

## **Housatonic Valley Regional High School**

# PROGRAM OF STUDIES 2022-2023

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#### **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,

lan 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**

#### For the Class of 2023 and beyond (25 Credits):

Commencing with the graduating class of 2023 and for each graduating class thereafter, 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 II 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) one credit mastery-based diploma assessment (Capstone); and
- (6) one credit in Health Education.

In addition, beginning with the Class of 2023, the Board of Education will provide 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, if such student is unable to satisfactorily complete any of the required courses or exams. 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.

Area	Credits Required	Specific Course Requirements
STEM (Science, Technology, Engineering, Math)**	9	3 courses in Math 3 courses in Science 3 additional courses designated as STEM
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 Perspectives on Democracy 1 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	1	(.5 credit in Grade 11, .5 credit in Grade 12)
Advisory	1	.25 credit each year
LifeSkills	.75	
Electives	3	

\*The Class of 2023 earned this credit with .5 credits in Grade 10, followed by .25 in Grades 11 & 12

\*\* Credit for a math course or World Language course taken in Middle School will only meet this requirement if the teacher of the Middle School course holds certification to teach grades 7-12.

### **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.

### Graduation Credit for Courses Taken in Middle School

Students enrolled in Spanish 1 or Algebra 1 in middle school will receive high school credit subject to the following conditions:

- A student earns 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.
- The high school curriculum has been followed.
- The course is taught by a teacher certified to teach high school Spanish or Algebra.

#### **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. 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 rigorous, intellectually stimulating, challenging, and provide rich experiences and excellent preparation for college work; Advanced Placement (AP), UConn Early College Experience (ECE), and Honors (H) level courses involve more sophisticated coursework in comparison to College Preparatory (CP) courses. For this reason, careful consideration is given to each placement decision based on the teacher's knowledge of the student. Course-specific prerequisites for all courses are college courses with comparable workloads and expectations; the workload, depth of content and pace of coverage will be intense. These 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. 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 three-credit courses require a \$150 fee, payable to UConn, and billing is made to the student by the college. HVRHS currently offers the following UConn ECE courses:

- US History
- Introduction to American Politics
- Introduction to International Relations
- Introduction to Human Rights
- Environmental Science
- Drawing 1
- Equine Science

Registration for UConn ECE credit is a <u>separate</u> 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 <u>must also withdraw from the class at UConn</u>. 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 <u>ece.UConn.edu</u>. All students who sign up for the ECE course are expected to register for UConn ECE credit.

#### Partnership Program with Northwestern Connecticut Community College (NCCC)

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 NCCC, and can be submitted when the student applies to college. It is the student's responsibility to request a transcript from NCCC 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. NCCC sets application deadlines for each semester that HVRHS must uphold: November 15 for the Spring semester and June 15 for the Fall semester. For questions or more information, please contact Kalia Kellogg, NCCC Partnership Coordinator, by phone at 860-738-6329, or email at kkellogg@nwcc.commnet.edu.

#### **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.

#### **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 takes the place of the student's scheduled study hall 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. Before homebound instruction can be started, a written statement by the attending doctor must be submitted to the Director of Special Services, Regional School District No. 1, 246 Warren Turnpike, Falls Village, CT 06031.

#### **Academic Load**

Students are expected to carry a minimum of six courses during each semester exclusive of physical education and health, which must also be scheduled. Seniors in good standing may

carry a minimum of six courses, including 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 17 credits (18 credits for the Class of 2023 and 2024)
- Graduation = 23 credits (25 credits for the Class of 2023 and 2024)

#### **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) 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, or life skills courses.

#### Grade Point Average (GPA)

A student's weighted GPA is determined by the assignment of points for grades at each level of course difficulty. Pass/Fail courses are not included in the calculation of GPA. The student handbook describes the calculation of GPA in greater detail.

#### **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 class session.

#### **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. 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, and the School Counselor. After the tenth day of school, 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.

#### **Final Grade**

For a full year course, grades received for the first, second, third, and fourth marking periods each account for 25% of a student's final grade. For a half year course, grades received for the two quarters are each worth 50%.

#### **Summer School**

At the end of a course, a student who does not earn a passing grade 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 culturally- 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.

Upon successful completion of Biology, all science electives of appropriate level are available. In the Agricultural Education Department, these include Equine Science, Vet Science, and Fish and Wildlife.

#### Introduction to Agriculture I and II

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 tractors 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 or a full year.

Course weight: 1.05

Credit: .5/1

#### Agricultural Mechanics and Structural Systems S

This is a double-period, 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.

**Prerequisites:** Exploring Life Skills or its equivalent, Applications in Agricultural Engineering or consent of department

Course weight: 1.05

### Applications in Agricultural Engineering 🛽

This course is designed mainly for sophomores, 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.

Course weight: 1.05

### Biotechnology S

Biotechnology combines academic biology and agricultural biotechnology. Agricultural biotechnology is the use of microbes, cell cultures, enzymes and genes to improve food, waste management, and fiber/ energy production. Students will learn basic skills and principles of biotechnology, molecular biology, waste treatment, and microbiology in a laboratory setting. Practical applications of biotechnology to farm to table production will be emphasized which includes the use of GMO's and transgenic animals. Students who successfully complete Biotechnology will have met the graduation requirement for a Science course.

Prerequisite: Science 9

Course weight: 1.05

### UConn ECE/Equine Science

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 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

Credit: 1

Credits: 2

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

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

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

Course weight: 1.05

#### Farm-to-Table

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 the 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. This coming year presents the opportunity to work in the new food science lab and kitchen. College and career opportunities will be explored. This course can be repeated with a different curriculum for additional credit.

Course weight: 1.05

#### Floral Design 🛛 🖬

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 science of botany as it applies to floriculture will be a foundation of the course. 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. This course can be repeated with a different curriculum for additional credit.

Course weight: 1.05

#### Forestry S [next offered in 2022-23]

This is a double-period, full-year course for students wishing to learn skills in Forestry and/or the tree care industry. Major units taught are deed research, mapping, finding boundaries, forest land management, felling timber, skidding timber, safety in the woods, processing timber, sales and

Credit: 1 or .5

Credit: 1

Credit: 1 or .5

marketing, soil science, global positioning systems and Christmas tree production. College and career opportunities in the forestry industry will be explored. This course can be repeated with a different curriculum for additional credit.

**Prerequisite**: Forest Technology, Fisheries and Wildlife Management or consent of the Ag-Ed instructor.

Course weight: 1.05

#### Forest Science 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, 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. This course can be repeated with a different curriculum for additional credit.

Course weight: 1.05

#### Freshwater Fish and Wildlife

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. This course can be repeated the following year or with a different curriculum for additional credit. One year of Freshwater Fish and Wildlife will meet the graduation requirement for a general Science course.

Course weight: 1.05

#### Greenhouse Botany

Enjoy gardening and botany all year-long as a full-year class. 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

Credit: 1 or .5

Credit: 1 or .5

Credit: 2

8

and careers will be studied. College and career opportunities in the greenhouse industry will be explored. This course can be repeated with a different curriculum for additional credit.

Course weight: 1.05

#### Landscape Design and Construction

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 and the National Career Development Event.

Course weight: 1.05

#### Advanced Landscape Design and Construction

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. This course can be repeated with a different curriculum for additional credit.

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

Course weight: 1.05

#### Companion Animal Science and Management

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.

Credit: 1

Credit: 1

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. This course can be taken for a full year credit or as a stand-alone semester course; both options are open to all sophomores, juniors and seniors. This course can be repeated with a different curriculum for additional credit.

Course weight: 1.05

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. This course can be repeated with a different curriculum for additional credit. One year of Veterinary Science will meet the graduation requirement for a General Science course.

Course weight: 1.05

#### 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. This course can be repeated with a different curriculum for additional credit.

Course weight: 0 (Pass/Fail)

Credit: 1 or .5

Credit: 1 or .5

Credit: 1 or .5

#### ART

### Advanced Painting

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.

Prerequisite: A 'B' or better average in Beginning Painting or permission of instructor.

Course weight: 1.05

#### Art History 1 🛙

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.

Course weight: 1.05

#### Art History 2 🛽

This class is designed to cover major influences and trends in art history, with an in-depth emphasis on the western tradition. Via in-class activities and independent investigation, students develop skills in interpretation and aesthetics.

**Prerequisite**: Successful completion of Art History 1.

Course weight: 1.05

#### The Art of Photography I

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 16 students.

Course weight: 1.05

Credit: .5

Credit: .5

Credit: .5

### The Art of Photography II

This advanced digital photography course will further develop photography skills learned at the introductory level. Students will explore advanced photography equipment and themes. A majority of the course will be production based: students will develop their portfolios and express themselves through the camera. Students will reflectively explore and critique their work and the work of others. Students will be encouraged to submit work to the annual student art exhibit. All needed equipment will be issued in class.

**Prerequisite**: Must have completed The Art of Photography 1 with a 'B-' average or permission of instructor. Class limited to 16.

Course weight: 1.05

### The Art of Storytelling

Enjoy comic books, graphic novels or manga? Interested in telling an original story? If so, this hands-on studio course is for you. Each student will conceptualize, author, edit, and create a narrative-based work that uses both words and drawings to tell its story. In creating this project, students will learn the drawing processes of storyboarding, figure drawing, penciling, and inking.

Course weight: 1.05

#### 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

### Color and Design 🛽

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

#### Computer Animation

Using cutting edge wireless laptops and digital tablet technology, students develop skills in computer animation. The primary application used is Flash. Students will create their own

Credit: .5

Credit: .5

Credit: .5

21

animations and post their work on the web. Current trends in animation are also explored. Class limited to 15 students.

Prerequisite: Computer Painting or permission of instructor

Course weight: 1.05

#### Computer Painting

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 15 students.

Course weight: 1.05

#### ECE Drawing 1

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

### Drawing 2

In this course students will further develop drawing skills as they build upon methods previously learned in Drawing 1. Students will be introduced to new drawing media and tackle more complex subject matter and techniques. Students will explore color drawing, collage drawing, as well as the human figure, foreshortening and gesture. The course will also touch upon art history and art criticism.

Prerequisite: A 'C' average or better in Drawing 1 or permission of instructor.

Course weight: 1.05

### Digital Design 🛛 🖻

Join us in the exploration of the elements and principles of art and design as you create two-dimensional graphic design/commercial art through the development of typography, logos, trademarks and advertising art with emphasis placed on art and design. The artistic process is implemented while you create "client-ready" commercial art. The computer is the main tool for creative expression and communication through the use of industry standard software including

Credit: .5

Credit: .5

Credit: .5

Adobe Photoshop, Illustrator, InDesign, as well as Adobe Acrobat. Digital photography will support assignments as appropriate to create finished products. Current industry practices are an essential component of this course. Portfolio preparation is also addressed.

Course weight: 1.05

### Introduction to Web Design

Come explore and enjoy the world of web design in this introductory course! You will learn effective website creation using the elements of art and design as they pertain to the World Wide Web. You will learn several ways to create and maintain web pages including Adobe Dreamweaver and HTML5, the newest release of web markup language. This course will result in the creation of a personal web page.

Course weight: 1.05

### Sculpture 🗉

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

### 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:** 2+ semesters of art and permission of instructor.

Course weight: 0 (Pass/Fail)

#### Credit: .5

Credit: .5

Credit: .5

### Personalized Learning, Photography

This course is directed by the student with a high photography average who is planning a career in photography. 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 hang an exhibit and written rationale or complete a similar major portfolio presentation.

**Prerequisite:** Art of Photography II.

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/MTSS 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 mathematics or STEM.

Course weight: 1.05

### **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 will work with a teacher and a mentor to identify an area of interest based on their studies from grades 9-11 and 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. *This is a graduation requirement for all students, starting with the Class of 2023. For 2021-2022, students will enroll in the first half of this course during the spring of their junior year, and they will enroll in the second half of the course during the fall of their senior year.* 

Course weight: 1.05

Credit: 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: 0 (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.

#### <u>Grade 9</u>

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. <u>Students enrolled in English 9H must also be enrolled in Global History I H</u>.

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. They will read a variety of texts from different times and places, including short fiction, novels, personal essays, articles, and poems. Represented authors possess diverse beliefs, perspectives, backgrounds, and purposes for writing. As part of their analysis, students will identify and apply literary devices, poetic techniques, and context-specific 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

### <u>Grade 10</u>

### 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 focused on these nations' impact on the world, and will develop and hone their writing skills by way of formal thesis-based essays, developed discussions, and creative pieces that reveal an increasing depth of understanding and analysis. <u>Students enrolled in English 10H must also be enrolled in Global History II H</u>. 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 new concepts and skills. This class takes a thematic approach to literature and includes the close reading of fiction and informational texts, class discussion, and the development of both expository and creative written responses. Students will become more sophisticated readers and writers, expanding their familiarity with, and application of, literary techniques in writing from various genres, and following the development of major themes in works of increasing difficulty.

Course weight: 1.05

### <u>Grade 11</u>

### AP 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. It is expected that students who register for AP English Language and Composition will take the AP Exam.

principles on which The United States of America was founded by reading works from various

Course weight: 1.15

**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 and analyze how the

Credit: 1

genres. Oral and written responses to literature will help students deepen their critical thinking skills, and sharpen their skills in developing a well-reasoned and well-developed argument.

Students enrolled in English 11H must also be enrolled in ECE U.S. History.

Course weight: 1.10

### 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

### <u>Grade 12</u>

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.

### Advanced Placement English Literature and Composition (Full-year)

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. It is expected that students who register for AP English Literature and Composition will take the AP Exam.

Course weight: 1.15

### 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.

H

Credit: 1

Credit: 1

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

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

### Drama CP (Half-year) 🛽

In this course students will read, discuss, and analyze in writing a mix of classic and contemporary plays. They will learn the many ways playwrights shape characters, establish and escalate conflict, develop themes, and compose plays in a manner that can be adapted for performance before an audience. This is an active and collaborative course, in which participants learn the fundamental techniques by which actors deliver authentic performances. Participants should be prepared to get out of their seats and onto the stage, where they will engage in improvisation and scene performance. Students who are comfortable before an audience--or would like to be--will have the chance to shine by delivering their own monologue and directing/performing in scenes that have been prepared for the class.

Course weight: 1.05

### Film Studies (Half-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 authentic audience their own short-form motion picture.

Course weight: 1.05

### 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

Credit: .5

Credit: 1

Credit: .5

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.

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

Course weight: 1.05 or 1.10

### Perspectives on Democracy: Citizenship & Activism [also listed under English]

This course is rooted in a simple belief: that there is no better way for students to learn about activism, civics, and participation in the democratic process than by helping them become knowledgeable and engaged citizens. Members of the class examine citizenry from a variety of critical perspectives. They will identify topics in which they are deeply invested and towards which they feel a sense of urgency. Working individually or in small groups of like-minded peers, they will develop personalized learning plans identifying those educational experiences that will deepen their understanding of the issue in all its complexity. Subsequently, they will develop plans of action that will best enable them to raise awareness of, influence decision-making about, and effect meaningful change around contemporary issues that matter most to them. Mastery of the course's priority skills and standards will earn students both English and Civics credit (½ credit for each).

Course weight: 1.05

### 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.

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

Course weight: 1.05 or 1.10

**The Immigrant Experience (Half-year)** The contributions immigrants make, and have long made, to the American experience cannot be overstated. This course spotlights the stories of first and second generation immigrants, who were

Credit: 1

Credit: .5

for decades treated, as the song goes, like "America's ghost writers." Immigrant voices provide us with an opportunity to better understand the role that cultural identity plays in one's own life, the lives of others in our community, and the nation as a whole. All too recently, political rhetoric brought xenophobia into the mainstream. By returning it to the shadows, we can instead celebrate the diversity of our country's literature, art, and music. If who we are is where we're from, then The Immigrant Experience is a kind of homecoming.

#### Course weight: 1.05

Credit: .5

#### Science Fiction & The Social Sciences 🛛 [also listed under Social Studies]

This interdisciplinary, honors-level course provides students the opportunity to explore the genre of science fiction through classical and contemporary literature and film. Students will be tasked with analyzing and evaluating both teacher and student-selected works in conjunction with a focused study on relevant psychological, sociological, and political concepts. Themes in the course include the growth of technology, utopian/dystopian society, humanity and human nature, and more. Science fiction has long provided a lens through which to examine societal issues, psychological constructs, as well as historical/current events, and that will serve as the primary objective of the course. Mastery of the course's priority skills and standards will earn students both English and Social Studies credit (½ credit for each).

Course weight: 1.10

Credit: 1

#### Women in Literature CP (Half-year)

Much has changed in the years since Women in Literature was first 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

### **EXPLORING LIFE SKILLS**

#### **Exploring Life Skills**

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

### 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 and HIV/AIDS.

Course weight: 1.05

#### Health 10

Health 10 covers the following units: drug and substance abuse, stress management, suicide prevention, eating disorders, sex education and birth control.

Course weight: 1.05

#### Health 11

Topics covered in Health 11 include drug and substance abuse, sexually transmitted infections, HIV/AIDS, teen dating violence, acquaintance rape, and domestic violence.

Course weight: 1.05

#### Health 12

Health 12 includes adult certification in American Heart Association First Aid/CPR/AED. The second half focuses on drugs and the law, impulse control disorders, alternative medicine, and sexual orientation.

Course weight: 1.05

### **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.

Credit:.25

Credit: .25

Credit: .25

#### **Mountain Climbers**

This is a one-semester course that provides adaptive 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.

PE units:

- Throwing, catching, dribbling skills
- Striking skills
- Balance skills
- Gross motor skills running, skipping, jumping, etc.
- Cooperative games & team building activities
- Snowshoeing
- Kick ball
- Badminton
- Yoga
- Cardio kickboxing
- Parachute games
- Fitness Center

### **MATHEMATICS**

Given the sequential nature of the courses in the College Prep (CP) and Honors (H) levels, a student obtaining a grade of C- in a prerequisite course will need teacher approval to continue in that level. Should the teacher not believe that the level is appropriate, the student's parent or guardian will be asked to complete a level override form, available from the School Counseling Department.

#### Applied Algebra 🛛

Applied Algebra is a bridge course between Algebra 1 and Algebra 2. Students learn algebraic concepts through real-world applications at the same time they are reviewing their learning from Algebra 1. Students examine real-world situations and how they relate to mathematical topics such as measurement, ratios, proportions, and other topics from algebra. Students are expected to use informal algebra and the concepts of algebra to guide their solution to meaningful problems. Sequentially this course is intended for those students who have successfully completed Algebra 1 but who need some additional review of algebraic concepts before taking Algebra 2. Applied Algebra is NOT open to students who have passed Algebra 2. This course is not open to freshmen. This course can be taken concurrently with Geometry CP.

As a result of their experiences in Applied Algebra, students are expected to become more confident problem solvers and use a variety of problem solving strategies. They will become better able to choose appropriate mathematical procedures to use in a variety of real-world settings. 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 and various computer software packages as tools for the solution of problems and to explore mathematical concepts.

#### Prerequisite: Successful completion of Algebra 1.

Course weight: 1.05

Algebra 1 🛛 🗳

Students in Region One use the Illustrative Math Algebra 1 course. In Algebra 1, students build on the descriptive statistics, expressions and equations, and functions first encountered in the middle grades while using more formal reasoning and precise language as they think deeper about mathematics. Students add to the statistical work from the middle grades by working with standard deviation, describing statistical distributions more precisely, and measuring goodness-of-fit with residuals and the correlation coefficient. Students further their work with linear equations and inequalities as they transition from representations tied to tangible objects to working with abstract expressions. Students develop their abilities to see structure in expressions to show that expressions involving several operations are equivalent (for example, grasping that "substitution" works at various levels of complexity), and they solve linear and quadratic equations by writing a series of equivalent statements, justifying each step. Students formalize their concept of function and encounter exponential and quadratic functions as well as other examples of non-linear functions. A function that arises from a real context requires students to attend to an appropriate domain and to the meaning of various features of the function in the context. As they explore

various functions, students should also leverage the power of making connections between graphical, tabular, symbolic, and contextual representations.

Course weight: 1.05

#### Algebra Lab

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Students who enter high school having skill deficits or who have had multiple interventions in previous courses will be enrolled in Algebra Lab to help to attain the skills necessary for success in Algebra 1. Students will be assigned to Algebra Lab and Algebra 1 until they have demonstrated the prerequisite skills necessary for success in Algebra 1.

Course weight: 1.05

#### Credit: 0.25 per quarter

### Geometry CP/H

Students in Geometry CP and Geometry H use the Illustrative Math Geometry program. 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. To support their proof writing, students record definitions and theorems in a reference chart, which will be used and expanded throughout the course.

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.

Next, students 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 close the year by extending what they learned about probability in grade 7 to 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.

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

# Prerequisite: Successful completion of Algebra 1 or Applied Algebra (with Department approval).

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

### Algebra 2 CP/H 🛛 🛛

The second year of algebra continues the student's exploration of functions begun in Algebra 1. The course begins with a brief review of the major concepts from Algebra 1 and then moves quickly to investigations of new types of functions: quadratic, exponential, logarithmic, rational, and trigonometric. 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; develop facility with polynomial and rational expressions; and use sequences and series to describe real-world phenomena.

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 and successful completion of, or coregistration with, Geometry.

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

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Credit: 1

### Algebra 3

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 will use scientific and graphing calculators and computer software as tools for the solution of problems and to explore mathematical concepts.

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. Students will use scientific and graphing calculators and computer software as tools for the solution of problems and to explore mathematical concepts.

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

#### Advanced Placement Calculus AB

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. It is expected that students who register for AP Calculus will take the AP Exam.

Course weight: 1.15

Credit: 1

#### Advanced Placement Statistics

Statistics is a mathematical study of the world around us. In this course, students will observe patterns in data, use tools such as surveys and experiments to plan and conduct studies, explore probability, and use statistical inference for confirming hypotheses. This course is similar to that taken by many non-mathematics majors in college. Graphing calculators and statistical software packages will be used extensively throughout the year as tools for exploring statistical concepts and solving real-world problems. This course may be taken concurrently with either Precalculus or Calculus. This course is approved by the College Board for AP designation.

# Prerequisites: Successful completion of Algebra 2. It is expected that students who register for AP Statistics will take the AP Exam.

Course weight: 1.15

### *Statistics and Probability* (Spring Semester)

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

The Mathematics of Money (Fall Semester)

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.

The course is open to all students who have a desire to work hard and wish to gain a preliminary knowledge of the mathematics of money.

Course weight: 1.05

Credit: .5

Credit: .5

### Personalized Learning Advanced Placement Calculus 2 (BC)

Additional topics in the study of Calculus, designed to prepare students to take the Advanced Placement Calculus BC Exam. Students will be introduced to functions given in parametric, polar, and vector form. The concept of the derivative will be expanded to include parametric, polar, and vector functions, and applications of the derivative will include slope fields, Euler's method for differential equations, and L'Hopital's rule and its use in determining convergence of improper integrals and series. The concept of the integral and its application will be reviewed and additional techniques of integration will be studied, along with improper integrals and logistic equations. Students will also study polynomial approximations and series, including the Taylor and Macalurin series approximations.

Typically this course is offered in an online format. This course is graded Pass/Fail only.

Prerequisites: Successful completion of Advanced Placement Calculus and permission of the instructor and department chair. It is expected that students who register for AP Calculus will take the AP Exam.

Course weight: 0 (Pass/Fail)

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### MUSIC

### Band (Fall and Spring)

This is a performing arts course open to interested students with previous band instrument experience. A minimum of two concerts will be performed each year. Opportunities for additional concerts will be provided, such as Berkshire League Music Festival, Northern Regional Festival and the All State Festival. Emphasis will be placed on musicianship, ensemble playing, tone, articulation and general technique. Additional rehearsal time is available during the school day. This is a full-year course. Concert attendance is mandatory. This class can fulfill the requirement for participation in the night groups – Jazz Band, Night Choir, Sweethearts and Heartbreakers.

Course weight: 1.05

Credit: 1 or .5

### Chorus (Fall and Spring)

This is a vocal group experience in choral literature which includes repertoire from all styles of music. A minimum of two concerts will be performed each year. Opportunities for additional concerts will be provided, such as Berkshire League Music Festival, Northern Regional Festival and the All State Festival. Emphasis will be placed on musicianship, ensemble playing, tone, articulation and general technique. Additional rehearsal time is available during the school day. This is a full-year course. Concert attendance is mandatory. This class can fulfill the requirement for participation in the night groups – Jazz Band, Night Choir, Sweethearts and Heartbreakers.

Course weight: 1.05

### Music Theory 1

This course is designed to teach students the basics of writing music through music theory and composition. New music technology, equipment, and piano keyboards will be used along with Finale and Logic.

Course weight: 1.05

### Music Theory 2 🛛

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

Prerequisite: Music Theory 1 and permission of instructor.

Course weight: 1.05

Credit: 1 or .5

Credit: .5

### Music Theory 3

This course is designed to continue the music curriculum covered in Music Theory 2: reading music, playing music, arranging music, writing music.

Review: secondary chords, modulation, transposing instruments, form in music cadences, non-harmonic tones. New: Advanced recording technology techniques, composition and arranging for large scale ensembles, advanced chromatic harmony, advanced part writing, advanced score and chord analysis, modes and composition.

**Prerequisite:** Music Theory 1 and 2 and permission of instructor.

S

Course weight: 1.05

Credit: .5

#### Music Technology

Music technology is a course designed to appeal to the songwriter and music producer in you. Have you ever wondered what it takes to produce a music track? In music technology you will learn how to compose and produce a song from start to finish. No experience necessary, and closet guitar heroes are highly encouraged. Students will be exposed to Audacity, Garageband, and Logic. Students will learn about basic principles of the physics of sound, the different types of recording, and how to properly set up a recording session. This course can be repeated with a different curriculum for additional credit.

Course weight: 1.05

### **SCIENCE**

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

Chemistry CP, H	Forensic Science CP	Earth Science CP
Physics CP, AP	AP/ECE Environmental Science	Engineer, Design, and Coding
AP Comp. Science Principles	AP Biology	Marine Biology CP

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. Students should carefully consider post-graduate plans when selecting science electives .

#### <u>Grade 9</u>

#### Science 9 S

This course emphasizes the basic chemical concepts that underlie a great deal of our technology. Students will learn how those concepts are applied in our lives and to the function of the Earth. In keeping with the Next Generation Science Standards, emphasis is placed on the use of science and scientific argumentation to solve problems and to 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.

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

Course weight: 1.10

### <u>Grade 10</u>

### 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, cells and biochemistry, 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

Biology H 🛛

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 scientific thought are required for all assignments.

**Prerequisite**: Science 9H or permission of the instructor.

Course weight: 1.10

#### 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 focus. Emphasis is given to laboratory design in the field of chemistry, analytical problem solving, and writing about chemical concepts.

**Prerequisites:** Biology CP, Algebra 2 (which may be taken concurrently) or permission of the science department chair.

Course weight: 1.05

Credit: 1

Credit: 1

### Chemistry H 🛛 🖻

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 instructor.

Course weight: 1.10

#### Earth Science

This full year course surveys the major topics in the earth sciences. These topics include topographic maps, weathering, surface and groundwater, soils, geology, meteorology and astronomy. Emphasis is placed on both laboratory investigations and field work. Students will also become familiar with appropriate technology such as GPS units and GIS.

Prerequisites: Science 9 and Biology.

Course weight: 1.05

### 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

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 \$150 fee is charged by the University for those that wish to receive credit. Students receiving free or

Credit: 1

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 instructor. The student *must be in 11th or 12th grade* to take this course.

Course weight: 1.15

### Forensic Science S

This course is a basic introduction to the use of science and the scientific method in crime solving. Collaborative problem solving and study of physical evidence will be stressed; therefore, collaborative 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.

Course weight: 1.05

### Marine Biology 🛛

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.

S

Course weight: 1.05

### AP Biology

AP Biology is a second year course in biology. This course provides interested students with an opportunity to pursue college level biological studies while in high school. Topics covered in depth include genetics, molecular biology, biochemistry, evolution, physiology, and ecology. Multiple texts and readings are used. Activities focus on the application of scientific method and advanced laboratory techniques. Frequent writing assignments are required. Students who elect this course are expected to take the national advanced placement exam.

**Prerequisites:** Successful completion of Biology , Chemistry, and Precalculus/Algebra 3 (which may be taken concurrently), or permission of the instructor.

Course weight: 1.15

Credit: 1

Credit: 1

Credit: 1

### Physics 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: 1.05

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 vectors, mechanics, sound, 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. This course follows the AP Physics I curriculum. Students taking AP Physics should be comfortable with quantitative thinking and algebraic reasoning. Students who elect this course are expected to take the national advanced placement exam.

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

Course weight: 1.15

### 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. Students who elect this course are expected to take the national advanced placement exam.

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

#### 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

#### <u>Grade 10</u>

#### 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

Credit: 1

### Global History II 🛛

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

### <u>Grade 11</u>

### ECE United States History

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 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.

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.)

Course weight: 1.15 (ECE)

Credit: 1

### United States History

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

**Senior Year and Electives** 

### 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

### 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

#### 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. This course fulfills the graduation requirement in Civics; 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 (ECE)

Credit: .5

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 fighting 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 human rights idea 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

#### ECE Introduction to International Relations [to be offered in 2023-2024]

This course is offered in cooperation with the University of Connecticut. From the UConn International Relations Syllabus: "Welcome to the study of relations between nation states, better known as international relations (IR). This course acquaints you with the major topics, themes, and patterns of IR, as well as the theoretical frameworks for understanding IR. Throughout the semester we will track current IR events as a means to reveal, explore, and understand these topics, themes, patterns, and theoretical frameworks. By the end of the course you will have developed the necessary foundation for understanding and analyzing future IR events on your own and in advanced IR courses. You may even decide to become a Political Science major and pursue a career in IR. But even if your career path takes you in a different direction, I am pleased you will join me as we explore the world of IR together."

This will allow HVRHS students the opportunity to develop the skills needed to analyze global events in an increasingly complicated world. 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

This course is rooted in a simple belief: that there is no better way for students to learn about activism, civics, and participation in the democratic process than by helping them become knowledgeable and engaged citizens. Members of the class examine citizenry from a variety of critical perspectives. They will identify topics in which they are deeply invested and towards which they feel a sense of urgency. Working individually or in small groups of like-minded peers, they will develop personalized learning plans identifying those educational experiences that will deepen their understanding of the issue in all its complexity. Subsequently, they will develop plans of action that will best enable them to raise awareness of, influence decision-making about, and effect meaningful change around contemporary issues that matter most to them. Mastery of the course's priority skills and standards will earn students both English and Civics credit (<sup>1</sup>/<sub>2</sub> credit for each).

Course weight: 1.05

### 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

### Science Fiction & The Social Sciences H [also listed under English]

This interdisciplinary, honors level course provides students the opportunity to explore the genre of science fiction through classical and contemporary literature and film. Students will be tasked with analyzing and evaluating both teacher and student-selected works in conjunction with a focused study on relevant psychological, sociological, and political concepts. Themes in the course include the growth of technology, utopian/dystopian society, humanity and human nature, and more. Science fiction has long provided a lens through which to examine societal issues, psychological constructs, as well as historical/current events, and that will serve as the primary objective of the course. Mastery of the course's priority skills and standards will earn students both English and Social Studies credit (½ credit for each).

Course weight: 1.10

#### 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

Credit: .5

Credit: 1

Credit: 1

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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

#### Environmental History

Students in this course will examine the environmental history of the United States, from 1492 to the present. Traditional approaches to history use the environment as a setting for great events; this course will explore the interactions between Americans and their environment in hopes of understanding how the physical world, flora and fauna, climate, water and soil have impacted our nation's history. With the help of guest speakers and field experiences, students will develop an understanding not only of the historical events but also of the nature of the American environment and its resources.

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).

### **General Education**

A Special Education teacher, collaborating with a General Education teacher, will provide specialized instruction both in class and pull out, as needed depending on the student, to individual or small groups of students to support teaching and learning in the content area.

### Supported General Education

A paraprofessional is assigned to one or a group of students in a general education class to maximize learning in the general education setting.

### 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. Students with 504 plans may also be considered for this course. Additionally, an intervention team may recommend this class as a tier 3 intervention. The course is offered in different categories (based on grade level and/or academic needs) determined by teacher recommendation.

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.

### 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.

### Alternative Learning Program for Student Success (ALPSS)

The Alternative Learning Program for School Success (ALPSS) is a collaborative learning program with Wheeler Clinic, which provides an integrated educational and clinical program supporting student social, emotional, cognitive, environmental, familial, and/or behavioral needs. In addition to individualized goals, the vision of the program is to improve academic performance, develop

skills for students to manage academic and social demands of the public 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.

#### 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 their teachers.

### Literacy Lab 🗉

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. Additionally, students will work with a sophisticated web-based software program that measures present levels of performance, gives targeted drill and practice activities, and measures Reading and Writing progress during the instructional year.

Course weight: 1.00

### Intensive Literacy Lab

At the recommendation of the Planning and Placement Team, students will be enrolled in Intensive Literacy Lab to service Goals and Objectives addressing significant needs in the areas of Reading and Writing. This class will focus on:

- Decoding strategies, word recognition, fluency and comprehension
- Word construction, content vocabulary, deriving meaning from word components
- Literature experience and text evidence to support comprehension
- Contemporary issues, understanding our role in the global community

The Planning and Placement Team will recommend this course based on a variety of data sources including, standardized assessments, universal screeners, and curriculum based assessments.

Course weight: 1.00

### Foundations of Pre-Algebra

Students in this course will work toward mastery of the math skills necessary for success in a pre-algebra course. Students will experience direct instruction, small group and individual work in the classroom, and have access to lessons and practice online. 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.

Credit: .5

### Math Skills

A Planning and Placement team may recommend this course for students who require specially-designed instruction in the area of basic numeracy, money, time and practical real-life math problems. Students will receive individualized direct instruction according to their needs and prior skill development. The course format includes small and whole group instruction utilizing hands-on and teacher-made materials.

Course weight: 1.00

Credit: .5

### **Related Services**

Counseling, Speech/Language, Occupational and Physical Therapy are available as recommended by the PPT.

### **TECHNOLOGY EDUCATION**

### Introductory Metal Technology

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. Students may enter this course at mid-year. Class limited to 16 students.

Course weight: 1.05

Credit: .5

### Advanced Metal Technology

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. <u>THIS COURSE MAY BE REPEATED FOR ADDITIONAL CREDITS BY CONTRACTING FOR A PERSONALIZED LEARNING COURSE WITH THE INSTRUCTOR.</u> Students may enter or exit this course at mid-year. Class limited to 16 students.

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

Course weight: 1.05

### Introductory Woodworking Technology

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

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. <u>THIS COURSE MAY BE REPEATED FOR ADDITIONAL CREDITS BY CONTRACTING FOR A PERSONALIZED LEARNING COURSE WITH THE INSTRUCTOR</u>. Class limited to 16 students.

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

Course weight: 1.05

#### Introductory Black and White Photography S

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.

Course weight: 1.05

### Computer Aided Drafting (CAD) and Electronic Publishing

This semester course is designed to engage students in awareness about the changing industry of publishing and to teach the basic application of CAD techniques. During the first half of the course, students will use a variety of computer software programs and production equipment to design and produce a class publication as well as printed materials to support other school projects. These may include posters, tickets, programs, brochures, flyers, banners, and business cards. During the CAD focused units of study, students are introduced to the appropriate tools, techniques, and terminology necessary for processing information utilized in mechanical drawing, architectural drawing, and computer image generation and publishing. Emphasis is placed on the development of basic skills in layout and design, measurement, problem solving, computer operation, and software application. Class limited to 16 students.

Course weight: 1.05

### **Production Graphics S**

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

Credit: .5

Credit: .5

S

artwork and designs on a varied number of substrates including t-shirts, vinyl stickers and magnets. Class limited to 16 students.

Course weight: 1.05

### **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

#### 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

Course weight: 1.05

#### 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

Course weight: 1.10

Credit: 1

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

Course weight: 1.10

#### 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

Course weight: 1.15

#### 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

### 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

Course weight: 1.05

Credit: 1

Credit: 1

Credit: 1

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 reinforce important points of grammar, stimulate oral expression, and to improve pronunciation.

Prerequisite: Spanish 2

Course weight: 1.10

### Spanish 4 🛛

At this level, the emphasis is on strengthening the student's confidence in using the language to express ideas and opinions. Advanced grammatical structures are presented and practiced in class discussions on a range of topics. Students receive an introduction to contemporary works of Spanish and Spanish-American literature. Compositions relating to the works studied are required to broaden the student's vocabulary and accuracy of expression and to lay the foundation for discussion of style and literary analysis.

Prerequisite: Spanish 3

Course weight: 1.10

### Spanish 5 🗉

This advanced composition and conversation course is designed to further students' progress in the development of the four language skills, 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 many literary genres. Short stories, novels, plays, poems, songs, and magazine articles offer students the opportunity to increase their ability to read with understanding and communicate their opinions. A thorough review of major grammatical concepts is coupled with an in-depth study of idiomatic expressions and subtleties of the language. One of the key objectives of the course is to enable the students to express their ideas in Spanish with increasing fluency and clarity.

#### Prerequisite: Spanish 4

Course weight: 1.15

Credit: 1

Credit: 1