are welcome)

Prerequisites: Beginning students are placed in Chinese 1

This introductory course is designed for students beginning their study of Chinese language and culture in early high school or those seeking to acquire basic Chinese language skills as a second world language in their later high school years. All grades are welcome.

Through real-world scenarios, authentic materials, and films, this course develops students' listening, speaking, reading, and writing skills. Interpersonal communication is emphasized through spoken and written exchanges of information, reactions, and preferences. The first semester focuses on mastering Chinese phonetics and character writing, while the second builds basic conversational and writing skills. Students analyze Chinese films and authentic materials to deepen cultural understanding and engage with authentic contexts.

CHINESE 2

COURSE #312

FULL YEAR – 5.00 CREDITS

CHINESE 2H

FULL YEAR – 5.00 CREDITS

COURSE #313

For students in grades: 9, 10, 11, and 12

Prerequisites: C in Chinese 1, or department approval

This course is for students who, having successfully developed strong basic skills, are ready to increase proficiency and develop their interpersonal communication skills in Chinese by interacting and negotiating meaning in spoken, or written conversations to share information, reactions, likes and dislikes. They also develop interpretive communication skills by reading authentic materials such as menus, schedules and signs; and also by writing notes and emails. Readings are real-life dialogues that emphasize the proper use of Mandarin Chinese with the goal of acquiring vocabulary and developing fluency. At the end of the first quarter, honors credit will be available to students on an individual contract basis and at the discretion of the teacher. Chinese 2 Honors is offered for students who want to work at a faster pace and continue the rapid acquisition of new characters and structures. Written and oral precision will be emphasized.

Evaluation will be based on participation, homework, projects and performance on spoken, audio and written assessments.

CHINESE 3**COURSE #314****FULL YEAR – 5.00 CREDITS****CHINESE 3H****COURSE #315****FULL YEAR – 5.00 CREDITS****For students in grades: 9, 10, 11, and 12****Prerequisites: C in Chinese 2 for Chinese 3, B in Chinese 2H or teacher recommendation for Chinese 3H.**

At this level, students will have increased opportunities for idiomatic usage and self-expression, both spoken and written. Students continue to develop their interpersonal communication skills in Chinese as well as their interpretive and presentational communication skills. Students continue to learn more complex sentence patterns and grammar in a cultural context and they learn how to respond appropriately in various social situations and examine the cultural contributions of diverse groups. Chinese 3 Honors is available to motivated students who are independent learners who build a strong foundation of structures and vocabulary and want to continue the rapid acquisition of grammatical structures. Students will use Chinese to develop interpersonal and presentational speaking skills, to ask questions, and express opinions.

Evaluation will be based on participation, homework, projects and performance on spoken, audio and written assessments.

CHINESE 4**COURSE #316****FULL YEAR – 5.00 CREDITS****CHINESE 4H****COURSE #317****FULL YEAR – 5.00 CREDITS****For students in grades: 11 and 12****Prerequisites: C in Chinese 3 for Chinese 4; B in Chinese 3H or teacher recommendation for Chinese 4H.**

This course continues the sequence of reading and of cultural, social, and economic topics begun in Chinese 3. Students will enhance their ability to initiate, sustain, and close a conversation in a variety of real-life situations. Students continue to develop their interpersonal communication skills in Chinese as well as their interpretive and presentational communication skills. They will refine their ability to read analytically and write effectively. They will also discuss issues relevant to Chinese communities. Chinese 4 Honors is available to motivated students who are independent learners who build a strong foundation of structures and vocabulary and want to continue the rapid acquisition of grammatical structures. Students will use Chinese to develop interpersonal and presentational speaking skills, to ask questions and express opinions. Students in Chinese 4H will read and discuss a variety of authentic materials. Oral and written reports will be an integral part of the course.

Evaluation will be based on participation, homework, projects and performance on spoken, audio and written assessments.

CHINESE 5

COURSE #318

FULL YEAR – 5.00 CREDITS

CHINESE 5H

COURSE #319

FULL YEAR – 5.00 CREDITS

For students in grades: 11 and 12. Usually taken in grade 12

Prerequisites: Chinese heritage speakers fluent in speaking who would like to learn reading and writing, C in Chinese 4 for Chinese 5, B in Chinese 4H or teacher recommendation for Chinese 5H.

This course continues the sequence of reading and exploring cultural, social, and economic topics begun in Chinese 4. It will provide students with ongoing and varied opportunities to further develop their proficiencies across the range of listening, speaking, reading and writing in a cultural context. Students continue to develop their interpersonal communication skills in Chinese as well as their interpretive and presentational communication skills. In the second semester there will be more emphasis on culture and conversation and the students will have leadership roles in various projects that involve all four classes in the Chinese Program. Students will refine their ability to read analytically and write effectively. They will also discuss issues that are relevant to the Chinese communities. Varied methods, such as group work, paired work, and direct instruction are used to help all students develop communicative proficiency.

Evaluation will be based on participation, homework, projects and performance on spoken, audio and written assessment.

Honors credit will be available to individual students, on a contract basis, at the discretion of the teacher. These students will be enrolled in Chinese 5H during the first quarter of the school year.

CHINESE AP

COURSE #320

FULL YEAR – 5.00 CREDITS

For students in grades: 11 and 12. Usually taken in grade 12.

Prerequisites: B in Chinese 5 Honors, or teacher recommendation.

The overall goal of this course, as set forth by the College Board, is to deepen students' immersion into the language and culture of the Chinese speaking world. Students will be provided with ongoing and varied opportunities to further develop their proficiencies in listening, speaking, reading and writing. Cultural topics such as abstract ideas concerning art, literature, politics and society will be explored using the target language. This learning is enhanced by the use of Internet, appropriate technologies and audio and video programs. Varied methods such as group work, paired work, and direct instruction are used to help all students develop communicative proficiency. Students interact with cultural competence and understand relating cultural practices to perspectives. They use Chinese to investigate, explain, and reflect on the relationship between the practices and perspectives of the cultures studied. One of the goals of this course is to prepare interested students for the Chinese Language Advanced Placement Examination. Students can choose to prepare for the AP Exam using simplified or traditional characters.

Evaluation will be based on participation, homework, projects and performance on spoken, audio and written assessments.

FRENCH AND SPANISH LANGUAGE PROGRAMS

The following chart indicates the usual progression of study. It is possible, however, to move from the sequence on the left to honors sequences on the right and vice versa. Please consult with the World Languages department for details.

Spanish/French Conversation & Culture	Spanish AP/AP2/French AP/AP2
Spanish 4/French 4	Spanish 4H/French 4H
Spanish 3/French 3	Spanish 3H/French 3H
Spanish 2/French 2	Spanish 2H/French 2H
Spanish 1/French 1	Concord Middle School and Carlisle School Programs

See course descriptions below

FRENCH COURSES

FRENCH 1

COURSE #331

FULL YEAR – 5.00 CREDITS

For students in grades: 9, 10, 11, and 12 (usually taken in grades 9 or 10)

Prerequisites: Beginning students are placed in French 1

At this level, students acquire and expand their knowledge of the language by engaging in guided conversations in settings such as the café, the home, and the school. Students develop their interpersonal communication skills in French by interacting and negotiating meaning in spoken, or written conversations to share information, reactions, likes and dislikes. They also develop their interpretive communication skills by reading level appropriate authentic materials such as menus, schedules and signs and by writing notes and emails.

In order to perform these functions, students learn the appropriate French grammatical structures. Language skills and cultural knowledge are enhanced by the use of Internet, audio and video programs and by reading infographics or brief articles on current events and culture. Varied instructional methods such as group work, pair work, and direct instruction are used to help all students develop communicative proficiency.

Evaluation will be based on participation, homework, projects and performance on spoken, audio and written assessments.

FRENCH 2

COURSE #332

FULL YEAR – 5.00 CREDITS

FRENCH 2H

FULL YEAR – 5.00 CREDITS

COURSE #333

For students in grades: 9, 10, 11, and 12 (usually taken in grades 9 or 10)

Prerequisites: French 2 requires a C in French 1 or teacher recommendation.

French 2H requires an A- in French 1 or teacher recommendation.

At this level, students have the opportunity to develop their communicative skills in a cultural context. They acquire and expand their knowledge of the language by interacting and negotiating meaning in spoken, or written conversations and also refine interpersonal communication skills in French by sharing information and reactions. Students continue to develop their interpretive communication skills by interpreting and analyzing what is heard, read, or viewed on a variety of topics. Their presentational communication skills are developed by presenting information, and ideas to inform, explain, and narrate.

These skills are refined by guided conversations in a variety of cultural contexts in Francophone countries and by reading authentic materials such as short stories, infographics. In order to perform these functions, students learn the appropriate grammatical structures. Language skills

and cultural knowledge are enhanced by the use of the Internet, audio and video programs.. Varied methods such as group work, paired work, and direct instruction are used to help all students develop communicative proficiency.

Evaluation will be based on participation, homework, projects and performance on spoken, audio and written assessments.

FRENCH 3

COURSE #334

FULL YEAR – 5.00 CREDITS

FRENCH 3H

COURSE #335

FULL YEAR – 5.00 CREDITS

For students in grades: 9, 10, 11, and 12 (usually taken in grades 9 or 10)

Prerequisites: French 3 requires a C in French 2 or teacher recommendation.

French 3H requires a B- in French 2H or teacher recommendation.

At this level, students have the opportunity to develop and extend their communicative skills in a cultural context. Students continue to develop their interpersonal communication skills in French as well as their interpretive and presentational communication skills. They do so by engaging in spontaneous interpersonal speaking, by reading authentic materials, such as short stories and articles about current events and French culture and by writing short, guided compositions. In order to perform these functions, students learn the appropriate grammatical structures. Language skills and cultural knowledge are enhanced by the use of the Internet, and audio and video programs. Varied instructional methods, such as group work, paired work, and direct instruction are used to help all students develop communicative proficiency.

Evaluation will be based on participation, homework, projects and performance on spoken, audio and written assessments.

FRENCH 4

COURSE #336

FULL YEAR – 5.00 CREDITS

For students in grades: 10, 11 and 12 (usually taken in grade 11)

Prerequisites: French 4 requires a C in French 3 or teacher recommendation.

At this level, students have the opportunity to enhance their communicative skills in a cultural context. They do so by engaging in interpersonal speaking on cultural and social topics such as current affairs, school, family life, shopping and work. Students continue to develop their interpersonal communication skills in French as well as their interpretive and presentational communication skills. Students view several movies in French which are relevant to the themes explored in the course. Vocabulary and grammar support is provided with the movies as needed.

Current political and social issues, such as emigration, immigration, identity, and human rights are discussed using French. In order to perform these functions, students learn the appropriate grammatical structures. Language skills and cultural knowledge are enhanced by the use of the

Internet, and audio and video programs. Varied methods such as group work, paired work, and direct instruction are used to help all students develop communicative proficiency. Depending on the number of students enrolled in the course, the French 4 course will run independently or along the French Conversation and Culture course. The themes will be the same but assessments will be differentiated.

Evaluation will be based on participation, homework, projects and performance on spoken, audio and written assessments.

FRENCH 4H

COURSE #337

FULL YEAR – 5.00 CREDITS

Usually taken in grades: 11 or 12

Prerequisites: French 4H requires a B- in French 3H or teacher recommendation.

At this level, students have the opportunity to extend and refine their reading, writing, listening and speaking skills in a cultural and historical context. Students continue to develop their interpersonal communication skills in French as well as their interpretive and presentational communication skills. They do so by engaging in interpersonal conversations, group discussions, and presentations based on course readings. Students read authentic and adapted texts and articles on topics such as cultural institutions, literature, history and the arts. Readings upon which discussion is based may include current events, French fairy tales, selections of short stories, and 20th century novellas.

Students also write presentations, dictations and analyses. In order to perform these functions, students review fundamental grammar structures and acquire more sophisticated ones. Language skills and cultural knowledge are enhanced by the use of feature length French films, news reports, documentaries and music. Varied instructional methods such as group work, paired work, and direct instruction are used to help all students develop communicative proficiency.

Evaluation will be based on participation, homework, projects and performance on spoken, audio and written assessments.

FRENCH CONVERSATION AND CULTURE THROUGH FILM

COURSE #338A SEMESTER 1 - 2.5 CREDITS

COURSE #338B SEMESTER 2 - 2.5 CREDITS

Can be taken as a FULL YEAR or SEMESTER course. Please sign up for semesters 1 and 2 to complete full year course and earn 5.00 CREDITS.

Usually taken in grade 12

Prerequisites: C in French 4 or 4H, or teacher recommendation.

This is a full year course, but can be taken as a semester course. In this class, students will build their proficiency in French conversation while learning about the diverse cultures of the French-speaking world through contemporary French cinema and readings. Students continue to develop their interpersonal communication skills in French as well as their interpretive communication and presentational communication skills.

Students will view and discuss films from France and francophone countries. Some of the movies have been rated R for mature themes. Classroom time will be devoted to viewing the films and discussing topics including Sports, Music, Human Rights, Immigration, Love, Ethics, Multiculturalism and Comedy with a focus on school, adolescence, work, current events, cuisine, family, and cultural traditions. Students will explore these topics as well as draw on personal experiences. They will also gain an understanding of and appreciation for various directors in francophone cinema.

Evaluation will be based on participation and homework, as well as spoken and written assessments. Since the emphasis of the course is on speaking, students are expected to use French for all classroom interactions.

FRENCH AP

COURSE #339

FULL YEAR – 5.00 CREDITS

FRENCH AP2

COURSE #340

FULL YEAR – 5.00 CREDITS

Usually taken in grades 11 or 12

Prerequisites: AP requires a B- in French 4H, or teacher recommendation. AP2 requires a B- in AP or teacher recommendation.

In the advanced level, students continue to refine and extend their knowledge and proficiency in all skill areas through an even wider variety of activities. They can function in almost any context including many complex situations that deal with concepts of broader cultural significance. These concepts include social issues in the target culture and abstract ideas concerning science and technology, beauty and aesthetics, identity, contemporary life, family and community and global challenges.. Readings upon which discussion is based include the work of prominent francophone authors as well as current articles from magazines, journals and newspapers. Language skills and cultural knowledge are enhanced by the use of Internet, and audio and video programs. Varied methods such as group work, paired work, and direct instruction are used to help all students develop communicative proficiency, interpersonal and presentational speaking and writing in the target language.

Students interact with cultural competence and understand relating cultural practices to perspectives. They use French to investigate, explain, and reflect on the relationship between the practices and perspectives of the cultures studied. Among the goals of this course is to prepare students for the French Language and Culture Advanced Placement Examination taking place in May.

Evaluation will be based on participation, homework, projects and performance on spoken, audio and written assessments.

Note: Students who have already taken the AP course, may enroll in an AP2 course. AP2 students work more independently and do presentations to AP students to help them prepare to the AP exam and gain a deeper understanding of cultural topics. Instructions for AP2 students is tailored to the needs of the student (reading of literature such as Candide de Voltaire for instance).

LATIN COURSES

LATIN 1

COURSE #351

FULL YEAR – 5.00 CREDITS

LATIN 1H

COURSE #352

FULL YEAR – 5.00 CREDITS

For students in grades: 9, 10, 11, and 12. Usually taken in grade 9 or 10.

Prerequisites: Beginning students are placed in Latin 1.

In this course, students read stories on Roman and Greek themes in order to develop the vocabulary, grammatical knowledge, reading experience, and cultural awareness needed to prepare them for further study. They answer comprehension and analysis questions based on the stories, and are asked to read aloud accurately. They perform written exercises in sentence completion and translation, chiefly Latin to English. Latin 1 Honors is for students who wish to challenge themselves with more complex tasks.

Evaluation based on selections from: homework, class participation, quizzes and tests.

LATIN 2

COURSE #353

FULL YEAR – 5.00 CREDITS

LATIN 2H

COURSE #354

FULL YEAR – 5.00 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: C in Latin 1 to go into Latin 2, teacher recommendation for Latin 2H.

This course continues the sequence of readings and cultural topics begun in the Latin I course. Students increase their knowledge of Latin vocabulary and sentence structure, including the study of several complex sentence patterns. The goal of the course is to prepare students for reading works by Roman authors in Latin 3 and Latin 4.

Evaluation is based on selections from the following: class participation, homework, projects, quizzes and tests.

LATIN 3

COURSE #355

FULL YEAR – 5.00 CREDITS

LATIN 3H

COURSE #356

FULL YEAR – 5.00 CREDITS

For students in grades: 9, 10, 11, and 12

Prerequisites: C in Latin 2 for Latin 3, teacher recommendation for Latin 3H.

After reviewing the grammar topics from the first two years, students continue their study of

grammar by completing the sequence of readings and cultural topics begun in the prior course. Later in the year, they read selections from ancient Roman authors such as Caesar, Pliny, and Ovid. Along with reading for comprehension, students also start to develop skills at critical writing.

Evaluation is based on selections from the following: class participation, homework, critical writing, quizzes and tests.

LATIN 4

COURSE #357

FULL YEAR – 5.00 CREDITS

LATIN 4H

COURSE #358

FULL YEAR – 5.00 CREDITS

For students in grades: 11 and 12

Prerequisites: C in Latin 3 for Latin 4, teacher recommendation for Latin 4H.

Students read authentic Latin texts with a focus on understanding the syntax and grammar of the language, the literary style and aims of the author, and the historical context of the texts. Readings are selected from a variety of Latin prose authors (Cicero, Caesar, Pliny) and poetry (Ovid, Vergil, Catullus and Horace).

LATIN AP

COURSE # 359

FULL YEAR - 5.00 CREDITS

For students in grades: 11 and 12

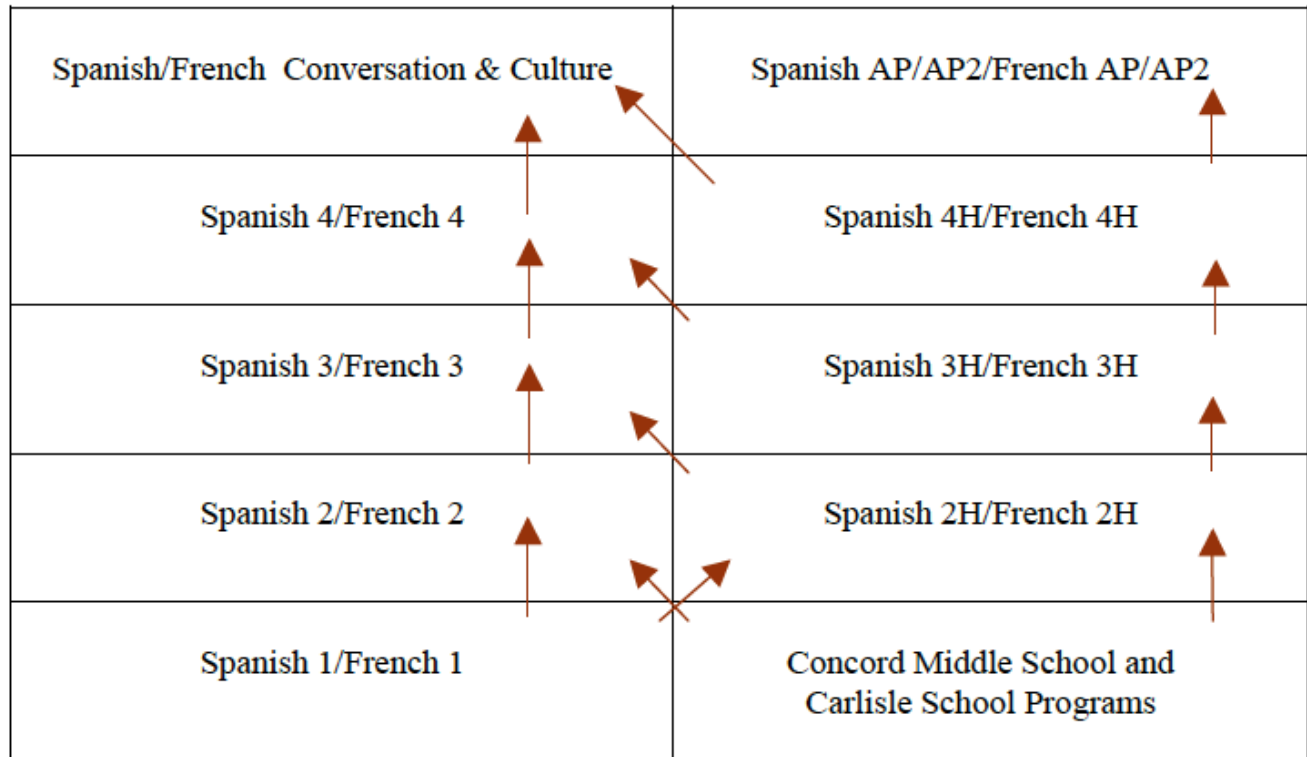
Prerequisites: Latin 3H with A average + teacher recommendation

This course is designed for students to become advanced readers of Latin poetry and prose (Vergil's Aeneid and Pliny's Epistulae). Students will develop and apply their skills in Reading and Comprehending, Translation, Contextualization, and Analysis of Texts. Throughout the course, students will develop their language skills through various activities: precise, literal translation of prepared poetry and prose; reading with comprehension and grammatical analysis of sight passages, both poetry, and prose; and written analyses that demonstrate the results of critical reading in clear and coherent arguments supported by textual examples.

Students will be expected to complete a summer assignment and prepare daily translations of authentic Latin.

FRENCH AND SPANISH LANGUAGE PROGRAMS

The following chart indicates the usual progression of study. It is possible, however, to move from the sequence on the left to honors sequences on the right and vice versa. Please consult with the World Languages department for details.



See course descriptions below

SPANISH COURSES

SPANISH 1

COURSE #371

FULL YEAR – 5.00 CREDITS

For students in grades: 9, 10, 11, and 12 (usually taken in grade 9 or 10) Prerequisites: Beginning students are placed in Spanish 1.

This is an introductory course in which students have the opportunity to develop their communicative skills in a cultural context. They acquire and expand their knowledge of the language by engaging in guided conversations related to school, family, food and social

situations. Students develop their interpersonal communication skills in Spanish by interacting and negotiating meaning in spoken, or written conversations to share information, reactions, likes and dislikes. They also develop their interpretive communication skills by reading authentic materials such as menus, schedules, headlines and signs and by writing notes and emails.

Students will also write notes, short essays and dialogues using the target language. Presentational skills are emphasized through the use of project-based learning. In order to perform these functions, students learn the appropriate grammatical structures and thematic vocabulary through communicative activities and the use of cooperative learning strategies. Language skills and cultural knowledge are enhanced by the use of the Internet, audio and visual programs. Varied instructional methods such as group work, paired work, and direct instruction are used to help all students develop communicative proficiency.

Evaluation will be based on participation, homework, and performance on oral, aural and written tasks.

SPANISH 2

COURSE #372

FULL YEAR – 5.00 CREDITS

SPANISH 2H

COURSE #373

FULL YEAR – 5.00 CREDITS

For students in grades: 9, 10, 11, and 12 (usually taken in grade 9)

Prerequisites: Spanish 2 requires a C in Spanish 1 or teacher recommendation.

Spanish 2H requires an A- in Spanish 1 or teacher recommendation.

At this level, students have the opportunity to develop their communicative skills in a cultural context. They acquire and expand their knowledge of the language by interacting and negotiating meaning in spoken, or written conversations and also refine their interpersonal communication skills in Spanish by sharing information and reactions. Students continue to develop their interpretive communication skills by interpreting and analyzing what is heard, read, or viewed on a variety of topics. Their presentational communication skills are developed by presenting information, and ideas to inform, explain, and narrate. They acquire and expand their knowledge of the language by engaging in guided conversations, by reading authentic material such as brief articles on current events and a variety of cultural topics and by writing notes, emails and short compositions. In order to perform these functions, students learn the appropriate grammatical structures. Language skills and cultural knowledge are enhanced by the use of the Internet, audio and visual programs. Varied instructional methods such as group work, paired work, and direct instruction are used to help all students develop communicative proficiency.

Evaluation will be based on participation, homework, projects and performance on spoken, audio and written assessments.

SPANISH 3

COURSE #374

FULL YEAR – 5.00 CREDITS

SPANISH 3H

COURSE #375

FULL YEAR – 5.00 CREDITS

For students in grades: 9, 10, 11, and 12 (usually taken in grades 10)

Prerequisites: Spanish 3 requires a C in Spanish 2 or teacher recommendation.

Spanish 3H requires a B- in Spanish 2H or teacher recommendation.

At this level, students have the opportunity to develop and extend their communicative skills in a cultural context. Students continue to develop their interpersonal communication skills in Spanish as well as their interpretive and presentational communication skills. They do so by engaging in spontaneous social conversations; by reading authentic materials, such as infographics and articles on current events, and by writing short, guided compositions and narrations. In order to perform these functions, students learn the appropriate grammatical structures and vocabulary. Language skills and cultural knowledge are enhanced by the use of listening activities and authentic films from and/or about the Spanish-speaking world. Varied instructional methods, such as group work, paired work, and direct instruction are used to help all students develop communicative proficiency.

Evaluation will be based on participation, assignment and project completion and performance on spoken, aural and written assessments.

SPANISH 4

COURSE #376

FULL YEAR – 5.00 CREDITS

For students in grades: 10, 11 and 12 (usually taken in grade 11)

Prerequisites: Spanish 4 requires a C in Spanish 3 or teacher recommendation.

At this level, students have the opportunity to enhance their communicative skills in a cultural context. Students continue to develop their interpersonal communication skills in Spanish as well as their interpretive and presentational communication skills. Students view several movies and documentaries in Spanish which are relevant to the themes explored in the course. These include current political and social issues, such as emigration and immigration, identity and human rights. Students enrolled in this course discuss these topics using Spanish and acquire the vocabulary necessary for the discussions. The use of Internet, articles, music, audio and video programs help build cultural knowledge of the Spanish-speaking world. Group work, pair work, whole class discussions and direct instruction are implemented to support all students in developing language skills and communicative proficiency. In order to perform tasks in Spanish, students review grammar structures and learn new ones.

Evaluation will be based on participation, homework, projects and performance on spoken, audio and written assessments.

SPANISH 4H**COURSE #377****FULL YEAR – 5.00 CREDITS****For students in grades: 10, 11 and 12 (usually taken in grade 11)****Prerequisites: Spanish 4H requires a B- in Spanish 3H or teacher recommendation.**

At this level, students have the opportunity to extend and refine their communicative skills in a cultural context. Students continue to develop their interpersonal communication skills in Spanish as well as their interpretive and presentational communication skills. They do so by engaging in social conversations and group discussions based on course readings on a variety of topics like identity, immigration, history and culture in the Spanish speaking world. Readings upon which discussion is based include essays, articles, short stories and excerpts from novels. In order to perform these functions, students review fundamental grammar structures and acquire more sophisticated ones. Language skills and cultural knowledge are enhanced by the use of films, documentaries and a video project. Varied instructional methods such as group work, paired work, class discussion and direct instruction are used to help all students develop communicative proficiency.

Evaluation will be based on participation, assignment completion, projects and performance on spoken, audio and written assessments.

SPANISH CONVERSATION AND CULTURE THROUGH FILM**COURSE #378A - SEMESTER 1 - 2.5 CREDITS****COURSE #378B - SEMESTER 2 - 2.5 CREDITS****Can be taken as a FULL YEAR or SEMESTER course. Please sign up for semesters 1 and 2 to complete full year course and earn 5.00 CREDITS.****Usually taken in grade 12****Prerequisites: C in Spanish 4 or Spanish 4H, or teacher recommendation.**

This is a full year course, but can be taken as a semester course. In this class, students will build their proficiency in Spanish conversation while learning about the diverse cultures of the Spanish-speaking world through contemporary films and documentaries. Students continue to develop their interpersonal communication skills in Spanish as well as their interpretive and presentational communication skills.

Students will view and discuss films from Latin America and Spain. A wide variety of thematic topics will be covered. These include: Democracy and Dictatorship, Sports, Music, Human Rights, Immigration, Fantasy and Reality, Violence and Corruption, Love, Ethnicity and Class Identity, Indigenous Cultures of the Americas, Comedy, and Urban Life. Some of the movies have been rated R for violence, language and sexuality. Classroom time will be devoted viewing the films and discussion and analysis of the cultural themes.

Evaluation is based on participation and homework, as well as spoken and written assessments. Since the emphasis of the course is on speaking, students are expected to use Spanish for all classroom interactions.

SPANISH AP**COURSE #379****FULL YEAR – 5.00 CREDITS****SPANISH AP2****COURSE #380****FULL YEAR – 5.00 CREDITS****Usually taken in grades: 11 or 12****Prerequisites: AP requires a B- in Spanish 4H, or teacher recommendation. AP2 requires a B- in AP or teacher recommendation.**

In the advanced level, students continue to refine and extend their knowledge and proficiency in all skill areas through an even wider variety of activities. They can function in almost any context including many complex situations that deal with concepts of broader cultural significance. These concepts include social issues in the target culture and abstract ideas pertaining to art, science and technology, beauty and aesthetics, identity, contemporary life, family and community and global challenges. Discussion is based upon reading a variety of journalistic pieces and literature primarily from the 20th and 21st centuries. Language skills and cultural knowledge are enhanced by the use of the Internet, audio programs and films. Varied methods such as group work, paired work, and direct instruction are used to help all students develop communicative proficiency and improve their interpersonal, presentational and interpretive skills.

Students interact with cultural competence and understand relating cultural practices to perspectives. They use Spanish to investigate, explain, and reflect on the relationship between the practices and perspectives of the cultures studied.

Among the goals of this course is to prepare students for the Spanish Language and Culture Advanced Placement Examination.

Evaluation will be based on participation, homework, projects and performance on spoken, audio and written assessments.

Note: In years when there is not sufficient enrollment to have an AP2 section, students may be assigned the same section as AP students. Most of the readings and activities of the course alternate from year to year, so that there is little repetition of content. AP2 students may be asked to do alternate or additional assignments.

INTERDISCIPLINARY

COURSES OFFERED:

History & Literature: A Twice Told Tale
Cultural Awareness through International Cuisine
Research Senior Capstone (AP)
Seminar Capstone (AP)
Introduction to Business Marketing
Rivers and Revolutions
Senior Internship Program

HISTORY & LITERATURE: A TWICE TOLD TALE

COURSE #260 - History & Literature: A Twice Told Tale - Social Studies

COURSE #261 - History & Literature: A Twice Told Tale - Social Studies (H)

SEMESTER 1 - 2.50 CREDITS

For students in grade: 11

Prerequisites: 10 credits in English and successful completion of World Cultures and U.S. History. Students must also sign up for English Course #160 or #161 for Honors.

In History, Literature, & Psychology: A Twice-Told Tale, we explore the human experience through literature, history and psychology. Students will employ literature as a case study to analyze universal human dilemmas and specific obstacles created by cultural circumstances. Students will also examine literary, historical, and psychological theory centered on the desire to reconcile the outside world with internal reality. Texts include “Epic of Gilgamesh,” The Bacchae by Euripides, The Ballad of Mulan, Siddhartha by Hermann Hesse, , the writing of Langston Hughes, poetry of Martín Espada, Junot Díaz, Jamaica Kincaid, Robin Wall Kimmerer, and V for Vendetta by Alan Moore.

The course integrates an English teacher and a Social Studies teacher with fifty students in the same classroom and takes place in two blocks. The course is an elective for upperclassmen. Students receive a total of 5 credits: English (2.5) and Social Studies (2.5).

Evaluation will be based on preparation for class, written reports, unit tests, individual projects, and a semester exam.

CULTURAL AWARENESS THROUGH INTERNATIONAL CUISINE

COURSE #605

SEMESTER 2 – 2.5 CREDITS - meeting 4 x week

For students in grades: 9, 10, 11 and 12

Prerequisites: None

In this course, the world of food comes alive through creativity, practical skills, and cultural exploration! This hands-on course invites you to delve deeper into how food is intertwined with culture. Discover why people eat what they eat, how they eat, and what dining practices vary dramatically across the globe. In this course, you'll explore the cultural significance of food traditions and the social customs surrounding meals.

Through practical lessons, you will develop essential cooking skills, learn how to prepare various dishes, and gain a solid understanding of food presentation. The course also emphasizes *cultural awareness*, helping you appreciate how food practices and etiquette differ from one country to another. What's acceptable in one culture may be viewed differently in another—exploring these differences will broaden your understanding of global food practices.

You will learn to safely prepare and present food with a keen eye for cultural nuances, all while sharpening your skills in food preparation, measurement, and cooking techniques. By the end of the course, you'll not only be able to prepare delicious dishes but also understand how food reflects identity, tradition, and values.

RESEARCH SENIOR CAPSTONE (AP)

COURSE #610

FULL YEAR – 5.00 CREDITS

For students in grade: 12

Prerequisites: Successful completion of Seminar Capstone (AP), and teacher recommendation.

The AP Capstone is a two-year program that focuses on developing research skills. AP Research allows students to design, plan, and conduct a yearlong research-based investigation on a topic of individual interest. Through this inquiry and investigation, students demonstrate the ability to apply scholarly understanding to real-world problems and issues. Students further their skills acquired in the AP Seminar Course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information to build, present, and defend an argument.

SEMINAR CAPSTONE (AP)

COURSE #612

FULL YEAR – 5.00 CREDITS

For students in grade: 11

Prerequisites: None

The AP Capstone is a two-year program that focuses on developing research skills. The first year is

AP Seminar, which is a foundational course that provides students with opportunities to think critically and creatively, research, explore, pose solutions, develop arguments, collaborate, and communicate using various media. Students explore real-world issues through a cross-curricular lens and consider multiple points of view to develop a deep understanding of complex issues as they make connections between these issues and their own lives. Students who register for Seminar will need to have strong reading and writing skills. They also need to be able to work independently as well as work in a team.

INTRODUCTION TO BUSINESS AND MARKETING

COURSE #615

SEMESTER 1 - 2.5 CREDITS - meeting 4 x week

For students in grades: 9, 10, 11 and 12

Prerequisites: None

This Introduction to Business and marketing course focuses on key marketing strategies and what businesses use to reach consumers and boost sales in a globalized World. Student will learn how companies tailor marketing efforts to connect with diverse audiences through strategies like ****globalization**** and ****localization****. The course will emphasize how businesses adjust their approach to meet the needs of specific markets and how these strategies help them grow. Students will gain foundational marketing knowledge, understand the importance of cultural awareness, and apply these concepts in real-world business scenarios. This course will provide the tools to compete in the DECA district conference.

RIVERS AND REVOLUTIONS

COURSE 620A SEMESTER 1

COURSE 620B SEMESTER 2

For students in grades: 11 and 12 only

Prerequisite: None

Note: This course does not fulfill Health and Fitness course requirements.

Rivers and Revolutions is an interdisciplinary, place-based program that offers CCHS students the opportunity to pursue rigorous, hands-on, experiential learning outside the traditional classroom environment. Throughout the semester students engage in fieldwork and community-facing projects as they consider different ways of understanding and engaging with the world, create connections between seemingly disparate things, and explore links between the content and their own lives.

Students enrolled in Rivers and Revolutions receive 2.5 credits in English, Social Studies, Science, Mathematics, and Art, for a total of 12.5 credits. **Students may elect to enroll in embedded Honors for English, Science, Social Studies, Art, and/or Math. Students may also elect to enroll in Advanced Art.**

Rivers and Revolutions runs every block of the day except for A and B blocks. During A and B blocks, students may enroll in other courses. **The program does not interfere with athletics or co-curricular activities.**

Evaluation will be based on classwork, written work, and interdisciplinary projects.

RIVERS AND REVOLUTIONS ENGLISH

COURSE #621

SEMESTER - 2.50 CREDITS

RIVERS AND REVOLUTIONS ENGLISH (H)

COURSE #622

SEMESTER - 2.50 CREDITS

For students in grades: 11 and 12 only

Prerequisite: None

English in Rivers & Revolutions focuses on skills associated with close reading, journaling, narrative construction, creative and analytical writing, and public speaking. Students engage with course content such as short stories, poetry, essays, and philosophical writing. Skill development and content selection follow the thematic arc of the semester.

RIVERS AND REVOLUTIONS SOCIAL STUDIES

COURSE #623

RIVERS AND REVOLUTIONS SOCIAL STUDIES (H)

COURSE #624

SEMESTER - 2.50 CREDITS

For students in grades: 11 and 12 only

Prerequisite: None

Social Studies in Rivers & Revolutions focuses on our human interaction with the world around us through looking at a mix of local history, economics, and human geography. By examining our relationship with Concord and Massachusetts, investigating revolutionary people and ideas, and contemplating humanity's journey through time, students will develop a better understanding of their place in this society and world. Students visit many field sites around Concord and Massachusetts, from Walden Woods to the Wachusett Dam to Boston, to deepen their understanding of topics such as eminent domain, palimpsest, and migration. The course will encourage students to question their underlying assumptions and give them the option to engage with real world civic issues.

RIVERS AND REVOLUTIONS MATH

COURSE #625

SEMESTER- 2.50 CREDITS

RIVERS AND REVOLUTIONS MATH (H)

COURSE #626

SEMESTER - 2.50 CREDITS

For students in grades: 11 and 12 only

Prerequisite: None

Math in Rivers & Revolutions focuses on developing students' mathematical practices. Students will observe, build understanding, and model mathematical patterns that exist in their lives and the natural world. Students will develop problem solving and analytical skills. There will be an

emphasis on applying geometric principles and statistical reasoning.

RIVERS AND REVOLUTIONS SCIENCE

COURSE #627

SEMESTER - 2.50 CREDITS

RIVERS AND REVOLUTIONS SCIENCE (H)

COURSE #628

SEMESTER - 2.50 CREDITS

For students in grades: 11 and 12 only

Prerequisite: None

Science in Rivers & Revolutions focuses on New England natural history and ecology. Students explore our watershed while investigating the glacial and human history that has shaped the landscape over the last 12,000 years. Students practice wildlife identification skills as they become familiar with birds, trees, fungi and other local species.

RIVERS AND REVOLUTION ART

COURSE #629

RIVERS AND REVOLUTION ART (H)

COURSE #630

SEMESTER - 2.50 CREDITS

For students in grades: 11 and 12 only

Prerequisite: None

Art in Rivers & Revolutions focus on skills characteristic of contemporary art, which value process over product and expand creative thinking through immersive experiences. Students practice being flexible, adaptive and resourceful problem solvers. They apply divergent and convergent thinking strategies and build confidence in their ability to create original and innovative artistic solutions, both as individuals and as a group. Whether you have an extensive background in creating art or no prior experience, the projects in *Rivers and Revolutions* will challenge and expand both your skills and your understanding and appreciation of visual art.

SENIOR INTERNSHIP PROGRAM

COURSE #683

Q4 – 6.25 CREDITS

For students in grade: 12

Prerequisites: Students must be in good standing for graduation.

The Senior Internship program is a unique five to eight-week course rooted in career exploration that integrates study with planned and supervised career-related work experience. Seniors are involved as non-paid “authentic employees” receiving academic credit for work experiences. The purpose of the program is to develop and strengthen the student’s educational and career preparation. These internships will expose the student to the interpersonal relationships a job requires, both with co-workers and supervisors that are essential in developing a variety of skills.

TEACHING ASSISTANTS

In order to be a Teaching Assistant (TA), students must have permission from the classroom teacher, and there is no expectation that a teacher must have a TA. At the beginning of the year, the TA and classroom teacher will meet to discuss the individual goals and expectations for the year.

Tier 1

- Open to students in grades 9-12
- Student must attend at least half of the scheduled class times
- Student can be a TA for one semester or full year
- Help with administrative tasks – photocopying, handing out papers/tests, setting up classrooms/labs, and miscellaneous administrative tasks (excluding grading)
- Student will receive community service credit based upon the number of hours completed
- Students are responsible for entering their completed hours into 2Volunteer
- No grade or credit associated with this position

Tier 2

- Prerequisite: students must be a junior or senior, and have received at least a B in the course and level (or level above) which you will be a TA in
- Student must attend every class meeting
- Tasks may include helping students during class/lab time, helping students in need of extra help or who were absent, collecting assignments, taking class notes, classroom set up, and miscellaneous administrative tasks (excluding grading)
- Students will be graded on a Pass/Fail basis, and will receive 2.5 credits for a full-year or 1.25 credits for one semester; grades will be entered by the classroom teacher. The grade will be determined and entered by the teacher.
- This course will count towards the overall graduation credits, but will not count towards distribution requirements (see your guidance counselor). This will not count as a 5th academic course.

SPECIAL EDUCATION

The SPECIAL EDUCATION PROGRAM offers a variety of specialized courses in response to the individual needs of students. Descriptions of frequently offered courses are available in the Special Education office.

Additional Information and Links

[Course Listing 2025-2026](#)

[English and Social Studies classes by semester](#)

Course Registration Directions and Worksheets

- [Class of 2026 – 12th Grade](#)
- [Class of 2027 – 11th Grade](#)
- [Class of 2028 – 10th Grade](#)
- [Class of 2029 – 9th Grade](#)

END OF PROGRAM OF STUDIES

***KEEP THIS BOOKLET HANDY TO
REVIEW COURSES, CREDITS, AND
INFORMATION ABOUT COURSE
SELECTIONS***