

**A Housatonic Valley
Regional High School Graduate**



Housatonic Valley Regional High School

PROGRAM OF STUDIES

2025-2026

Table of Contents

Principal’s Message	3
The Portrait of a Graduate	4
Core Values and Beliefs	4
School-Wide Expectations	5
Graduation Requirements	6
Additional Requirements for Graduation	7
Graduation Credit for Courses Taken in Middle School	7
Transfer Students	7
Before Making Course Selections	7
Course Recommendations and Placement	8
Course Level Changes	8
Enrichment and College Experience Courses	8
UConn Early College Experience Program	8
Partnership Program with CT State Community College - Northwestern (CSCCN)	9
Personalized Learning Courses	9
Auditing Courses	10
Homebound Instruction	10
Academic Load	10
NCAA Eligibility	11
Weighted Class Rank and Course Levels	11
Grade Point Average (GPA)	11
Course Change Procedures	11
Changing Courses	11
Dropping Courses	12
Summer School	12
HVRHS Course Descriptions by Department	13
AGRICULTURE SCIENCE AND TECHNOLOGY EDUCATION	13
BRIDGES PROGRAM	19
BUSINESS & FINANCIAL EDUCATION	20
CAPSTONE & ADVISORY EXPERIENCES	21
ENGLISH	22
EXPLORING LIFE SKILLS	29
FINE ARTS	30
HEALTH AND PHYSICAL EDUCATION	35
HEALTH EDUCATION	35
PHYSICAL EDUCATION	35

MATHEMATICS	37
SCIENCE	44
SOCIAL STUDIES	49
STUDENT SUPPORT SERVICES	53
TECHNOLOGY EDUCATION	55
WORLD LANGUAGES	57

Principal's Message

Dear Students, Parents, and Guardians,

Since 1938, Housatonic Valley Regional High School has prided itself on offering a comprehensive curriculum that prepares students for careers and further education. Our curriculum and course offerings have changed over time to reflect the demands of our world and the needs of our students, and as you peruse the courses described in our Program of Studies, I am confident that you will encounter some classes that pique your curiosity and excite you.

High school is a time for students to explore potential subjects of interest in greater depth, and especially during your junior and senior years, you will have the opportunity to fill your schedule with courses that suit your interests. Even if you have never attempted to play an instrument, balance a checkbook, take a better photo, or write a short story, now is the time to see if you like those activities so you can explore them in greater depth in the years to come.

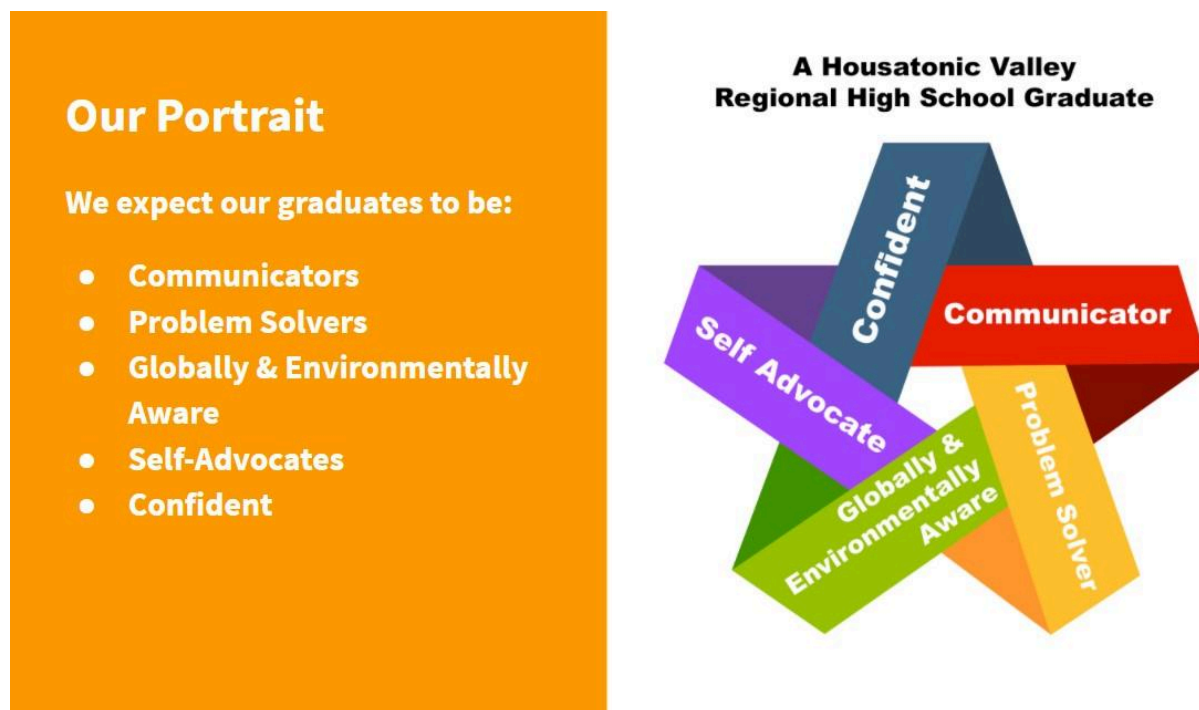
Your school counselor is available to help you decide among courses to design the best schedule to meet your needs and future plans. While you will need to meet certain graduation requirements, there is flexibility in how you meet those. Additionally, you may include Personalized Learning courses to investigate a topic that you want to explore independently. Talk to your counselor to get started; learn something just for the fun of it!

Sincerely,

Ian Strever
Principal

The Portrait of a Graduate

In 2019, members of the Housatonic community developed a vision for what our graduates should know and be able to do upon graduation. Teachers, students, administrators, board members, and members from the public at large held conversations, solicited feedback, and surveyed their constituents about what they wanted to see in our graduates. They identified five qualities that reflect the values of our community and the needs of our students:



Core Values and Beliefs

The HVRHS community promotes personal and academic growth, as well as independence of thought and spirit for all its members, within a culture of respect, responsibility and safety. The core values that support this statement include a commitment to 21st century academic expectations which encourage all members to grow to their potential, accept and respect different learning styles, solve problems and think analytically, and communicate their ideas effectively. Members of the school community are also expected to make ethical choices, demonstrate social and civic responsibility, and show pride and care for the school and its environment.

School-Wide Expectations

Academic Expectations

Students at HVRHS will:

- read for understanding
- communicate effectively
- identify and solve problems
- gather, analyze, interpret, assess and apply information

Social Expectations

- demonstrate respect for all individuals
- demonstrate personal responsibility
- demonstrate respect for our school and our environment
- work collaboratively to resolve conflicts in our school community

Civic Expectations

- make positive contributions to their community.
- demonstrate a sense of ethics that is evident in the decisions they make and the behavior they exhibit.
- exercise their rights, duties, and responsibilities as members of their community.

Graduation Requirements

In order to graduate and be granted a diploma, students must satisfactorily complete a minimum of twenty-five (25) credits, including not fewer than:

- (1) nine credits in the humanities, including civics and the arts (courses marked with **H** in the course description);
- (2) nine credits in science, technology, engineering, and mathematics (courses marked with **S** in the course description);
- (3) one and a half credits in physical education and wellness;
- (4) one credit in world languages;
- (5) successful completion of a Capstone project (.5 credit); and
- (6) one credit in Health Education.

In addition, the Board of Education provides adequate student support and remedial services for students beginning in grade nine. Such student support and remedial services shall provide alternate means for a student to complete any of the high school graduation requirements, previously listed. Such student support and remedial services shall include, but not be limited to (1) allowing students to retake courses in summer school or through an online course; (2) allowing students to enroll in a class offered at a constituent unit of the state system of higher education, (3) allowing those students whose individualized education plans state that such students are eligible for an alternate assessment to demonstrate competency through success on such alternate assessment or a waived graduation requirement.

Area	Credits Required	Specific Course Requirements
STEM (Science, Technology, Engineering, Math)	9	3 courses in Math 3 courses in Science 3 electives designated as STEM .5 credit in Financial Literacy (Class of 2027 and beyond)
Humanities (English, Social Studies, Art, Music)	9	4 courses in English 3 courses in Social Studies which must include 1 credit of US History and .5 credits in Civics or American Politics or .5 credit in a course designated as "the Arts"
Physical Education and Wellness	1.5	PE 9, 10, 11, 12
World Languages	1	

Health Education	1	Health 9, 10, 11, 12 (.25 credit each year)
Capstone Assessment	.5	Successful completion of the Capstone project.
Advisory	1	.25 credit each year, but not required for graduation.
LifeSkills	.75	Students must take, but not required for graduation.
Electives	3	

Additional Requirements for Graduation

- All freshmen must enroll in Exploring Lifeskills.
- A student must meet proficiency in a minimum of four (4) full year courses or their equivalent in the senior year in addition to Physical Education and Health.
- Students starting with the Class of 2027 must complete a Free Application for Federal Student Aid (FAFSA) or complete a waiver.

Graduation Credit for Courses Taken in Middle School

Students enrolled in French 1, Spanish 1, Algebra 1, or Geometry in middle school will receive high school credit subject to earning a passing grade. A grade of P will be added to the high school transcript and will not be included in the student's high school GPA.

Transfer Students

A student who transfers into Housatonic Valley Regional High School must meet the school's graduation requirements to be eligible to graduate with an HVRHS diploma. Course work completed in other secondary schools will be added to the student's permanent HVRHS transcript. Students must be enrolled at HVRHS for at least four semesters in order to be eligible for consideration as valedictorian or salutatorian.

Before Making Course Selections

Careful program planning by students and parents is of critical importance. As a general rule, it is wise for a student to take as many academic subjects as can successfully be completed. Many students need to meet academic requirements for college and also complete sequences in other areas of interest such as agriculture, art, music, or technology (See the [CTE Course Clusters](#) as one way of thinking about planning for courses). Each student's academic program should be individualized according to their interests and goals. An important function of the School Counseling Department is to assist each student in selecting courses to meet their

unique goals. The School Counseling Department is a great resource for students, and students and parents are encouraged to reach out to the counselors at any time.

Course Recommendations and Placement

Teachers recommend courses and levels that appropriately challenge each student. All courses at Housatonic Valley Regional High School are aligned to state and national content standards and are therefore rigorous, intellectually stimulating, and challenging. Students who are interested in the most in-depth preparation for college work should consider Advanced Placement (AP), UConn Early College Experience (ECE), and Honors (H) level courses. For this reason, careful consideration is given to each placement decision based on the teacher's knowledge of the student and their performance on measures of academic performance. Students need to be aware that AP and ECE level courses are college courses with comparable workloads and expectations: the workload, depth of content and pace of coverage are intense. All AP and ECE courses also follow a different set of grading policies that reflect college standards.

Course Level Changes

A student must receive a recommendation from their teacher for placement in an AP, ECE, or Honors level course. Students entering the ninth grade will be placed in the appropriate level based on teacher recommendation, a local writing assessment, and standardized test results. An override form may not be used for honors ninth grade courses in English and History. If necessary, a meeting with the student's School Counselor should be scheduled. If, after these meetings, a parent/student chooses to override the teacher recommendation, an override form must be completed and submitted to the counselor.

In doing so, the parent and student need to be aware that the change in level will place new demands on the student. Significant changes in the student's schedule and/or closed classes may make it impossible to move the student to a different level. Should the student experience difficulty in meeting the demands of the new placement, they must make use of appropriate resources (i.e., confer with the teacher, seek extra help, seek peer tutoring, etc). No override will be rescinded unless the student has made consistent use of these resources. If the override is rescinded, the student's grade will stand as the one earned in the original override placement. Any student requesting an override into a course that requires summer work is expected to complete that summer work.

Enrichment and College Experience Courses

UConn Early College Experience Program

The UConn Early College Experience (ECE) program provides academically motivated students the opportunity to take university courses while in high school. These challenging courses allow for students to preview college work, build confidence in their readiness for college, and earn

college credits that provide both an academic and financial head start towards their college degree and future post-secondary opportunities. UConn ECE instructors are high school teachers certified as adjunct instructors by the University of Connecticut. UConn ECE courses are listed in the Program of Studies within each department. All credit-bearing courses require a fee, payable to UConn, and billing is made to the student by the college. Students who are eligible for Free or Reduced Lunch are eligible for a fee waiver for their ECE class(es), however appropriate paperwork must be submitted to the high school by the requested date at the start of the school year.

Registration for UConn ECE credit is a separate process through Dual Enroll that is run by the University of Connecticut. Students will not be eligible to earn UConn credit in the course if they fail to complete all of the steps by the registration deadline. A student who withdraws from an HVRHS ECE class must also withdraw from the class at UConn. The University of Connecticut sends fee notifications to the email address the student provides during the application process. Students are financially responsible for all courses for which they register. University standard policies on late fees, returned checks, and collections apply. All policies and procedures can be found at ece.UConn.edu. All students who sign up for the ECE course are expected to register for UConn ECE credit.

Partnership Program with CT State Community College - Northwestern (CSCCN)

The High School Partnership Program is designed to enable qualified high school juniors and seniors to take up to two courses each semester on a “space available” basis at no charge. Qualified students must have an overall B average (3.0) with approval from their School Counselor. Students may register for specific developmental courses and/or 100-level or higher courses, and must meet the prerequisites for the courses. Students are responsible for purchasing their own books and providing their own transportation. A transcript of the student’s work will be maintained at CSCCN, and can be submitted when the student applies to college; these courses will also be listed on a student’s HVRHS transcript. It is the student’s responsibility to request a transcript from CSCCN for submission with their applications. Interested students should contact their School Counselor for additional information and an application. Students must take the placement tests at the college prior to enrolling in the classes. CSCCN sets application deadlines for each semester that HVRHS must uphold. For questions or more information, please contact your school counselor or the College and Career Resource Center.

Personalized Learning Courses

Because students learn in different ways, schools need student-centered strategies to address student learning differences. Each student has unique talents and skills that shape learning, so HVRHS will work to promote personalized learning that will equip students with the skills and abilities described in the Portrait of a Graduate. We use student-centered approaches to help students become communicators, problem-solvers, self-advocates, confident individuals, and

globally and environmentally-aware citizens.

To participate in a Personalized Learning (PL) course, the student needs to initiate a meeting with the teacher(s) who will volunteer to oversee progress with the course. Together, the teacher and student submit a proposal that must be approved by the chair of the applicable department and the principal. Both student and parent are required to sign the proposal.

The application for a PL course can be approved at any time; however, the proposal that includes all signatures should be submitted at least ten days prior to the time the student plans to begin the activities related to the course. All PL courses are graded on a Pass/Fail basis and are not included in the calculation of the student's GPA. [Click here](#) to access the application form, which provides more detailed information about these courses.

Auditing Courses

Students are encouraged to audit courses for enrichment purposes and for reasons of personal interest, providing the teacher of the class, the school counselor, and the parent/guardian approve. The course audited will be added to the student's schedule, and the student receives no credit for the course. Auditing students must meet all course requirements including attendance. The course audited is noted on the student's permanent record.

Homebound Instruction

Students who are unable to attend school because of an extended illness (ten school days) may arrange to have tutors assigned to them, beginning with the second week of absence. Priority for tutoring is required and core courses for graduation. Before homebound instruction can be started, a written statement by the attending doctor must be submitted to the Director of Pupil Services, Regional School District No. 1, 246 Warren Turnpike, Falls Village, CT 06031 (860) 824-5123 (Ext. 1322).

Academic Load

Students are expected to carry a minimum number of courses during each semester:

- Grade 9: 7 credits
- Grade 10: 6.75 credits
- Grade 11: 7 credits
- Grade 12: 6 credits

inclusive of physical education and health. **Students are strongly encouraged to exceed these minimum requirements.** Required credits for promotion to the next grade level are:

Minimum Credits Earned From

- Grade 9 to Grade 10 must be 6 credits
- Grade 10 to Grade 11 must be 12 credits

- Grade 11 to Grade 12 must be 18 credits
- Graduation = 25 credits

NCAA Eligibility

Students who intend to participate in Division I or Division II college athletics must register with the NCAA Clearinghouse by the end of their junior year. Students can register at the NCAA Clearinghouse website web3.ncaa.org/ecwr3/.

Weighted Class Rank and Course Levels

Class standing is determined by a weighted grading system. Within the weighted system there are four levels of course difficulty:

- College Preparatory (CP) are standard courses for college preparation. These courses are given a 1.05 GPA weighting.
- Honors (H) courses are designed for students who are recommended by their teachers and department heads as being capable of a higher level of rigor and academic challenge. These courses are given a 1.10 GPA weighting.
- Early College Experience/Advanced Placement (ECE/AP) as well as Level Five World Language courses are designed for students recommended by their teachers and department heads as being capable of participating in college-level work. These courses are given a 1.15 GPA weighting.
- Certain courses are designated as non-weighted or assigned a 1.0 GPA weighting. These are physical education, remedial, and life skills courses.

Grade Point Average (GPA)

A student's weighted GPA is determined by the assignment of points on a four-point scale for grades at each level of course difficulty. Pass/Fail courses are not included in the calculation of GPA.

Course Change Procedures

Changing Courses

The selection of a course is a very important decision. Courses should be selected only after considerable thought and with the counsel of parents, teachers and the school counselor. It is frequently difficult and often impossible to change a student's schedule after the school year starts. Schedule changes will only be considered after contact has been made with parents, teacher, school counselor and administration. Schedule changes will be kept to a minimum and made only for the following reasons: to correct scheduling conflicts, to accommodate a student's revised placement, or to meet extenuating circumstances (as determined by the

school administration). Schedule changes initiated by students or parents must be initiated by the tenth day of the term.

Dropping Courses

All students are expected to carry a minimum of six (6) units of credit per academic year, and a minimum of six (6) classes per semester exclusive of PE and Health. Seniors in good standing may carry a minimum of six courses, including physical education and health. Students who have registered for more than the above required credits/classes may work with their School Counselor to drop a course. After the tenth day of the term, no student may withdraw from a scheduled course without the appropriate form signed by the classroom teacher, the department chairperson, the student's parent/guardian, the School Counselor, and the principal must also sign the form. Forms are available in the School Counseling office. If the student withdraws from a course within ten (10) calendar days of the beginning of the course, the course will not appear on their transcript. Students who withdraw from a course after the ten (10) day limit with permission from the department chairperson will receive a final course grade of WP (Withdraw Pass) or a WF (Withdraw Failure) on their transcript, depending on the course grade at the time of withdrawal. Any student who withdraws from a course after the ten (10) day limit without the approval of the teacher and/or department chair will receive a final course grade of ***WF (Withdraw Failure) on their transcript and the WF will be counted as a 0 in the student's GPA calculation.*** A student involved in the process of dropping or adding a course may not stop attending class and/or start going to another class until the Course Change Request Form has been signed by all parties, and the Counselor informs the student that the process is complete.

Summer School

At the end of a course, a student who does not demonstrate proficiency in a course will work with the course instructor or department head to identify how proficiency will be demonstrated in summer school in order to earn full credit. Credits from other summer school programs are not accepted.

HVRHS Course Descriptions by Department

AGRICULTURE SCIENCE AND TECHNOLOGY EDUCATION

The courses in Agriculture Science and Technology Education are open to freshmen, sophomores, juniors and seniors. They are designed to provide education, career training, and experiences in the many areas of agricultural engineering, animal science, biotechnology, food science, natural resources, and plant science. Students in these courses develop knowledge and skills to become globally and environmentally-aware life-long learners and informed citizens.

Completion of a Supervised Agricultural Experience (SAE) portfolio is a requirement to receive course credit for all agricultural classes. Many diverse opportunities exist such as agriscience research projects, service-based learning projects, school-based enterprises, job placements, job shadowing/internships, and exploratory activities. The SAE is the application of what is learned in the classroom and is a catalyst for personal growth, career development, and responsible citizenship.

Students are also involved with leadership and community activities through their participation in the FFA. The FFA is a national leadership organization of Agricultural Education students and provides scholarships, awards, cultural exchange and many educational opportunities to members.

All students with an interest in agriculture may apply for this program, and students may apply from the nearby states of Massachusetts and New York and out-of-district school systems. New students should obtain an Agricultural Education Program application from the Agricultural Education Department or the website <https://www.ffa.hvrhs.org/home>.

Introduction to Agriculture **S**

What is Agricultural Science? What types of careers are included? The answers to these questions may surprise you! This course allows freshmen to develop basic skills in the various aspects of agriculture while exploring what it has to offer. It is a full-year course designed to provide practical instruction and hands-on activities in a variety of units including; natural resources, agricultural mechanics, plant science, food science, animal science, and marketing. Equipment safety and operation (yes, driving equipment and more!), shop safety/woodworking, agricultural awareness and career exploration will also be included. Students will be able to take a semester of Introduction to Agriculture (Spring or Fall) or enroll in both for a full year. Class limited to 16 students.

Course weight: 1.05

Credit: .5/1

Agricultural Business **S** Offered in 2025-2026 Full Year Class

Agricultural Business introduces students to business management in agriculture. Mathematics, reading, and writing components are woven in the context of agriculture and students will use the introductory skills and knowledge developed in this course throughout their SAE (Supervised Agricultural Experiences) and courses. Throughout the course are practical and engaging activities,

projects, and problems to develop and improve business and employability skills. Additionally, students investigate and develop viable business plans in order to solve local problems. The business plan ideas are communicated to student peers and members of the professional community. The Agricultural Business foundations course includes, starting a business, financial documents, risk management and connection with local agricultural businesses and guest lecturers. ***This course is designed for juniors and seniors, and it meets the Financial Literacy requirement for the Class of 2027 and beyond.*** The Curriculum for Agricultural Science Education (CASE) is recognized for articulated college credit if taken for a full year. Class limited to 16 students. *This course is offered in alternating years.*

Course weight: 1.05

Credit: 1

Applications in Agricultural Engineering

This full year course is designed mainly for sophomores and juniors, but will accommodate any student seeking agricultural mechanical skills. This is a single period full year course. Safety instruction is at the foundation of each unit. Students will learn hand tool and power tool use, build structures, and learn electrical wiring, plumbing, and metalworking skills. They will develop and read plans, fasten metals and wood, and learn large equipment operation and maintenance. College and career opportunities in the agricultural mechanics field will be explored. Class limited to 16 students.

Course weight: 1.05

Credit: 1

Agricultural Mechanics and Structural Systems (Single Block)

This is a full-year course that provides class instruction in basic agricultural mechanics theory and skills. Student-centered learning programs are oriented toward acquiring mechanical skills through projects and/or job placement. Major units include welding; small engines; diesel tractor operation and maintenance; constructing agricultural equipment; equipment repair; electricity; agricultural building construction; public speaking; and supervised programs. College and career opportunities in the agricultural mechanics field will be explored. Class limited to 16 students.

Prerequisites: Applications in Agricultural Engineering or consent of department

Course weight: 1.05

Credits: 1

UConn ECE/Equine Science Offered in 2025-2026

This college level Equine course is open to sophomores, juniors and seniors though only juniors and seniors may take for UConn credit, while still open to sophomores as a regular class.

In this full year course, students will develop an understanding of career opportunities as well as foundational knowledge and skills related to the care and maintenance of horses, donkeys, and mules. Students will study aspects of equine anatomy, nutrition, reproduction, selection, behavior, and history. In addition, students will learn about the various species, breeds and their uses.

Experience with horses is not required for this course. In addition to content-based concepts and skills, this course will focus on collaboration, problem solving, leadership, and other workplace skills taught through classroom and field experience, the opportunity to be on the HVRHS FFA Horse Judging Team, and SAE experience.

This course is open to sophomores, juniors and seniors and provides practical instruction and activities in horse management through class work, field trips to local stables, and equine laboratory work. Class limited to 16 students.

One year of ECE Equine Science will meet the graduation requirement for a Science course.

This course is offered in alternating years.

Prerequisites include any one of the following and may be taken concurrently: Introduction to Agriculture, Veterinary Science, or Companion Animals.

Course weight: 1.15 (ECE)/1.05 (CP)

Credit: 1

Farm-to-Table **S**

If you believe there's nothing better than fresh, local food and socially conscious green practices to create the best dining experiences, our Farm-to-Table class is perfect for you. You'll spend a semester or full year examining the ideals behind this food philosophy, growing and harvesting food through community partnerships that celebrate and engage local farmers and producers. Explore cooking, ecology of food, sustainable food systems, and chef-community relations. Develop menus using sourced ingredients as you participate in tastings and cooking demos. This is a full-year course for sophomores, juniors, and seniors. The Farm-to-Table kitchen will be your lab space. College and career opportunities will be explored. May be taken for a full year or a semester. Class limited to 16 students.

Course weight: 1.05

Credit: .5/1

Floral Design **S H**

Enjoy working with cut-flowers from around the world? Design wedding or graduation flowers for a Region One School. This semester or full-year course introduces students to floral design as an art and a science. Students will gain practical experience in the field of floriculture in the design of arrangements, corsages, and foliage plants with a focus on the principles of design. Students will also receive valuable growing experience in the state-of-the-art greenhouse facility. The course will emphasize the merchandising and business areas in the floral industry including all of the holidays. Students will be able to take flowers home and will provide a floral service to our school community. College and career opportunities in the floral industry will be explored. Students will have the opportunity to participate in the Career Development Event at the University of Connecticut. Students will be able to take a semester of Floral (Floral 1 and/or Floral 2) or enroll in both for a full year. Class limited to 16 students. *This course may also fulfill a student's Fine Arts Graduation Requirement.*

Course weight: 1.05

Credit: .5/1

Forest Technologies **S**

This year long or semester course is open to sophomores, juniors and seniors which includes units on: (fall semester) tree identification, measurement and management; mapping and measuring land, orienteering and GPS; forestry tool identification and care; logging practices and safe equipment operation;(spring semester) chainsaw maintenance, care and operation; contracting and business practices; tree planting; tree plantation management, soils, ropes and knots, climbing, safe equipment operation, and the relationship of forest ecology to our natural resource systems. College and career opportunities in the natural resources industry will be explored. Students will have the opportunity to participate in the Career Development Event in the autumn season. Students will be able to take a semester of this course (Forest Technologies 1 and/or Forest Technologies 2) or enroll in both for a full year. Class limited to 16 students. *This course is offered in alternating years.*

Course weight: 1.05

Credit: 1 or .5

Freshwater Fish and Wildlife **S**

This semester or full-year survey course will introduce students to freshwater fish and wildlife most commonly found in our region of North America. Students will focus on the biology and natural history of fish and wildlife species and investigate ways to improve their habitats. Students will work in the field and lab with local fish and wildlife projects such as Trout Unlimited, Housatonic Valley Association, Great Mountain Forest, Audubon and the various projects of the Department of Energy and Environmental Protection (DEEP), as well as Environmental Conservation officers. Students will have the opportunity to develop partnerships and projects with these environmental professionals. Concepts and techniques in fish and game farming will also be included in the course. The fall course will focus on wildlife and the spring course on fisheries. One year of Freshwater Fish and Wildlife will meet the graduation requirement for a science course. Students will be able to take a semester of this course (Freshwater Fish 1 and/or Freshwater Fish 2) or enroll in both for a full year. Class limited to 16 students.

Course weight: 1.05

Credit: 1 or .5

Greenhouse Botany **S**

Enjoy gardening and botany all year-long or for a semester. This course will include the operation of greenhouses for all purposes, including seasonal crops, carnivorous plants, tropical plants, vegetables, medicinal and culinary herbs and hydroponics. The greenhouse will be used as a laboratory to start new plants from seeds and through methods of cloning. Crops will be raised for sale and students will be able to take plants home. We will utilize the local private and public sector of the horticultural industry. Business management skills as they relate to greenhouse operations and careers will be studied. College and career opportunities in the greenhouse industry will be explored. Students will be able to take a semester of this course (Greenhouse Botany 1 and/or Greenhouse Botany 2) or enroll in both for a full year. Class limited to 16 students.

Course weight: 1.05

Credit: 1 or .5

Landscape Design and Construction **S**

Operate a backhoe or skid-steer. Take a hike and explore the diversity of plant life in nature. Learn to build a water garden, stone wall or just how to attract butterflies and birds to your home. This full year course will cover the preparation of planting beds and the planting of trees, shrubs, and flowers. Construction of landscape features such as patios, walks, walls, and fences as well as the installation of irrigation systems and outdoor lighting will be included. Students will learn arboriculture techniques of the tree care industry using the International Society of Arboriculture Arborist Certification Manual. Additionally, the course will include turf and athletic fields, pruning trees and shrubs, fertilizing landscape plants, flower bed management, and integrated plant (pest) management as well as historical landscape preservation. College and career opportunities in the landscape field will be explored. The course will closely follow state requirements of Connecticut's Landscape and Nursery Association. Class limited to 16 students.

Course weight: 1.05

Credit: 1

Advanced Landscape Design and Construction **S** Offered in 2026-2027

Thinking about starting a landscape design and construction business or want to know more about how to manage the residential and community landscape? The Advanced Landscaping course is a single period, full-year course open to juniors and seniors who have successfully completed Landscape Design and Construction. The course will build upon the foundations of the landscape industry and will include project oriented-work in the field. Students will enhance their basic skills in the areas of pruning, landscape design (with computer software) and installation, tree and shrub selection, equipment operation, insect and disease recognition and control, athletic fields and fertilization. Specialized areas of the industry will also receive more concentration including water gardening, nursery management, and arboriculture. Students may work towards certification with the International Society of Arboriculture, Connecticut Nursery Landscape Association, and Connecticut Tree Protective Association as well as explore the necessary requirements for acquiring a commercial driver's license. Students will have the opportunity to participate in the Career Development Event at the University of Connecticut. Class limited to 16 students. Permission from instructor in senior year if the prerequisite course has not been taken. *This course will be offered in alternating years..*

Prerequisites: Landscape Design and Construction or with consent of the department.

Course weight: 1.05

Credit: 1

Companion Animal Science and Management **S**

Have you ever wondered why dogs eat grass, or what exactly your cat is doing when they smell with their mouth open? This course can answer these common questions along with many others! We will study everything from their lineage and history to common health problems and diseases. The focus for the units (History, Terminology, Nutrition, Housing, Restraint, Health and Anatomy/Physiology) will be on the canine and feline species for the Fall Semester. In the Spring Semester we will explore how small exotic animals are beginning to take the veterinary industry by storm. These pets may include ferrets, guinea pigs or chinchillas. Sometimes called pocket pets or

fibrevores, these small companion animals are a specialty branch of the veterinary sciences. The units (History, Terminology, Nutrition, Housing, Restraint, Health and Anatomy/Physiology) will focus on the following species; Ferrets, Chinchillas, Guinea Pigs, Hamsters/Gerbils, Rabbits and Sugar Gliders. Students will take this class for a full year. Class limited to 16 students.

Course weight: 1.05

Credit: 1

Veterinary Science

Do you love animals? Are you interested in a career that has many different opportunities in the animal sciences? Do you want to make a positive difference in your community? If the answer is “yes” join the veterinary science class for one semester or for a full year. This course is open to sophomores, juniors and seniors and provides practical instruction and activities in animal management through class work, field trips, and laboratory work. Fall semester topics covered may include: veterinary office and kennel management; laboratory procedures and practices; animal restraint and skills; Spring semester units may be advanced anatomy and physiology; basic animal first aid; administering medication; and immunization. Students will manage the health and breeding programs of livestock throughout the entire year. College and career opportunities in the veterinary science and animal care industries will be explored. Students will be able to take a semester of this course (Veterinary Science 1 and/or Veterinary Science 2) or enroll in both for a full year. Class limited to 16 students.

Course weight: 1.05

Credit: 1 or .5

Personalized Learning in Agricultural Education

Open to students interested in a specific area of study in agriculture and who have completed the basic courses and/or cannot schedule advanced courses. Plans must be submitted to and approved by an agriculture teacher at the beginning of each semester.

Course weight: 0 (Pass/Fail)

Credit: 1 or .5

BRIDGES PROGRAM

The Bridges program is an alternative education program offering students the opportunity to successfully achieve credit through an individualized educational experience. The mission of the Bridges Program is to provide an alternative route for these designated students to a high school diploma. These students will be given a curriculum that is personally created and corresponds to future career goals. This program also involves therapeutic support using the individual model. Bridges helps students develop skills to manage academic and social demands of the public school while reestablishing a connection to their school and community. Enrollment in the Bridges program is only open to students who have been recommended by a counselor or through the school's SRBI process.

BUSINESS & FINANCIAL EDUCATION

Introduction to Accounting

The course objective is to provide a basic understanding of accounting principles, including preparation of financial statements. Students will become familiar with debits, credits, journals and ledgers. Students will learn the double-entry accounting cycle for a sole proprietorship. Also, students will focus on balance sheets and income statements. Accounting careers, advanced vocabulary and financial current events will also be discussed throughout the semester. Even when taught by a certified mathematics teacher, this course **does not** meet the graduation requirements for mathematics or STEM.

Course weight: 1.05

Credit: .5

Marketing in a Global Economy

This course focuses on the basic concepts of marketing and business. Marketing is a coordinated system of business activities, which relies on the performance of people. Topics include the functions of marketing, the components of a marketing plan, and how marketing works within global economies. The functions of marketing consist of many activities to help get a product or service to the consumer and include distribution, financing, pricing, promotion, and selling. Students will participate in activities where they will develop skills in communication, collaboration, and creativity. Even when taught by a certified mathematics teacher, this course **does not** meet the graduation requirements for STEM.

Course weight: 1.05

Credit: .5

CAPSTONE & ADVISORY EXPERIENCES

Capstone Experience

Students will work with the five qualities of our Portrait of a Graduate as the focus for an intensive project that demonstrates their attainment of those qualities. Students collaborate with a teacher and a mentor to identify an area of interest based on their studies from grades 9-11 and to design a project that incorporates that learning with additional research and experiences. Students will be expected to engage with the larger community and share their projects with others at a public showcase that will take place toward the end of the course. ***Completion of a Capstone project is a graduation requirement for all students.*** *Students will be enrolled in the first half of this course during the spring of their junior year and students should plan to complete the course in one semester. Students who do not complete the project during that semester or who elect to undertake a more ambitious project will need to enroll in the second half of the course during the fall of their senior year.*

Course weight: 1.05

Credit: .5 (or 1)

Advisory

Advisory prepares students for college and career success as documented in a Student Success Plan (SSP) that contributes to a student's Capstone project in junior and senior year. Students work with their Advisor in a small-group setting to personalize their high school experience. Teachers will regularly touch base with students in their Advisory groups to monitor academic achievement and to energize students with regard to active participation in their education. Advisory teachers serve as mentors to model and encourage success. Because the groups are small and more intimate, mentors will be able to celebrate and support student success as well as, when necessary, provide information about and referral to available resources.

Course weight: (Pass/Fail)

Credit: 1 (.25 credits per year)

ENGLISH

The high school's four-year English program follows a standards-referenced curriculum developed in alignment with the Common Core State Standards and those Advanced Placements guidelines defined by the College Board. Placement is determined with past achievement, identified needs, and student interest in mind. Elective course offerings are open to all students, though seniors are given priority for enrollment. **Non-seniors, and those students who wish to enroll in electives that are being offered outside of their established placement level, may only do so with teacher approval during the course selection process.**

Grade 9

English 9 is a prerequisite for all other courses offered by the department. Students who do not pass English 9 must repeat the course in the following year. They will not be allowed to take English 10 concurrently.

English 9H

English 9H is available to students whose demonstrated intellectual potential indicates they are ready for mature and independent work, both in English and Social Studies. This level of study hones students' skills in the comprehension, analysis, and evaluation of concepts encountered in their reading. It also provides them with the opportunity to identify the characteristics of quality writing and to adopt the practices on which skilled writers rely. English 9H emphasizes a global approach to literature, pairing works from Africa, China, South America and the Middle East with the study of those regions' histories. These texts will serve as the basis for class discussions, collaborative projects and independent work. Students in this class will need to show strong levels of self-direction and intellectual curiosity. Students enrolled in English 9H must also be enrolled in Global History I H.

Course weight: 1.10

Credit: 1

English 9

English 9 serves as an introduction to the skills and concepts outlined in the Common Core State Standards, which are necessary for the study of English Language Arts at the high school level and beyond. This course assists students in the development of their reading, writing, speaking and listening, and language application skills. Students will identify and apply literary devices, techniques and vocabulary in an effort to develop their personal and critical responses to the works studied. Students will also hone their ability to work independently both inside and outside of class.

Course weight: 1.05

Credit: 1

Grade 10

English 10H

English 10H provides a thematic overview of European and World literature throughout various eras, including Elizabethan England, war-torn Germany, and revolutionary France. Students in this class will read novels, plays, poems, and non-fiction works, and will develop and hone their writing skills by way of formal thesis-based essays and creative pieces that reveal an increasing depth of understanding and analysis. Students enrolled in English 10H must also be enrolled in Global History II H.

Course weight: 1.10

Credit: 1

English 10

English 10 reinforces those skills introduced to students in their first year of English while deepening their understanding of the concepts outlined in the Common Core of State Standards. Through the close reading of fiction and informational texts, class discussion, and the development of written responses, students will become more sophisticated readers and writers. They will expand their familiarity with, and application of, literary techniques in writing from various genres, and follow the development of major themes in works of increasing difficulty.

Course weight: 1.05

Credit: 1

Grade 11

Advanced Placement English Language and Composition

AP English Language and Composition is comparable to an introductory college-level rhetoric and writing course. Students read non-fiction texts, drawn from a variety of disciplines and historical periods, and analyze the effect of rhetorical elements contained within them. The course prepares students to develop evidence-based analytic and argumentative essays that undergo extensive revision. Students evaluate, synthesize, and properly cite research sources to support their arguments and claims. Through self-reflection, peer feedback, and teacher evaluation, they will hone their personal style and strengthen their control over the elements of composition. Students must be enrolled in ECE U.S. History as well.

Course weight: 1.15

Credit: 1

Advanced Placement English Literature and Composition

AP English is designed to prepare students for the College Board's Advanced Placement Examination in Literature and Composition and to succeed with their writing in competitive

college-level courses. Students read works from different authors, genres and time periods, engage in the close analysis of these works, and develop essays and other written responses that help them recognize the different styles, purposes, and audiences that one must consider when writing for understanding, analysis, and evaluation. Additionally, students learn and apply the language of literary analysis, articulate themes for the novels, plays and poems they have studied in class, and analyze the specific literary techniques authors use to develop such themes. They discuss their own interpretations of works studied in class, and compare them with those of their classmates and the academic community at large. Throughout the year, students compose, edit, and revise interpretive essays in response to longer works, and become closely familiar with the format of the AP Examination in English Literature and Composition.

Course weight: 1.15

Credit: 1

English 11H

English 11H uses classic and contemporary American literature to examine the theory, practice, and efficacy of our country's founding philosophies. Students will consider how the principles on which The United States of America was founded are explored through writing reflective of various genres. Oral and written responses to literature will help students deepen their critical thinking skills, and extend the focus of their expository writing. Students enrolled in English 11H must also be enrolled in ECE U.S. History.

Course weight: 1.10

Credit: 1

English 11

English 11 uses classic and contemporary American literature to explore the American Experience. Students evaluate and assess connections between literature and their lives, individuals, communities, and society throughout history. They continue their study of academic vocabulary, and recognize the ways in which key techniques and concepts are employed in the study of fiction and non-fiction, drama, poetry and media. Students will deepen their critical thinking skills through written and oral reader responses, compose creative, expository and persuasive writing pieces, and plan and deliver oral and visual presentations.

Course weight: 1.05

Credit: 1

Grade 12

A single full-year course, or two semester-long courses, will fulfill a student's senior year English requirement. Students wishing to enroll in additional electives may do so and will be scheduled into them provided there is available space.

English 12H (Full-year)

Students in English 12H will further strengthen their ability to read and analyze complex literary works drawn mainly from the late 20th and early 21st centuries. Ideal candidates for this course are active readers, who enjoy discussing the complex, topical, and provocative themes notable authors examine through their work, as well as the techniques, structures, forms, and styles on which such writers rely. Students will write frequently and in a variety of modes, with the goal of recognizing the importance of concision, accuracy, clarity, and insightfulness in quality essays. Through ongoing feedback they will be encouraged to consider the importance of voice, purpose, and audience in writing from all genres.

Course weight: 1.10

Credit: 1

Advanced Placement English Literature and Composition

AP English is designed to prepare students for the College Board's Advanced Placement Examination in Literature and Composition and to succeed with their writing in competitive college-level courses. Students read works from different authors, genres and time periods, engage in the close analysis of these works, and develop essays and other written responses that help them recognize the different styles, purposes, and audiences that one must consider when writing for understanding, analysis, and evaluation. Additionally, students learn and apply the language of literary analysis, articulate themes for the novels, plays and poems they have studied in class, and analyze the specific literary techniques authors use to develop such themes. They discuss their own interpretations of works studied in class, and compare them with those of their classmates and the academic community at large. Throughout the year, students compose, edit, and revise interpretive essays in response to longer works, and become closely familiar with the format of the AP Examination in English Literature and Composition.

Course weight: 1.15

Credit: 1

Advanced Placement English Language and Composition

AP English Language and Composition is comparable to an introductory college-level rhetoric and writing course. Students read non-fiction texts, drawn from a variety of disciplines and historical periods, and analyze the effect of rhetorical elements contained within them. The course prepares students to develop evidence-based analytic and argumentative essays that undergo extensive revision. Students evaluate, synthesize, and properly cite research sources to support their

arguments and claims. Through self-reflection, peer feedback, and teacher evaluation, they will hone their personal style and strengthen their control over the elements of composition. Students must be enrolled in ECE U.S. History as well.

Course weight: 1.15

Credit: 1

Electives

Creative Writing CP (Half-year)

In Creative Writing, students will write in various modes and styles to increase their knowledge and understanding of the writing process. They read selections from a variety of genres, focusing on the many ways in which writers create challenging, engaging, entertaining, and inspiring works. Students study the elements of storytelling in order to enrich their writing, convey their intentions to the reader, and make their work more engaging. Finally, they will deepen their appreciation for the conventions of the English language through the processes of reading, writing, and editing, with special consideration paid to perspective and purpose.

Course weight: 1.05

Credit: .5

Drama CP (Half-year)

In this course students will read and write about a mix of classic and contemporary plays. They will discuss the many ways playwrights and actors develop character, express themes, and stage plays before an audience. This is an active and collaborative course, so participants should be prepared to move around daily. Students who are comfortable before an audience (or would like to be) have the chance to shine by delivering their own monologue and directing/performing in scenes prepared for the class.

Course weight: 1.05

Credit: .5

Film Studies (Full-year)

Enjoy going to the movies? Dream of being a filmmaker? Ever wonder just what it takes to get an idea inside your head onto the silver screen? If so, this course is for you. Film Studies will familiarize students with the history of the motion picture, beginning with the silent era and concluding with the groundswell of DIY digital filmmaking. Members of this class will examine different critical approaches to film, learn how to “read” a movie, and study the work of prominent directors throughout the last century, one of whom they will research independently. Additionally, they will conceptualize, write, storyboard, shoot, edit, and screen before an audience of hundreds their own short-form motion picture.

Course weight: 1.05

Credit: 1

Literature of Black, Indigenous, and People of Color (BIPOC) (Half-year)

Although you've likely sampled the literature of Black and Indigenous People of Color in past English classes, this semester-long elective moves the stories of these often underrepresented groups to the forefront. Reading, writing, and discussion in this class will focus not only on authors who hold membership in these groups, but also on the history, struggles, and accomplishments their writing encompasses. We will examine the widespread reforms that have resulted from movements such as Black Lives Matter, and the ongoing work of organizations that are purposefully counter-messaging the language of white supremacy that is all-too-frequently disseminated on social media platforms, a major source of information--and disinformation--for the public at large. The topics examined in this course, and the discussions and writing that will stem from them, could not be more timely or essential. *Literature of BIPOC will not be running in the 2025-2026 academic year, and any Junior interested in either class should take it as an elective in 2024-2025, alongside English 11, 11H, or AP Lang/Lit.*

This course may be taken for Honors or College Prep weighting.

Course weight: 1.05 or 1.10

Credit: .5

Pride Literature (Half-year)

Although a significant and growing number of our school population identifies as part of the LGBTQ+ community, authors who do likewise have long been overlooked by high school curricula. Pride Literature celebrates the contributions of LGBTQ+ writers to the literary canon. The novels, plays, short stories, and memoirs under study were chosen to help build our capacity for empathy while providing opportunities through which we can actively seek to understand the experiences and perspectives of others. In addition to traditional learning experiences, students in Pride Literature will visit organizations, and hear from professionals, dedicated to providing advocacy and support to the LGBTQ+ community's youngest members. *Pride Literature will not be running in the 2025-2026 academic year, and any Junior interested in either class should take it as an elective in 2024-2025, alongside English 11, 11H, or AP Lang/Lit.*

This course may be taken for Honors or College Prep weighting.

Course weight: 1.05 or 1.10

Credit: .5

Women in Literature CP (Half-year)

Much has changed in the years since Women in Literature was last offered to students at Housatonic. The emergence of the #MeToo movement, a surge in the number of women running for and elected to leadership positions across the nation, and the demonstrated power of female initiated-activism have proven that our perception of equality is rapidly evolving. Still, there is more work to be done. This course contrasts women's views of self with those of society throughout history and in the present day. Students will read works from a variety of genres, written by both men and women representing different time periods and cultures, and analyze and interpret them

both in writing and through discussion with peers. Progress is made by those who understand the past and the lessons it offers us.

Course weight: 1.05

Credit: .5

EXPLORING LIFE SKILLS

Exploring Life Skills **S**

This required course is designed to introduce all freshmen to life skills and career opportunities in the areas of technology, art, and agriculture. Students will explore areas such as manufacturing, materials processing, art, graphics production, horticulture, natural resources, animal care, and mechanics. At any time during the year students can join the FFA and begin a Supervised Agricultural Experience program (SAE).

Course weight: 1.05

Credit: .75

FINE ARTS

Beginning Painting

An exciting hands-on course that provides practical applications of color theory, as well as interesting methods of self-expression. Instruction will be given in a variety of painting media, with an emphasis on water-based mediums. This course provides an opportunity for students to develop a strong portfolio of work.

Course weight: 1.05

Credit: .5

Acting I

Acting I introduces students to the fundamentals of acting and performance. Through the exploration of acting techniques, character development, and scene work, students will gain confidence in expressing themselves creatively on stage. The course focuses on physical and vocal expression, improvisation, and traditional techniques to help students build a strong foundation in the art of acting. By the end of the course, students will perform in scenes and monologues, applying the skills they have learned throughout the semester.

Course weight: 1.05

Credit: .5

Advanced Painting Offered in 2026-2027

This class is designed to develop students' painting skills to a higher level. Various mediums are explored, including acrylic, egg tempera and watercolor. The class experience includes producing work for the annual public exhibition as well as visits from various guest artists. Students also develop their personal portfolios. *This course is offered in alternating years.*

Prerequisite: Successful completion of Beginning Painting or permission of instructor.

Course weight: 1.05

Credit: .5

Art History Offered in 2025-2026

This course is an exciting investigation of the foundations of Western Art. The curriculum covers the early Renaissance through the Impressionists and on to Modern art. Students will have a variety of experiences as they pursue the interesting stories behind great art. This course includes a field trip to a major museum. *This course is offered in alternating years.*

Course weight: 1.05

Credit: .5

Ceramics 1: Handbuilding

This hands-on course introduces students to the foundational techniques of handbuilding in ceramics. Students will explore various methods such as pinch, coil, and slab construction to create functional and sculptural ceramic pieces. Emphasis will be placed on creativity, craftsmanship, and

the design process, from conceptualization to the final glazed product. Throughout the course, students will develop an understanding of basic ceramic terminology, tools, and techniques, while also exploring historical and cultural aspects of ceramic art.

Projects will encourage experimentation with form and texture, while fostering personal expression and problem-solving skills. Students will also learn the basics of glazing, surface decoration, and firing processes. No prior experience is necessary, and all skill levels are welcome.

Course weight: 1.05

Credit: .5

Digital Photography 📷

This exciting course explores contemporary digital photography at an introductory level. Students will focus on creative uses of digital cameras and related computer media, especially Adobe Photoshop. Students learn how to see and interpret the world through the camera and how to visually communicate their ideas. Through a series of interesting photo shoots, students will develop their individual portfolios and will be encouraged to submit work to the annual student art exhibit. This course will also touch upon the history and current trends of photography. All needed equipment will be issued in class. Class limited to 14 students.

Course weight: 1.05

Credit: .5

Mixed Media Photography 📷 Offered in 2025-2026

This mixed media photography course goes beyond the digital photography realm. Students will experiment with a combination of photography and other artistic mediums, pushing the boundaries of conventional image-making. A significant portion of the course will be dedicated to hands-on projects, allowing students to craft a diverse portfolio that showcases their unique mixed media creations.

In-depth critiques will foster a space for students to reflect on their work, gain insights from peers, and explore the myriad ways photography can intersect with other art forms. Furthermore, students will be given opportunities to display their ingenuity by submitting their projects to the annual student art exhibit. All necessary equipment and materials, from cameras to mixed media supplies, will be provided during class sessions. Class limited to 14. *This course is offered in alternating years.*

Course weight: 1.05

Credit: .5

Color and Design **H**

This course provides an exciting introduction to art, covering both design principles and color theory. Students will create works of art in a variety of mediums including colored pencil, acrylic and collage. Some works will also be created in 3D media. Emphasis will be placed on creative problem solving. No prior experience in drawing or painting is needed for students to have a vibrant experience.

Course weight: 1.05

Credit: .5

Computer Painting **H** **Offered in 2026-2027**

Using industry standard technology, students develop skills in digital imaging using Photoshop. Activities include: creating digital portfolios that display real world skills, and surveying current trends in graphic design. Class limited to 14 students. *This course is offered in alternating years.*

Course weight: 1.05

Credit: .5

ECE Drawing 1 **H**

Drawing 1 is an excellent course for the beginning artist, as well as those with no drawing experience. With patience and effort everyone can learn to draw! Students will explore key elements of basic drawing including line, value, shape and perspective. Emphasis will be placed on *creating* art works and developing skills with various media and techniques. This key course develops a foundation for subsequent art making. **Only students in grades 11 and 12 are eligible to earn UConn credit for this course.**

Course weight: 1.15

Credit: .5

Digital Design **S H**

Dive into the captivating world of art and design with us! In this course, we'll guide you through the elements and principles of design as you craft two-dimensional graphic and commercial art. Emphasis will be on the artistry and design behind typography, logos, trademarks, and advertising art. Not only will you grasp the intricacies of art, but you'll also produce "client-ready" commercial pieces throughout the journey.

While the computer remains a primary tool for design, you'll also harness the power and precision of the iPad and stylus, integrating traditional design methods with cutting-edge AI text-to-image tools. Our curriculum encompasses a range of industry-standard software, including Adobe Photoshop, Illustrator, InDesign, Acrobat, Express, and Firefly. Digital photography will be intertwined with assignments, ensuring you can create polished, finalized products.

Staying updated is crucial, so current industry practices will be at the heart of our teachings. And as you progress, guidance on portfolio preparation will ensure you're ready to showcase your skills to the world.

Course weight: 1.05

Credit: .5

Band (Fall and Spring)

Concert band is a performing arts course open to students with all experience levels on instruments. Students learn to perform on their instrument, a variety of music in individual instruction and large ensemble work with the ultimate goal of performing in concerts in the Fall and Spring. Students are taught rudimentary technique on their instrument, how to breath, improve their tone quality and intonation. Enrichment opportunities are offered through festivals outside the school day, as well as travel.

Course weight: 1.05

Credit: 1 or .5

Chorus (Fall and Spring)

Concert choir is a vocal performing arts course open to students with all experience levels. Students learn to sing a variety of styles in individual instruction and large ensembles with the ultimate goal of performing in concerts in the Fall and Spring. Students are taught to sing with proper intonation, breath control and support. Enrichment opportunities are offered through festivals outside the school day, as well as travel.

Course weight: 1.05

Credit: 1 or .5

Music Theory 1

Music Theory teaches students how to create music through listening and experimenting with the basics of tonal harmony. Students are introduced to intervals, chords, and music vocabulary to create their own music. The course will teach you how to reason and make informed decisions about creating music that achieves your intended purpose. Topics include diatonic harmony, intervals, triads, melodic dictation, and composing harmonies for melodic content.

Course weight: 1.05

Credit: .5

Music Theory 2

Music Theory 2 will continue where Music Theory 1 concluded, with more focus on composition work and extended harmonic vocabulary. Major emphasis will be placed on music recording technology.

Prerequisite: Music Theory 1/Band/Chorus or permission of instructor.

Course weight: 1.05

Credit: .5

Music Technology **S H**

Music technology is a course designed to appeal to the songwriter and music producer in you. Have you ever seen a sound engineer working on a mixing console and wondered what that hardware actually does, or how to record and produce your own music? Students will work in a state of the art recording studio and learn how to produce their own music using Logic Pro. Students will work with an array of hardware and learn how to set up live sound sessions, including microphones and stereo monitors. This course can be repeated for additional credit.

Course weight: 1.05

Credit: .5

Sculpture **H**

Combining hands and imagination, students create a variety of three-dimensional works. Students will explore several 3D techniques; molding, carving, assemblage, as well as casting. This course will also touch upon the history of sculpture. Students will be directly exposed to sculptures through a field trip to a major sculpture exhibit. Sculpture is the art department's première hands-on course.

Course weight: 1.05

Credit: .5

Personalized Learning, Portfolio Preparation

This course is directed by the self-disciplined student with a high average in art who is planning to go to an art school. The student and teacher will determine together what is to be covered. The student and advisor will draw up a contract which the student will sign. As part of the Personalized Learning program, the student is expected to create and hang an exhibit of his or her work.

Prerequisite: Permission of instructor.

Course weight: 0 (Pass/Fail)

Credit: .5

HEALTH AND PHYSICAL EDUCATION

HEALTH EDUCATION

All seniors, juniors, sophomores and freshmen are required to take and pass one marking period of health each year.

Health 9

Units of study in Health 9 include marijuana, tobacco, alcohol, sex education including HIV/AIDS and birth control.

Course weight: 1.05

Credit:.25

Health 10

Health 10 covers the following units: drug and substance abuse, stress management, mindfulness, suicide prevention, consent - online and sexting, and human trafficking.

Course weight: 1.05

Credit: .25

Health 11

Topics covered in Health 11 include drug and substance abuse, sexually transmitted infections, HIV/AIDS, sexual harassment, teen dating violence, acquaintance rape, domestic violence, consent - alcohol and drugs use, communication skills, body image - healthy and unhealthy eating

Course weight: 1.05

Credit: .25

Health 12

Health 12 includes adult certification in American Red Cross First Aid/CPR/AED. The quarter also focuses on drugs and the law, impulse control disorders, cancer detection (skin, breast, and testicular), alternative medicine, consent - hook-up culture, sexual assault, dating- what for adults, and gender topics.

Course weight: 1.05

Credit: .25

PHYSICAL EDUCATION

Students must take and pass a total of 1.5 credits in physical education in order to graduate. PE 9 and PE 10 are one semester each, and PE 11 and PE 12 are one quarter each for a total of 1.5 credits. Grades in PE classes are not calculated as part of GPA and therefore are not assigned a course weight.

Mountain Climbers

This is a one-semester course that provides adaptive health and physical education to identified students. This course allows specific goals, needs, and modifications to be used in a smaller setting for those students with similar skills. Students in Mountain Climbers remain in mainstream PE classes, but also get small group instruction in skills that would benefit them. Enrollment in Mountain Climbers is open only to students who have been recommended by IEP or by their teachers.

MATHEMATICS

The Mathematics Department uses the Illustrative Math Program for Algebra 1, Algebra Lab, and Algebra 2. Online information for Illustrative Math is available at this [site](#).

Algebra 1 **S**

Students begin the course with studying functions, continuing the work begun in grade 8 and deepening their understanding of functions and their ability to represent, interpret, and communicate about them. They also see categories of functions, starting with linear functions (including their inverses) and piecewise-defined functions (including absolute value functions), exponential, and quadratic functions. Throughout the course, for each function type, students begin their investigation with real-world and mathematical contexts, look closely at the structural attributes of the function, and analyze how these attributes are expressed in different representations. First, students expand their understanding of linear functions, systems of linear equations, inequalities, and systems of inequalities. They use these representations to model relationships and constraints but also reason with them abstractly. Students write, rearrange, evaluate, and solve equations and inequalities, explaining and validating their reasoning with increased precision. They then take these insights to a unit on 1-variable and 2-variable statistics. Students learn to use mean, median, mode, and box plots and histograms in context. They will collect and analyze data in context and they extend their prior knowledge of scatter plots and lines of best fit. Students use residuals and correlation coefficients to assess linear models, interpret quantitative data, and distinguish correlation and causality. They will be able to explore and show their learning in a performance assessment where students collect and analyze data based on a question they develop. From there, students investigate exponential functions, how their growth differs from linear functions, and where they can be seen in real world applications. The course ends with an introduction to quadratic functions, their applications, and tools to work with quadratic equations.

Within the classroom activities, students have opportunities to engage in aspects of mathematical modeling. Additionally, modeling prompts are provided for use throughout the course. Modeling prompts offer opportunities for students to engage in the full modeling cycle.

As a result of their experiences in Algebra 1, students are expected to develop both procedural competence and conceptual understanding. Students should be prepared to write regularly to describe the procedures that they employ and to explain and defend their reasoning. Students entering Algebra 1 are expected to be able to compute with positive and negative numbers (without a calculator), to plot points on a coordinate plane, and compute with ratios, proportions, and percents.

Prerequisites: This is the only introductory course offered at HVRHS. Students whose performance on the Winter Fastbridge Benchmark Assessment falls below benchmark or whose scores on the SBAC Math Assessment are in Level 1 or Level 2 will be required to enroll in Algebra Lab to receive additional instruction to support their success in Algebra 1.

Course weight: 1.05

Credit: 1

Algebra Lab

Students whose performance on the Winter Fastbridge Benchmark Assessment falls below benchmark or whose scores on the SBAC Math Assessment are in Level 1 or Level 2 will be required to enroll in Algebra Lab to receive additional instruction to support their success in Algebra 1. This course will count towards elective credit, and will not count towards STEM credit.

Course weight: 1.00

Credit: 0.25 per quarter

Geometry CP/H **S**

For the first several units, students practice generating conjectures and observations. This begins with work on compass and straightedge constructions. They gradually build up to formal proof, engaging in a cycle of conjecture, rough draft, peer feedback, and final draft narratives. Students build on their middle school study of transformations of figures. Students use transformation-based definitions of congruence and similarity, allowing them to rigorously prove the triangle congruence and similarity theorems. They apply these theorems to prove results about quadrilaterals, isosceles triangles, and other figures. Students extend their understanding of similarity when they study right triangle trigonometry, which in future courses will be expanded into a study of periodic functions. Students also derive volume formulas and study the effect of dilation on both area and volume. They connect ideas from algebra and geometry through coordinate geometry, reviewing theorems and skills from prior units using the structure of the coordinate plane. They use transformations and the Pythagorean Theorem to build equations of circles, parabolas, parallel lines, and perpendicular lines from definitions, and they link transformations to the concept of functions. Students analyze relationships between segments and angles in circles and develop the concept of radian measure for angles, which will be built upon in subsequent courses. They consider probabilities of combined events, including identifying when events are independent.

Within the classroom activities, students have opportunities to engage in aspects of mathematical modeling. Additionally, modeling prompts are provided for use throughout the course. Modeling prompts offer opportunities for students to engage in the full modeling cycle.

As a result of their experiences in Geometry, students are expected to develop both procedural competence and conceptual understanding. Students should be prepared to write regularly to describe the procedures that they employ and to explain and defend their reasoning. Students enrolling in the H-level course should expect to write rigorous, formal proofs of theorems and to evaluate the arguments of others. Students enrolling in the CP-level course should expect to justify their reasoning using careful geometric arguments and to evaluate the arguments of others. Students will use computer geometry software as a tool for the solution of problems and to explore geometric concepts.

Geometry is STRONGLY RECOMMENDED for any student who anticipates going to college. A student who wishes to enroll in two math courses can elect Algebra 2.

Prerequisite: Successful completion of Algebra 1.

Course weight: 1.05 (for CP) or 1.10 (for H)

Credit: 1

Algebra 2 CP/H **S**

Students begin the course with a study of sequences, which is also an opportunity to revisit linear and exponential functions. Students represent functions in a variety of ways while addressing some aspects of mathematical modeling. This work leads to looking at situations that are well modeled by polynomials before pivoting to a study of the structure of polynomial graphs and expressions. Students do arithmetic on polynomials and rational functions and use different forms to identify asymptotes and end behavior. Students also study polynomial identities and use some key identities to establish the formula for the sum of the first terms of a geometric sequence. Students then extend exponent rules to include rational exponents. They solve equations involving square and cube roots before developing the idea of i , a number whose square is -1 , expanding the number system to include complex numbers. This allows them to solve quadratic equations with non-real solutions. They use logarithms to solve for unknown exponents, and are introduced to the number e and its use in modeling continuous growth. Logarithm functions and some situations they model well are also briefly addressed. Students learn to transform functions graphically and algebraically. Statistical inference focuses on analyzing data from experiments using normal distributions. Students learn to account for variability in data and estimate population mean, margin of error, and proportions using sampling and simulations. They develop skepticism about news stories that summarize data inappropriately.

Within the classroom activities, students have opportunities to engage in aspects of mathematical modeling. Additionally, modeling prompts are provided for use throughout the course. Modeling prompts offer opportunities for students to engage in the full modeling cycle.

As a result of their experience in Algebra 2, students are expected to develop both procedural competence and conceptual understanding. Students should be prepared to write regularly to describe the procedures that they employ and to explain and defend their reasoning. Students will use scientific and graphing calculators as tools for the solution of problems and to explore mathematical concepts.

Algebra 2 is STRONGLY RECOMMENDED for any student who anticipates going to college. The SAT Reasoning Test includes problems drawn from Algebra 2 topics. In addition, students are advised that colleges that require mathematics through Algebra 2 often expect that students will have studied the trigonometric functions. At HVRHS, trigonometry is studied in Algebra 3 and Precalculus.

Prerequisite: Successful completion of Algebra 1.

Course weight: 1.05 (for CP) or 1.10 (for H)

Credit: 1

Algebra 3 **S**

This third year of algebra, which serves as a bridge between high school and college mathematics, continues the student's study of functions. The course includes a thorough review of the material studied in Algebra 2 to allow students the opportunity to bolster their skills and become more comfortable with the knowledge required for college-level mathematics courses. Students will continue to write and solve equations, inequalities, and systems of equations to model real world problems; draw graphs to describe linear and non-linear relationships; collect and describe data using a variety of functions; and develop facility with polynomial and rational expressions. In addition, students will be introduced to the trigonometric functions, including right triangle trigonometry, the trigonometry of general angles, and simple trigonometric equations.

As a result of their experiences in Algebra 3, students are expected to develop both procedural competence and conceptual understanding. Students should be prepared to write regularly to describe the procedures that they employ and to explain and defend their reasoning. Students are advised that colleges that require mathematics through Algebra 2 often expect that students will have studied the trigonometric functions. At HVRHS, trigonometry is primarily studied in Algebra 3CP and Precalculus, so students are strongly encouraged to enroll in one of these courses to obtain the expected background for college admissions testing and college-level mathematics.

Prerequisite: Successful completion of Algebra 2. Students who anticipate needing a formal calculus course (taken either at HVRHS or in college) should enroll in Precalculus H.

Course weight: 1.05

Credit: 1

Precalculus H **S**

This course continues the student's study of functions and includes a review of the functions that were studied in Algebra 2 and a formal study of the trigonometric functions. Students will continue to write and solve equations, inequalities, and systems of equations to model real world problems; draw graphs to describe linear, non-linear and periodic relationships; collect describe data using a variety of functions; and develop facility with polynomial and rational expressions. This course includes significant study of the trigonometric functions, beginning with a review of right triangle trigonometry, and continuing through general angles, sinusoidal functions and trigonometric equations. Students will also study trigonometric identities.

As a result of their experiences in Precalculus, students are expected to develop both procedural competence and conceptual understanding. Students should be prepared to write regularly to describe the procedures that they employ and to explain and defend their reasoning. S Students are advised that colleges that require mathematics through Algebra 2 often expect that students will have studied the trigonometric functions. At HVRHS, trigonometry is primarily studied in Algebra 3CP and Precalculus, so students are strongly encouraged to enroll in this course to obtain the expected background for college admissions testing and college-level mathematics.

Prerequisite: Successful completion of Algebra 2. Students who anticipate needing a formal calculus course (taken either at HVRHS or in college) should enroll in Precalculus H. A student who has taken Algebra 2CP and wishes to enroll in Precalculus H needs to meet with the chair of the Mathematics Department before the end of the school year to determine the requisite independent summer work for the student to be prepared for Precalculus H.

Course weight: 1.10

Credit: 1

Advanced Placement Calculus AB **S**

Calculus provides the base upon which higher mathematics rests. This course combines the analytical and geometric ideas gained in previous coursework to forge powerful tools for the solution of important problems in mathematics and to develop concepts of central importance in mathematics. Calculus can be described as the mathematics of change and motion. Since change and motion are implicit in all aspects of the physical world, the methods of calculus are useful in all the physical, natural, and social sciences. Calculus evolved from the solution of two geometric problems, finding the tangent to a curve and finding the area bounded by a curve. Solving the tangent line problem leads to the concept of derivative, and differential calculus. The derivative can be broadly interpreted as a measure of the instantaneous rate of change of one quantity with respect to another. Solving the area problem leads to the integral, and integral calculus. The integral can be broadly interpreted as the total change in some quantity whose rate of change is known. The key to solving both problems is the single most important notion in calculus, the limit. Most of the course deals with limits in one form or another. This course is approved by the College Board for AP designation.

Prerequisites: Successful completion of Precalculus H and recommendation of the department. A student who has taken Algebra 3CP and wishes to enroll in AP Calculus needs to meet with the instructor before the end of the school year to determine the requisite summer work needed to complete the study of Precalculus.

Course weight: 1.15

Credit: 1

Advanced Placement Statistics: Elementary Concepts of Statistics **S**

AP Statistics is an introductory college-level statistics course that introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students cultivate their understanding of statistics using technology, investigations, problem solving, and writing as

they explore concepts like variation and distribution; patterns and uncertainty; and data-based predictions, decisions, and conclusions.

The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics.

This course may be taken concurrently with either Precalculus H or Calculus. This course is approved by the College Board for AP designation.

Prerequisites: Successful completion of Algebra 2 or recommendation of department.

Course weight: 1.15

Credit: 1

Introduction to Data Science **S**

This course will introduce students to the main ideas in data science through free tools such as Google Sheets, Python, Data Commons and Tableau. Students will learn to be data explorers in project-based units, through which they will develop their understanding of data analysis, sampling, correlation/causation, bias and uncertainty, probability, modeling with data, making and evaluating data-based arguments, the power of data in society, and more. At the end of the course students will have a portfolio of their data science work to showcase their newly developed abilities.

The course is adaptable so that datasets most relevant to the students are used throughout the course.

Prerequisite: Successful completion of Geometry. This course can be taken in place of Algebra 2, but should not be relied upon as preparation for colleges that require Algebra 2.

Course weight: 1.05

Credit: 1

Statistics and Probability **S**

The study of statistics will focus on the analysis and interpretation of quantitative data through measures of central tendency and spread in order to make informed decisions and better understand the world. The course will also touch upon the study of probability, which is the mathematics behind uncertainty and chance. Students will utilize critical thinking and use self-direction and collaboration to complete tasks using data that they have collected. They will communicate their understanding through authentic performances.

Prerequisite: Successful completion of Algebra 2.

Course weight: 1.05

Credit: .5

The Mathematics of Money **S**

A survey by the Organization for Economic Cooperation and Development (OECD) found that 25% of teenagers surveyed didn't understand simple choices about spending money and only 10% of the students understood more complex issues, such as income tax.

The need to understand money and finance is becoming increasingly important as students are bombarded with ads touting financial products. A recent television commercial actually suggested that credit card companies are "tricking" consumers into believing that they have to pay back the credit card companies for things that they had purchased!

At the foundation of financial literacy is mathematical literacy. In the Mathematics of Money course, students will learn the mathematics that underlies such important financial concepts as paychecks, loans, mortgages, and retirement plans. They will also be exposed to the mathematics that forms the foundation of investing and how the stock market works.

This course meets the graduation requirement in financial literacy for all students in the Class of 2027 and beyond.

Prerequisites: The course is open only to junior and senior students or with permission of the Department Head.

Course weight: 1.05

Credit: .5

AP Calculus 2 (BC) **S**

Calculus I (Fall Semester): Limits, continuity, differentiation, antidifferentiation, definite integral, with applications to the physical sciences and engineering sciences. Suitable for students with some prior calculus experience.

Calculus 2 (Spring Semester): Transcendental functions, formal integration, polar coordinates, infinite sequences and series, vector algebra and geometry, with applications to the physical sciences and engineering.

Prerequisites: Fall Semester: *Successful completion of one year of pre-calculus is required. A student must pass MATH 1131Q with a grade of a "C" or higher to continue on to MATH 1132Q. To receive credit for the MATH 1131Q – MATH 1132Q sequence a student must pass MATH 1131Q in the Fall with a C or higher and continue to MATH 1132Q in the following Spring. The sequence must be completed in one academic year.*

Spring Semester: *Successful completion of one year of pre-calculus is required. A student must pass MATH 1131Q with a grade of a "C" or higher to continue on to MATH 1132Q. To receive credit for the MATH 1131Q – MATH 1132Q sequence a student must pass MATH 1131Q in the Fall with a C or higher and continue to MATH 1132Q in the following Spring. The sequence must be completed in one academic year. Students may remain in the course for high school credit, but will not be eligible for UConn credit.*

Course weight: 1.15

Credit: 1

SCIENCE

All freshmen should enroll in the appropriate level of Science 9. All sophomores should take the appropriate level of Biology. Upon successful completion of Biology, all science electives for which students have met the prerequisites are available. These include:

Chemistry CP, H
Physics H, AP
ECE Biology
AP Chemistry

Forensic Science CP
AP/ECE Environmental Science
Marine Biology CP

Earth Science CP
Engineer, Design, and Coding
AP Computer Science

Students should discuss their appropriate course sequence and placement with their science teacher, school counselor, and parent/guardian. **Please note both science and math prerequisites carefully when selecting a science elective.**

Three years of science are required for graduation. All courses in the Science Department can also be used to fulfill the STEM requirement. Students should carefully consider post-graduate plans when selecting science electives.

Grade 9

Science 9 S

This course allows students to evaluate the reciprocal relationship between humans and the earth system by developing understandings of topics such as mineral resources, Earth's structure, climate change, and energy from the Sun. In keeping with the Next Generation Science Standards, emphasis is placed on the use of science and scientific argumentation to solve problems, engineer solutions, and understand the world around us.

Course weight: 1.05

Credit: 1

Science 9H S

This course explores the same standards as Science 9 CP; however, topics are dealt with in more depth and at a more demanding pace. Students are given more freedom and independence in performing experiments, and a greater emphasis is placed on longer form writing. Creativity and a high level of independent scientific thought are required for all assignments.

Prerequisite for Science 9H: Recommendation by eighth grade teacher and school counselor or recommendation of ninth grade teacher.

Course weight: 1.10

Credit: 1

Grade 10

Biology **S**

This is the second course in the science sequence for students who have successfully completed Science 9 CP. Biology CP is divided into four major areas: ecology, evolution, genetics, and physiology. Major topics include food webs, photosynthesis and cellular respiration, population dynamics, biodiversity, cell structure and function, genetics, evolution, anatomy and physiology, human reproduction, and plant growth and reproduction.

Prerequisite: Science 9 CP or permission of the instructor.

Course weight: 1.05

Credit: 1

Biology H **S**

This is the second course in the science sequence for students who have successfully completed Science 9H. Biology H explores the same standards as Biology CP, but major topics are explored in more detail. Students are given more freedom and independence in performing experiments, and a greater emphasis is placed on essay writing. Creativity and a high level of independent scientific thought are required for all assignments.

Prerequisite: Science 9H or permission of the instructor.

Course weight: 1.10

Credit: 1

Grade 11 and Electives

Chemistry **S**

This course in conceptual chemistry explores the basic principles and theories of chemistry in the context of interesting phenomena. Chemistry CP covers many of the same topics as Chemistry H, but with a conceptual rather than analytical and mathematical focus, although Algebra concepts will be used with more support. Emphasis is given to laboratory design in the field of chemistry, analytical problem solving, and writing about chemical concepts.

Prerequisites: Biology CP, Geometry (which may be taken concurrently) or permission of the science department chair.

Course weight: 1.05

Credit: 1

Chemistry H **S**

This course explores the basic principles and theories of analytical chemistry including stoichiometry, atomic structure, periodic properties of the elements, chemical bonding, thermodynamics, solution chemistry, electrochemistry and organic chemistry through the study and exploration of scientific phenomena. Emphasis is given to laboratory investigations using mathematical and analytical problem-solving skills. Discussing and writing about chemical concepts is a major focus of the course.

Prerequisites: Biology H, Algebra 2 (may be taken concurrently), or permission of the Science Department Chair.

Course weight: 1.10

Credit: 1

AP Chemistry **S**

The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry based investigations, as they explore content such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year.

Prerequisites: Successful completion of Chemistry and Algebra 2

Course weight: 1.15

Credit: 1

Engineer, Design, and Coding **S**

This course incorporates new technologies and skills that will expand the reach of science, engineering, and mathematics. Students will gain hands-on experience coding and moving through the engineer and design process in order to create, communicate, and problem solve. This course is open to all students with or without coding experience, and coding will be tailored to each student's prior knowledge and experience

Course weight: 1.05

Credit: 1

AP/ECE Environmental Science **S**

This college level Environmental Science course covers the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, identifies and analyzes natural and human-made environmental problems, evaluates the relative risks associated with these problems, and examines alternative solutions for resolving or preventing them. Environmental science is an interdisciplinary course; it embraces a wide variety of topics from different areas of study, including the social, political, economic, and ethical issues that are relevant

to the environmental topics studied. Students who successfully complete this course with a grade of C or better are eligible to receive 3 college course credits from the University of Connecticut. A fee is charged by the University for those that wish to receive credit. Students receiving free or reduced priced lunch are eligible for a fee waiver. Since this course follows the AP Environmental Science curriculum, students may also choose to take the AP exam in the spring.

Prerequisites: Science 9, Biology, and Algebra 2 (may be taken concurrently), or by permission of the Science Department Chair. This course is open only to junior and senior students.

Course weight: 1.15

Credit: 1

Forensic Science **S**

This course is a basic introduction to the use of science and the scientific method in crime solving. Problem solving and study of physical evidence will be stressed; therefore, lab activities and analysis of “crime scenes” will be frequent. Topics explored will include fingerprinting, blood typing, hair and fiber analysis, toxicology, DNA and biotechnology.

Prerequisite: Science 9, Biology (may be taken concurrently).

Course weight: 1.05

Credit: 1

Marine Biology **S**

This survey course examines major topics in Marine Biology. Emphasis of study is on the unique adaptations and life cycles of the marine flora and fauna of our world’s oceans. This is done through hands-on laboratory activities and reading of popular literature. Students will also work with members of the RV Oceanic on the Long Island Sound.

Prerequisites: Science 9, and Biology (may be taken concurrently).

Course weight: 1.05

Credit: 1

ECE Biology **S**

ECE Biology is a second-year course in biology. This course provides interested students with a foundation for more advanced courses in Biology and related sciences. Topics covered include molecular and cell biology, animal anatomy and physiology. Activities focus on the application of scientific experimentation and advanced laboratory techniques. Lab exercises include dissection of preserved animals.

Prerequisites: Successful completion of Biology , Chemistry, and Algebra 2, or permission of the Science Department Chair.

Course weight: 1.15

Credit: 1

Physics H **S**

Physics is an introductory one-year college preparatory physics course that touches on most of the aspects of general physics including vectors, mechanics, sound, light, magnetism, and electrostatics. The course also connects with other sciences, utilizes modeling instruction and includes aspects of the history and philosophy of science. Laboratory experience and specialized computer probes are integrated into the course. Even though presented at an academic level to satisfy college entrance requirements, this course offers much to those whose only study of physics will be in high school.

Prerequisites: Science 9, Biology, and Algebra 2 (may be taken concurrently).

Course weight: 1.10

Credit: 1

AP Physics **S**

AP Physics is an introductory one-year college level analytical and mathematical physics course that touches on most of the aspects of general physics including linear motion, circular motion, gravity, energy, momentum and torque. The course also connects with other sciences, utilizes modeling instruction and includes aspects of the history and philosophy of science. Laboratory experience and specialized computer probes are integrated into the course. Even though presented at an academic level to satisfy college entrance requirements, this course offers much to those whose only study of physics will be in high school. This course follows the AP Physics I curriculum. Students taking AP Physics should be comfortable with quantitative thinking and algebraic reasoning.

Prerequisites: Science 9, Biology and Precalculus/Algebra 3 (may be taken concurrently).

Course weight: 1.15

Credit: 1

AP Computer Science Principles **S**

AP Computer Science Principles is an introductory college level course that will introduce the foundational concepts of computer science. The course will explore topics of computer systems and networks, programming and app design, cyber security, and the impact of technology on the global stage.

Course weight: 1.15

Credit: 1

SOCIAL STUDIES

Grade 9

Global History I H

To prepare students to be global citizens, this course focuses on the common strands of history from the earliest human civilizations to the Age of Discovery. Students will be introduced to the skills of the historian as well as different ideas about the meaning of history. The major emphasis of the course will be on how civilizations around the globe developed in different ways, while also examining aspects common to all civilizations. As connections and common assignments with the English 9H course will be at the heart of this course, students taking Global History I H must also enroll in English 9H. A summer reading assignment will be given. This course meets the graduation requirement for Social Studies 9.

Course weight: 1.10

Credit: 1

Global History I

To prepare students to be global citizens, this course focuses on the common strands of history from the first human civilizations to the Age of Discovery. Students will be introduced to the skills of the historian as well as different ideas about the meaning and definition of history. The major emphasis of the course will be on how civilizations around the globe developed in different ways, while also examining aspects common to all civilizations. This course meets the graduation requirement for Social Studies 9.

Course weight: 1.05

Credit: 1

Grade 10

Global History II H

This course continues where Global History I H left off, and focuses on the increasingly interconnected world following the Age of Discovery, including the Industrial Revolution, World Wars, and the modern world. Students will have greater opportunity to independently use the skills of the historian they learned in Global History I. As connections and common assignments with the English 10H course will be at the heart of this course, students taking Global History II H must also enroll in English 10H. A summer reading assignment will be given.

Course weight: 1.10

Credit: 1

Global History II H

This course continues where Global History I left off, and focuses on the increasingly interconnected world following the Age of Discovery, including the Industrial Revolution, World Wars, and the modern world. Students will have greater opportunity to independently use the skills of the historian they learned in Global History I.

Course weight: 1.05

Credit: 1

Grade 11

ECE United States History H

ECE United States History is taught in two parts, United States History to 1877 and United States History since 1877. United States History to 1877 surveys political, economic, social, and cultural developments in American history through the Civil War and Reconstruction. United States History since 1877 surveys political, economic, social, and cultural developments in American history from 1877 to the present.

This course is taught in cooperation with the University of Connecticut. The graduation requirement for successful completion of United States History is met by passing this course. Summer reading assignments are a required part of the curriculum.

Students who are enrolled in the ECE program earn a final grade of at least a “C” for each semester will receive six course credits from the University of Connecticut. (Please note, students may receive different grades for Housatonic Valley Regional High School and the University of Connecticut.) Students enrolled in ECE United States History must also be enrolled in English 11H or AP Language and Composition. Students in this course may elect to enroll in the UConn ECE program; a fee is charged by the University of Connecticut for students who wish to receive college credit.

Course weight: 1.15 (ECE)

Credit: 1

United States History H

The successful completion of United States History is required for graduation. Therefore, all juniors at Housatonic enroll in United States History, a full-year course which surveys the American experience from 1877 to the present. The study of particular topics in American history is achieved through research projects, written and/or oral reports, dramatizations, field trips and films. Students engage in a variety of activities in order to communicate and support an individual perspective on the past.

Course weight: 1.05

Credit: 1

Senior Year and Electives

Civics

This course will focus on the meaning of citizenship and the responsibilities and rights of citizens, America’s political heritage, our regional community and its structures, law, and the American economic system. Civics is open only to seniors; the successful completion of Civics is required for graduation.

Course weight: 1.05

Credit: .5

ECE Introduction to American Politics

This course is taught in cooperation with the University of Connecticut. It is designed to serve two primary purposes. First, it will focus on the “nuts and bolts” issues of American government. Among other topics, students will explore the legislative, executive, judicial, and electoral processes, both as they were designed, and as they work today in the real world. Second, the course will enhance student understanding of the fundamental principles underlying the modern system of governance in the United States. Students will be asked to step away from the details of contemporary political debates and come to grips with the more fundamental political questions they address—questions that have dominated American political discourse since the nation’s founding. Students who complete the work outlined in the course syllabus and earn a grade of at least a “C” are eligible to receive 3 credits in Political Science from the University of Connecticut. (Please note: A fee will apply to those students who wish to take this course for University of Connecticut Credit. Also, students may receive different grades for Housatonic Valley Regional High School and the University of Connecticut.) Students in this course are expected to complete summer reading. This course fulfills the graduation requirement in Civics.

Course weight: 1.15

Credit: .5

ECE Introduction to Human Rights

This course is offered in cooperation with the University of Connecticut. From the UConn Human Rights Syllabus: “In recent years, “human rights” has become among the most powerful ways of thinking about - and advocating for - a more just world. This course provides an introduction to the interdisciplinary study of human rights as a concept, a set of laws and institutions, and as a set of political and cultural practices. We begin by considering some of the philosophical foundations of the idea of human rights and the sources and functioning of international human rights law. After a brief digression into history, we then focus on several particular human rights issues including torture, refugees, and racial discrimination. Along the way, we will take different disciplinary approaches—political science, history, philosophy, anthropology, etc.—to our subject. By the end of the semester, students will have developed an understanding of the institutions and processes related to human rights and familiarity with key intellectual debates and differing policy and advocacy strategies.”

This course will allow HVRHS students the opportunity to explore the historical context of human rights and analyze conditions in the modern world, while earning three credits at the University of Connecticut.

Students who complete the work outlined in the course syllabus and earn a grade of at least a “C” are eligible to receive 3 credits in Political Science from the University of Connecticut. (Please note: A fee will apply to those students who wish to take this course for University of Connecticut Credit. Also, students may receive different grades for Housatonic Valley Regional High School and the University of Connecticut.) Students in this course are expected to complete summer reading.

Course weight: 1.15

Credit: .5

African American/Black and Puerto Rican/Latino Studies 📖

The course is an opportunity for students to explore accomplishments, struggles, intersections, perspectives, and collaborations of African American/Black and Puerto Rican/Latino people in the U.S. Students will examine how historical movements, legislation, and wars affected the citizenship rights of these groups and how they, both separately and together, worked to build U.S. cultural and economic wealth and create more just societies in local, national, and international contexts. Coursework will provide students with tools to identify historic and contemporary tensions around race and difference; map economic and racial disparities over time; strengthen their own identity development; and address bias in their communities.

Course weight: 1.05

Credit 1.0

Psychology 📖

For more than a decade, careers in the field of psychology have been some of the fastest growing in the nation. This introduction to psychology is a project-based class that explores the science and philosophy behind human behavior and the mind. Students will discover insights into how they perceive the world, how to become more effective learners, and how to analyze their dreams. Other topics to be examined include the capabilities and limitations of human memory, psychological disorders, and ascertaining the proper role of parents in their children’s lives.

Course weight: 1.05

Credit: .5

Sociology 📖

Sociology is the study of human society, its development, and its institutions. How do we come together as communities? How do we behave once we’ve established a community? What challenges are involved in keeping a community functioning? Why are some communities more successful than others? This course will examine how and why people learn certain behaviors and develop certain beliefs. Topics of study will include: culture, “human nature”, poverty and wealth, racism, gender inequality, aging, crime, and family.

Course weight: 1.05

Credit: .5

STUDENT SUPPORT SERVICES

The Special Education Department at Housatonic Valley Regional High School offers a number of different programs and services that are designed to meet the needs of students with Individualized Education Plans. All programming is determined by the Planning and Placement Team (PPT).

Academic Lab

The Planning and Placement Team may recommend a student for Academic Lab as part of the student's specially designed Individual Education Plan. The goal of the course is to teach skills and content that will help students become independent learners in their general education courses. General curriculum content, foundational skills, and background information are developed to work toward this goal. Through pre-teaching and clarification of general curriculum, as well as direct instruction of necessary math, literacy, and executive skills, this course assists students in developing skills for success in academics while increasing their ability to manage their own learning. Students receive individualized and/or small group instruction and guided practice in topics critical to becoming independent learners. Grades in Academic Lab classes are not calculated as part of GPA and therefore are not assigned a course weight.

Course weight: 1.05

Credit: .5

Transition and Work Study Experiences

Students who require more individualized or intensive life or social skills training, as determined during the PPT, will participate in classroom or site based activities to support post high school education, career and independent living goals.

Course weight: 1.05

Credit: .5

Alternative Learning Program for Student Success (ALPSS)

The Alternative Learning Program for School Success (ALPSS) is an integrated education and clinical program supporting student social, emotional, behavioral, cognitive, familial, academic, and community needs. ALPSS staff design and deliver collaborative teacher instruction, counseling services, and additional staff support in order to strengthen participating students' ability to manage the academic and social demands of public high school, all while keeping students connected to their school community. Course enrollment and membership in the ALPSS cohort is only open to students who have been recommended by a multidisciplinary team.

Foundations of Pre-Algebra **S**

In this course, students work toward mastery of the math skills necessary for success in the Algebra 1 curriculum. In a small group setting, students will receive specialized instruction and work directly with the classroom teacher to identify and progress toward mastery of their individual math goals. Enrollment in this course is determined by the Planning and Placement Team.

Course weight: 1.05

Credit: .5

Mountaineer Academy

Mountaineer Academy is a program where students cultivate the academic, social and vocational skills necessary for life as an independent adult. The program embeds a variety of community, cultural, team building and service trips during the school year that give students an opportunity to extend learning beyond the campus of Housatonic Valley Regional High School. Courses in the Mountaineer Academy are open only to students who have been recommended by the Planning and Placement Team.

Literacy Lab **H**

A Planning and Placement team may recommend this course for students who require specially designed instruction in the area of Language Arts (reading and writing). Students will receive direct instruction and immediate feedback while working with the classroom teacher on reading and writing activities.

Course weight: 1.05

Credit: .5

Math Skills **S**

Students in math skills will work toward mastery of the math skills necessary to function in real world settings. Students will experience direct instruction, small group and individual work in the classroom. Students will also work directly with the classroom teacher to identify and progress toward mastery of their math IEP goals. Students' ability to apply math skills and their ability to explain the concepts and/or reasoning used to arrive at conclusions will be assessed.

Course weight: 1.05

Credit: 1

Related Services

Counseling, Speech/Language, English Learner Support, Reading/Mathematics, Occupational and Physical Therapy are available as recommended by a PPT or Multi-Tiered System of Support (MTSS) recommendation.

TECHNOLOGY EDUCATION

Introductory Metal Technology **S**

This course allows students an opportunity to develop skills and to gain experience working with various metals and related tools and equipment. Major areas of study include sheet metal work, mechanical and physical joining, forging, heat treatment, brazing and soldering, MIG and Arc welding as well as other supportive technologies employed to complete the fabrication of planned project work. The shop is equipped with a plasma cutter that cleanly cuts steel with a small torch flame. Students may also access the hot metals area where sand castings may be made. Safety both in the shop area and lifetime awareness is constantly stressed. Class limited to 16 students.

Course weight: 1.05

Credit: .5

Advanced Metal Technology **S**

The skills learned in Introductory Metal Technology are extended through the completion of more challenging activities. Students will gain new skills with processes previously uncovered. Technical writing is a significant focus in the course as students will write and present inventor reports as well as write-ups intended to sequentially lay out the proper steps for completing projects. This course may be repeated for additional credits by contracting for a personalized learning course with the instructor. Class limited to 16 students.

Prerequisite: One semester of Introductory Metal Technology or permission of instructor.

Course weight: 1.05

Credit: .5

Introductory Woodworking Technology **S**

This course is organized to give the student instruction and practical experience with tools and machines common to the woodworking industry. Additional areas of instruction include wood identification, planning and drawing, tool and machine safety, and finishing materials and techniques. Class limited to 16 students.

Course weight: 1.05

Credit: .5

Advanced Woodworking Technology **S**

This course gives the student an opportunity to apply previously gained skills and knowledge toward independent projects. New areas of learning include shop organization and equipment maintenance. This course may be repeated for additional credits by contracting for a personalized learning course with the instructor. Class limited to 16 students.

Prerequisite: One semester of Introductory Woodworking Technology or permission of instructor.

Course weight: 1.05

Credit: .5

Introductory Black and White Photography **S H**

This course will introduce the student to the myriad of concepts that comprise the core of photography. From compositional theory to the actual mechanics of the camera, students will gain a deep understanding and appreciation for the art of photography. The wet chemistry process reinforces science concepts such as the interaction of bases and acids, light theory, focal length and the effect of temperature upon reactions. Exposure control, film processing, composition, enlargement and finishing techniques will round out the skills students will gain. Any student wishing to express themselves with a graphic, hands-on process should take this course. Class limited to 16 students. This course can also satisfy the Fine Arts requirement.

Course weight: 1.05

Credit: .5

Production Graphics **S H**

This course will use a hands-on approach to teach students how to design and execute graphic arts projects as the class completes real world jobs that support other schools and programs as well as private business needs. Production jobs such as student publications, posters, tickets, brochures and other printed materials will teach students how to work cooperatively, problem solve and meet crucial deadlines. The Versa Camm wide format digital printer allows for the production of fatheads, stickers and t-shirt heat transfers. The screen process of printing will allow students to execute artwork and designs on a varied number of substrates including t-shirts, vinyl stickers and magnets. Class limited to 16 students. This course can also satisfy the Fine Arts requirement.

Course weight: 1.05

Credit: .5

WORLD LANGUAGES

French 1

In the first year, students master elementary listening, speaking, reading, and writing skills necessary for simple communication in practical, day-to-day situations. The course stresses active student use of the language through frequent speaking and writing exercises as well as reading and grammar drills.

Course weight: 1.05

Credit: 1

French 2

The course is a continuation of French 1. Emphasis is placed on students' vocabulary and increasing their ability to understand, speak, read, and write the language in both present and past tenses. Emphasis is placed on the students' acquiring more refined grammatical and syntactical structures and particular emphasis is placed on increasing the students' awareness and knowledge of the francophone world.

Prerequisite: French 1 or permission of the instructor

Course weight: 1.05

Credit: 1

French 3

Greater importance is placed on developing and improving communication skills in all four areas. Grammar lessons from the first two years are reviewed in greater depth, adding more complex material. During the third year of study, the student naturally develops a more fluent command of the language.

Prerequisite: French 2 or permission of the instructor

Course weight: 1.10

Credit: 1

French 4

Advanced grammatical structures are presented and practiced in class discussions on a range of topics. At this level, students are beginning to use the language creatively. They are expected to understand, speak, read, and write in French about common, everyday activities as well as more abstract subjects, such as personal preferences, culture, civilization, current events, and literature. The goal of the course is to enable students to communicate intelligently and accurately.

Prerequisite: French 3 or permission of the instructor

Course weight: 1.10

Credit: 1

French 5

French 5 is designed to meet the needs of a small number of students who have completed the standard four-year sequence of French study. The class has been conceived as a rough equivalent to a typical college-level course in advanced composition and conversation. The class has two broad objectives: first, to review key points of basic, intermediate and some advanced grammar and, secondly, to enable students to read, write, understand and speak accurately and with increasing fluency about both daily practical matters and about contemporary cultural life.

Prerequisite: French 4 or permission of the instructor

Course weight: 1.15

Credit: 1

Spanish 1

This course is an introduction to the basic grammar and vocabulary of the language. Emphasis is placed on the listening, speaking, reading and writing skills necessary for communicating practical, everyday needs. Active participation by the student in a variety of activities is designed to stimulate conversation and aural comprehension. Students will be introduced to the many cultures found in the Hispanic world.

Course weight: 1.05

Credit: 1

Spanish 2

A continuation of Spanish 1, this course further develops oral and written proficiency in the language through a concentrated program of grammar presentation and an expansion of the student's vocabulary and writing skills. Active practice of the four skills is stressed. Cultural backgrounds, customs and the geography of the Spanish-speaking world are explored through reading selections and discussions.

Prerequisite: Spanish 1 or permission of the instructor

Course weight: 1.05

Credit: 1

Spanish 3

This course is designed to consolidate the skills attained in the first two levels as previously learned material is systematically reviewed and reinforced. More complex grammatical and syntactical structures are presented. Comprehension and communicative activities remain the major focus of the course. The goal is to stimulate oral expression, improve pronunciation, and strengthen reading and writing skills, all in an effort to provide students with strategies to further develop their language abilities in the three modes of the ACTFL Proficiency Guidelines: Interpretive (Listening, Viewing, Reading), Interpersonal (Speaking and Writing), and Presentational (Speaking and

Writing). Emphasis is also placed on fostering an appreciation of the cultures of Spanish-speaking countries through the use of authentic texts and media.

Prerequisite: Spanish 2 or permission of the instructor

Course weight: 1.10

Credit: 1

Spanish 4

At this level, the emphasis is on strengthening the students' confidence in using the language to express ideas and opinions. Communication skills in the three modes are refined and expanded (Interpretive, Interpersonal, and Presentational). There is a review of key language structures with an expansion to more advanced grammar. Reading selections broaden students' knowledge of culture and increase their vocabulary and accuracy of expression. Students continue to work on developing their proficiency skills in accordance with the ACTFL Proficiency Guidelines. The opportunity to earn the CT State Seal of Biliteracy is offered in the spring.

Prerequisite: Spanish 3 or permission of the instructor

Course weight: 1.10

Credit: 1

Spanish 5

This course is designed to further students' progress in the three modes of communication: Interpretive, Interpersonal, and Presentational, while deepening their insight into Hispanic culture through the exposure to works by traditional and modern writers of the Spanish-speaking world. Selections to be studied represent various literary genres. One of the key objectives of the course is to enable students to express their ideas in Spanish with increasing fluency and clarity and to increase their language proficiency. Students have the opportunity to earn the CT State Seal of Biliteracy in the spring.

Prerequisite: Spanish 4 or permission of the instructor

Course weight: 1.15

Credit: 1