Course of Studies
2015-2016

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Housatonic Valley Regional High School

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.

Academic Expectations

Students at HVRHS will:

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

Social Expectations

Students at HVRHS will:

- 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

Students at HVRHS will:

- 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.

It is the policy of Regional School District One that no person shall be excluded from participation in, denied the benefits of, or otherwise discriminated against under any program, including employment, because of race, color, religious creed, sex, age, national origin, ancestry, marital status, sexual orientation, mental retardation and past/present history of mental disorder, learning disability, and physical disability.

GENERAL INFORMATION

The Housatonic Valley Regional High School is a comprehensive high school offering a broad program of studies leading to a common diploma. Over a four-year period, approximately two-thirds of the courses a student will take are core courses which must be passed. The remainder of the student's schedule will be filled with elective courses chosen on the basis of career plans and interest. Student selection of elective courses will be guided by assistance from the administration, guidance, and teachers based on the premise that it is the responsibility of the school to develop informed, literate, responsible, and contributing individuals prepared to conduct themselves in an intelligent and effective manner.

GRADUATION REQUIREMENTS

1. Core Courses

    a. Four credits of English
    b. Three credits of Social Studies which shall include one year of either Social Studies 9 or History 9H, one year of U.S. History or History 11H and one semester of Civics
    c. Three credits of Mathematics
    d. Three credits of Science which shall include one year of Biology or Biotechnology.
    e. One credit of Applied Education (Agriculture, Business, and Technology Education) which can be met through successful completion of Exploring Life Skills
    f. One-half credit of Fine Arts (Art, Music, Graphics or Photography)
    g. Three semesters of Physical Education (one semester as a freshman and sophomore, one marking period as a junior and senior). Those students with a written statement from a physician may satisfy this requirement through Adapted Physical Education.
    h. Three marking periods of Health (Health 10, 11, 12)

2. Credit Requirements for Promotion and Graduation

    a. These are minimum requirements only and are independent of the core course requirements.

To the sophomore class	5
To the junior class	11
To the senior class	17
Total to graduate	23

    b. Students must have a minimum final grade of D- in a course to earn credit for the course.

3. Additional Requirements and Information for Graduation

    a. All freshmen must enroll in Exploring Life Skills.
    b. With administrative approval and after consultation with the teacher of the course, the department chairperson, and guidance counselor, a student may take the failed half of a full-year course during the following school year. Credits are awarded when the student successfully completes the entire course.

c. A student must pass a minimum of four full-year courses or their equivalent in the senior year in addition to Physical Education and Health.

d. A student admitted to college on the Early Admittance program after the completion of 3 or 3 ½ years will be awarded a diploma upon the completion of the first successful year at the undergraduate level.

e. A student must either reach the state goal standard in the CAPT science subtest or meet the school district's performance standards in four areas: reading, writing, mathematics, and science.

4. Academic Load

All students must take six courses each semester. Physical education and health, when scheduled, are not counted as one of the student's six courses.

CHANGING AND DROPPING COURSES

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. No changes will be approved by the administration until the student, the teacher, and the parents have consulted with the guidance counselor.

Changes made after the tenth class session period will carry a designation "Withdrawn Failing (W/F) on al official records. A "Withdrawn Failing" course will be used in calculating, for example, class rank, National Honor society academic qualifications, and in determining "good student" status for car insurance discounts. The WF will count as a zero (0) for purposes of calculation.

Any deviation from these procedures can be made only in consultation with guidance and with the approval of the administration.

ADDING COURSES

New courses may not be added after the tenth class session. Any exceptions must be approved by the teacher, counselor, parent and administration.

PLACEMENT LEVELS

Advanced Placement (AP): The College Board's Advanced Placement Program enables students to pursue college-level studies while still in high school. Housatonic offers AP courses in English Literature and Composition, Calculus AB, Statistics and Biology. Based on their performance on rigorous AP Exams, students can earn credit, advanced placement, or both, for college. (weighting factor 1.15)

Humanities: A three-year honors program in English AND History designed to meet the needs of the most talented and gifted students. This program prepares the student for the most selective colleges. This demanding program emphasizes rigorous research, careful composition, and individual creativity. Intuitive thinking, excellent writing skills, and excellent work habits are necessary for success. An intensive summer assignment must be completed before the start of school.(weighting factor 1.10)

Honors: This level is recommended for the most advanced mathematics and science students. Programs on this level prepare students for the most selective colleges. Students who succeed will combine high academic ability with strong motivation and work ethic. Honors courses proceed at a rapid pace. Students who grasp ideas quickly will benefit. (weighting factor 1.10)

College Preparatory: Recommended for students who are able to handle a challenging college-bound program. Teaching at this level emphasizes the reading, writing, and math skills necessary to be successful in college. Students who succeed show motivation to learn and have good time management skills. (weighting factor 1.10)

General: This level is geared toward students who require additional help or time when learning new concepts. (weighting factor 1.00)

School Counseling Department

The Housatonic Valley Regional High School Guidance and Counseling program is designed to address the comprehensive needs of all students. It is in alignment with the goals established by the Region 1 Board of Education, NEASC Recommendations, and the American School Counselor Association National Standards for School Counseling Programs. Employing a planned and systematic program each student will develop his/her individual potential in the areas of academic development, personal/social development and career development. The counseling program is an integral part of the total educational program through which students prepare for meaningful and rewarding lives as productive members of a changing society. Counselors will function in a number of different capacities including: counselor, consultant, teacher, manager and role model. Counselors work as a team in conjunction with teachers, administrators, parents and community members to assist students in the achievement of these goals.

COMPREHENSIVE SCHOOL COUNSELING

Guiding Principles of Comprehensive Counseling

- Comprehensive counseling is based on a set of established content standards.
- Comprehensive counseling is for all students.
- Comprehensive counseling has an organized and planned curriculum.
- Comprehensive counseling is sequential and flexible.
- Comprehensive counseling is an integrated part of the total education process.
- Comprehensive counseling involves all school personnel.

The comprehensive counseling program at Housatonic Valley Regional High School is made up of four components:

- **The curriculum component** provides a method by which every student receives school counseling curriculum content is a systematic way.
- **The individual student planning component** provides all students an opportunity to work closely with their counselor to plan, monitor and understand their growth and development and take action on their next steps personally, educationally and occupationally.
- **The responsive services component** responds to the direct and immediate concerns of students and includes, but is not limited to individual counseling, crisis counseling, referrals or consultations with parents or guardians, teachers or other specialists.
- **The system support component** enables the school counseling process to be effective through leadership and advocacy, consultation, collaboration and teaming, program management and professional development. This component also provides appropriate support to other programs in the school.

STUDENT SUCCESS PLANS

The Student Success Plan (SSP) is an individualized student driven plan that will be developed to address each student's needs and interests, to help each student stay connected in school and to help each student achieve postsecondary educational and career goals. The SSP will begin in the 6th grade and continue through high school to provide each student support and assistance in setting goals for social, emotional, physical and

academic growth, meeting rigorous high school expectations, and exploring postsecondary education and career interests.

COLLEGE ADMISSION

Grades, class rank, rigor of courses taken, teacher/counselor recommendations, extra-curricular activities, and standardized testing (SAT or ACT) are the most important factors determining a student's acceptance at a college or university. A student will meet regularly with his/her counselor to make sure that a program is being developed that will prepare the student for college admission. Students who intend to apply to college are encouraged to develop a challenging program of academic courses for senior year.

COURSE SELECTION

Each year, counselors hold a course selection assembly for each grade to explain the process for choosing courses for the following year. The Program of Studies booklet contains course descriptions of each course that is offered at the high school. Students can access the Program of Studies from computers at home or at school. Students will complete course selection through Power School. Students are required to carry a minimum of 6 classes each semester (excluding PE and health). Students are asked to choose alternates for any elective course to aid the resolution of schedule conflicts.

CLASS PLACEMENT

Teacher recommendations are the primary determiners of placement in Academic and Humanities classes. With the understanding that they will be held to a higher standard of performance -- particularly in writing -- than in other levels, students not recommended for CP or H classes may still enroll in them with parental permission. Once this placement has been made, a student may not be able to change, except at midyear, provided there is room in the class requested. All students who plan to attend a competitive four- year college should be in CP or H level courses.

Sample form:
I _____, having already talked it over with the appropriate teachers, acknowledge that my enrollment in _____ is contrary to advice and recommendations from them, and I realize that I will have to work harder to succeed than I would have if I had accepted my other placement. I understand that priority will be given to teacher-recommended students, and that this request will be honored only if space permits. I also understand that if this placement request is honored, I may not be able to change back, except at midyear, and only if there is room in the class.

Signature _____
Parent's Signature _____
Department Head's Signature _____

PARTNERSHIP PROGRAM

Juniors and seniors at Housatonic with a minimum grade point average of B or better are able to earn college credit at Northwestern Connecticut Community College through the Partnership Program. Students register tuition free for courses which are taught at the college. Successful completion of the courses earns college credit which can be used toward an Associate's degree at NCCC or which may be transferred to other colleges or universities. Registration for these courses is handled through the Guidance Office in August and December.

EARLY COLLEGE EXPERIENCE (ECE) PROGRAM WITH UCONN

The UConn Early College Experience Program provides academically motivated students the opportunity to take college level courses while still in high school. These challenging courses allow students to earn college credits that provide an academic and financial head-start to their college career. Housatonic offers students the opportunity to take US History and American Politics as part of this program. Students who are interested should talk to their counselor. Registration must be done prior to the end of the preceding year.

PASS-FAIL OPTION

Students have the option of taking one course (except English) on a pass-fail basis in their senior year. The request must be approved by the teacher, the department chairperson, the guidance counselor, the student's parent/guardian, and the principal. The application must be complete and returned to guidance no later than the final day of class before the 2nd quarter begins for first semester and full-year courses, and the final day class before the 4th quarter begins for second semester courses. Any deviation from these procedures can be made only in consultation with guidance and with the approval of the administration. AP Calculus BC, IS Latin I, and IS Latin 2 are only graded pass-fail.

INDEPENDENT STUDY

Students who wish to do independent study or who are unable to schedule a class may, after consulting with the teacher and obtaining the approval of the department chairperson and administration, elect to take the course on an independent basis. The number of meetings per week with the instructor, the length of the program, and the credit to be awarded will be submitted in an application due no later than the 10th class meeting.

DETERMINATION OF CLASS RANK

Computed at the ends of the sixth and seventh semesters, class rank is determined by the total quality points earned by the student. Quality points are computed by multiplying the final grade received in a course by the weight assigned to that course based upon the level of difficulty of the course. Weighting values are as follows:, AP or 5th year language - 1.15; Honors - 1.10; College Prep - 1.05; General - 1.00.) Quality points for half- or quarter-year courses are halved or quartered accordingly. Courses which are being audited or taken on a pass-fail basis and physical education are not used in determining class rank. The total of all quality points is then divided by the number of full-year equivalent courses taken by the student. Grades of students who transfer to Housatonic from another high school are also used in determining class rank. A student must be enrolled at Housatonic for a minimum of one year in order to receive an exact class rank.

NCAA CLEARING HOUSE

To be eligible to participate in Division I or II athletics at the college level, a student must satisfactorily complete specific coursework in high school, and achieve a minimum SAT/ACT score. Certification applications and complete descriptions of requirements are available online at www.eligibilitycenter.org. Please note that courses taken before 9th grade (for example Algebra 1 and World Language) do not count towards these requirements.

AGRICULTURE SCIENCE AND TECHNOLOGY EDUCATION

Welcome to the world of Agricultural Science and Technology. Housatonic Valley is one of nineteen such programs in the state. We are rich in tradition, community support and leadership. Students in our program learn to recognize the importance of agriculture, food, fiber and natural resource systems more fully. They evaluate how these systems impact their lives and the world.

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 natural resources, (fish, wildlife and forestry), agricultural engineering, biotechnology, animal science, and plant science. The Agriculture Science and Technology Center consists of a fully equipped biotechnology lab, agricultural mechanics shop, classrooms, computer lab/library, animal barn and laboratory area, aquaculture/hydroponics lab, greenhouse, Christmas tree plantation, and a research forest. Students learn about the environment and the relationship of animals, plants, and machinery in our ever-changing productive society.

Completion of Supervised Agricultural Experience (SAE) hours is a requirement to receive course credit for all agricultural classes. Many diverse opportunities exist such as job placement, job shadowing, research projects, home-based projects, and community activities. Single period courses require a minimum of 60 hours, and double period courses require a minimum of 200 hours for completion. 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.

Students enrolled will have the opportunity to create their own outside of class learning program with hands-on activities and real world experiences. There will be opportunities for students to develop personalized leadership skills.

All students with an interest in agriculture may apply for this program. New students should obtain an Agricultural Education Program application from Guidance or the Agricultural Education Department. **All students applying must have an Agriculture Education teacher's signature on their Course of Study "sign-up" sheet before turning it in to the Guidance Office.**

Advanced Landscaping CP

Thinking about starting a landscape design and construction business or want to know more about how to manage the residential and community landscape? The Advanced Landscaping course is a single period, full-year course open to juniors and seniors who have successfully completed Landscape Design and Construction. The course will build upon the foundations of the landscape industry and will include project oriented-work in the field. Students will enhance their basic skills in the areas of pruning, landscape design (with computer software) and installation, tree and shrub selection, equipment operation, insect and disease recognition and control, athletic fields and fertilization. Specialized areas of the industry will also receive more concentration including water gardening, nursery management, and arboriculture. Students may work towards certification with the International Society of Arboriculture, Connecticut Nursery Landscape Association, and Connecticut Tree Protective Association as well as explore the necessary requirements for acquiring a commercial driver's

license. Students enrolled will have the opportunity to create their own outside of class learning program with hands-on activities and real world experiences. There will be opportunities for students to develop personalized leadership skills.

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

Agricultural Mechanical Systems CP

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 taught are: welding; small engine overhaul; diesel tractor tune up; 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

Applications in Agricultural Engineering CP

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 metal working 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.

Biotechnology CP

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 food and fiber 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 biology course.

Prerequisite: Concepts in Chemistry and Physics CP

Equine Science CP

Seabiscuit, Flicka, and Black Beauty: These horses and many more have captured our hearts and minds for centuries. If you ride or are interested in learning more about horses, join us for one semester or for a full year. 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. Fall semester units taught may include: stable management, tractor driving, equine evolution, horse evaluation and judging, and equine health. Spring semester units may include fencing and pasture management, equine nutrition, equine anatomy, equine breeding and foaling management and shop projects. College and career opportunities

in the equine industry will be explored. This course can be repeated with a different curriculum for additional credit.

This full year course can be taken for a half year of science credit.

Floral Design

Enjoy working with cut-flowers from around the world? Design a wedding or the 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, while stressing the principles of design. Students will also receive valuable growing experience in the state-of-the-art greenhouse facility. The course will emphasize the merchandising and business areas in the floral industry including all of the holidays. Students will be able to take flowers home and will provide a floral service to our school community. College and career opportunities in the floral industry will be explored.

Food and Fiber Production CP

Got Milk? Buy locally- Think Globally, I Farm - You Eat. This year long course will show you how you can help to shape our food system in ways that promote the production of safe, healthy food; protect the environment; and bolster your local economy. This is a full-year course for sophomores, juniors, and seniors. Field trips, hands-on laboratory work and experts in this field will complement class work. You will follow the evolution of food from farm to table, by studying units such as food science, food product development, food marketing and healthy animal production. This full year course can be repeated for additional credit with a different curriculum the following year. College and career opportunities in the agriculture production industry will be explored.

Forestry CP

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 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 for additional credit

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

Forest Technologies CP

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) chain saw maintenance, care and operation; contracting and business practices; tree planting; tree plantation management, soils, ropes and knots, climbing, safe equipment operation, and the relationship of forest ecology to our natural resource systems. College and career opportunities in the natural resources industry will be explored.

Freshwater Fish and Wildlife CP

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). 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. Freshwater Fish and Wildlife will have met the graduation requirement for a general science course.

Greenhouse Botany

Enjoy gardening and botany all year-long or just for the semester. This course will include the operation of greenhouses for all purposes, including seasonal crops, carnivorous plants, tropical plants, vegetables, medicinal and culinary herbs and hydroponics. The greenhouse will be used as a laboratory to start new plants from seeds and through methods of cloning. Crops will be raised for sale and students will be able to take plants home. We will utilize the local private and public sector of the horticultural industry. Business management skills as they relate to greenhouse operations and careers will be studied. College and career opportunities in the greenhouse industry will be explored. This course can be repeated once with a different curriculum for additional credit.

Independent Study 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.

Introduction to Agriculture I CP

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.

Landscape Design and Construction CP

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's 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.

Small Animal Science and Management CP

Have you ever wondered why dogs eat grass? Or what exactly your cat is doing when they smell with their mouth open? This course can answer these common questions along with many others! We will study everything from their lineage and history to common health problems and diseases. The focus for the units (History, Terminology, Nutrition, Housing, Restraint, Health and Anatomy/Physiology) will be on the canine and feline species for the Fall Semester. In the Spring Semester we will explore how small exotic animals are beginning to take the veterinary industry by storm. These pets may include ferrets, guinea pigs or chinchillas. Sometimes called pocket pets or fibrevores, these small companion animals are a specialty branch of the veterinary sciences. The units (History, Terminology, Nutrition, Housing, Restraint, Health and Anatomy/Physiology) will focus on the following species; Ferrets, Chinchillas, Guinea Pigs, Hamsters/Gerbils, Rabbits and Sugar Gliders. This course can be taken for a full year credit or as a stand-alone semester course; both options open to all sophomores, juniors and seniors.

Veterinary Science CP

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 the 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 the following year or with a different curriculum for additional credit. This course can be taken for a half year of science credit.

Environmental History CP (Co-taught with the social studies department)

Student 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. Through interdisciplinary teaching with the Agriculture Education and Social Studies Departments, students will develop an understanding not only of the historical events but also of the nature of the American environment and its resources.

Students will read works from authors such as John Burroughs, Rachel Carson, and John Muir. Major topics of study will include: The American Environment in 1491, Colonists in the New World, The First Ecological Movement, The Cotton South and the Civil War, The Exploitation of the Great Plains, Wilderness and Conservation in the Early 20th Century, and the Modern Ecological Movement.

Students will also gain first-hand experience - through field exercises and a supervised environmental history project - in reading an historical landscape and examining how man has both utilized and altered it.

Students in this course will receive .5 credits in Social Studies and .5 credits in Agriculture Education.

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 water color. 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.

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.

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.

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 will 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

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: A 'B-' average in The Art of Photography 1 or permission of instructor. Class limited to 16.

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.

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.

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

Prerequisite: Computer Painting or permission of instructor

Computer Painting

Using cutting edge wireless laptop 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.

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.

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.

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.

Independent Study, 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 independent study 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.

Independent Study, 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 independent study program the student is expected to hang an exhibit and written rationale or complete a similar major portfolio presentation.

Prerequisite: Art of Photography II.

The Art of Storytelling (Spring)(see English course offerings for semester 1 course)

Enjoy comic books, graphic novels or manga? Interested in telling an original story? If so, this hands-on, interdisciplinary 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.

BUSINESS AND FINANCE TECHNOLOGY EDUCATION

Business and Finance Technology Education courses are an integral part of the total academic structure that provides students with the competencies to be competitive in a business-oriented society. The mission of this program is to ensure that students have the opportunity to develop skills, knowledge, understanding and attitudes necessary for successful participation in postsecondary education and the global economy.

Accounting 1

Accounting is the "language of business" that provides the financial knowledge and analytical skills critically needed by both business organizations and individuals. This course is highly recommended for students considering a business major in college and/or who hope to own their own business someday. Students develop a business vocabulary, analyze and record daily business events, manage payroll records and prepare financial reports that illustrate the success of the business. Accounting for services and merchandising businesses, as well as corporations, will be reinforced through computer software applications.

Recommended for Grades 10, 11, or 12

Accounting 2

Accounting 2 is a continuation of Accounting 1 with emphasis on accounting as a profession. More complex accounting principles will be introduced such as departmentalized and corporate accounting, a study of plant assets and intangible assets, cash flow and liquidity, inventory methods, how to account for depreciation, bad debts, loans and other specialized adjusting entries. Emphasis on the decision-making aspect and interpretation of financial information is also stressed. Computer software applications are also an integral part of the course. This course earns college credit through the College Career Pathways programs.

Prerequisite: Accounting 1

NOTE: Credit earned in either Accounting 1 or Accounting 2 may be applied toward fulfilling the mathematics requirement. However, these courses do not satisfy CAPT requirements.

Communications 1/Introduction to Yearbook

Information technologies are driving forces in our lives with the power to reshape our learning and business activities. Each new technological advance promotes new ways of thinking, working, communicating, and learning. Using the latest technology application tools, this course is designed to teach you how to be successful in school and on the job. Students work at their own pace (regardless of skill level) to improve keyboarding skills and to produce professional letters, research reports, resumes, and tables. Students learn effective use of the Internet and input technologies, scanners, and digital imaging to work more efficiently. Using Adobe InDesign, students will gain real-world experience by learning the basic design principles in creating layouts for the school's yearbook.

Recommended for Grades 9, 10, 11, or 12

Communications 2

Students learn important aspects of desktop publishing and web design, which have become critical communication vehicles in today's professional world. Using MS Publisher and Adobe InDesign, students use advanced text and graphic tools to design attention-getting documents and publications. Students will gain realistic experience by completing projects and publications including magazines, newsletters, programs, fliers, brochures, certificates and banners. Students will then learn how to build effective websites using today's most advanced web-design tools. Students will also develop an understanding of the connection between effective web designs and their overall role in effective e-commerce practice by developing e-commerce vehicles, and marketing and promotional publications based on course technology for both student-created and actual businesses.

Prerequisite: Communications 1 strongly suggested but not required.

Recommended for Grades 9, 10, 11, and 12

Information Processing

This course will give students the competitive edge in today's job market and in preparing for the rigors of college coursework by moving beyond the basics to learn more advanced applications in word processing, spreadsheets, database, and presentation software. Using a current Windows platform and MS Office integrated software, this course provides project-based applications that integrate realistic business practices and provides a real-world focus on developing critical thinking skills.

Prerequisite: Communications 1 strongly suggested but not required. Recommended for Grades 9, 10, 11 and 12.

Money Management/Financing Your Future

You'll come in contact with money almost every day for the rest of your life. Used poorly, money can be a major source of anxiety and lead to financial problems. Used wisely, money can be a tool to help you achieve your goals and dreams. Take control of your life by learning the basic steps to financial independence and building wealth. Topics in this course include personal budgeting and spending plans, borrowing decisions, career planning, insurance, investing in the stock market, establishing and maintaining good credit, avoiding credit card debt, checking accounts, and other types of financial services. Students complete real-world activities and projects that apply the knowledge they gain with their current and future financial situations.

Recommended for Grades 11 and 12

Yearbook Design

This course is designed for students who have a genuine interest in the high quality workmanship involved with producing a real publication—namely, our school's *White Oak* yearbook. Yearbook Design provides students with a unique combination of skills and training that put classroom learning into real world action! The course includes all aspects of production—layout & design, journalism, and photography; as well as the business aspects (marketing and sales, customer relations, budgeting, accounting, money management, business communications, web page design, file management), and skill development in the use of industry-standard computer applications (Adobe InDesign and Photoshop). The course also includes heavy emphasis on

developing critical "soft skills" such as leadership, management techniques, teamwork, communication, brainstorming, problem-solving, consensus-building, time management, and business ethics.

Recommended for Grades 9, 10, 11, and 12.

BWE/CWE Internship (Business Work Experience/Cooperative Work Experience)

Internship in BWE/CWE is a work study program combined with a classroom component for students enrolled in the Business Education program. In the classroom students will study job applications, resumes, the interview, the work place, job ethics, taxes, and employment laws. Students will be provided the opportunity to work in the community gaining work experience. The work experience program provides valuable occupational experiences for students through school-supervised, part-time employment at approved business sites. This experience is designed to help students improve their occupational skills by working under the supervision of the Business Education teacher and the employer. This program is designed for a half-day of classes and a half-day of learning through a job experience. Students earn a 1 credit for each semester they are in the program. It is understood that students in Business Education work experience would be supervised by a Business Education teacher, and all other non-business work experience students would be supervised by a CWE teacher. Deviations may occur from time to time but with approval of the Applied Education Chairperson.

Prerequisite: Enrollment in Business Education course concentration.

Recommended for seniors in good standing.

Entrepreneurship/ The School Store

By learning the business functions involved in running a successful school-based enterprise, students will understand how to organize and operate their own business enterprise. Lessons focus on the characteristics of entrepreneurs and lead students through the process of setting up a business. Topics include accounting, research, advertising, marketing, planning, managing, and selling and then learning to translate that knowledge into the successful operation of our own school store.

Even students who choose not to manage their own business can benefit from utilizing the entrepreneurial way of thinking. The knowledge and skills of entrepreneurship can assist people along any path they choose to follow for the rest of their lives.

Recommended for grades 9, 10, 11, and 12

ENGLISH

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

Grade 9

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

English 9 H

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 good writing and to adopt the practices on which skilled writers rely. Early and medieval 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.

English 9

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

Grade 10

English 10H

English 10H provides a thematic overview of American and European literature throughout various literary ages, including Elizabethan England, war-torn Germany, and present-day America. Students in this class will read novels, plays, poems, and non-fiction works, and will develop and hone writing skills by way of formal thesis-based essays and creative pieces that reveal an increasing depth of understanding and analysis.

English 10

English 10 reinforces those skills introduced to students in their first year of English 9 while deepening their understanding of the concepts outlined in the Common Core State Standards. Through the close reading of fiction and informational texts, class discussion, and the development of written responses, students will become more sophisticated readers and writers. They will expand their familiarity with, and application of, literary techniques in writing from all genres, and trace the development of major themes in works of increasing difficulty.

Grade 11

English 11H

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

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.

Grade 12 Electives

Advanced Placement English

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 have been designed to 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.

Civic Life & Documentary Filmmaking

Civics is a required course for graduation in the State of Connecticut. This course presents students with an alternative method of preparing to participate in exercising their political responsibilities as engaged and informed citizens using the tool of documentary filmmaking. Students will identify civic issues that spark their interest and actively investigate and research real stories in their community that address constitutional issues. They will participate in discussions both within their classroom and with students from other participating schools. Using a variety of writing projects, students will also learn about the documentary film genre. They will be exposed to the necessary elements of filmmaking, while examining the historical development of the government and political systems, and the importance of the rule of law, the United States Constitution, Federal, State and local government structure, and the rights and responsibilities of citizenship. The end result will be a student-produced documentary film about an issue that truly matters to the class' members.

Film Studies

Want to be a filmmaker? Enjoy going to the movies? 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 you with the history of the motion picture, beginning with the silent era and concluding with the groundswell of DIY digital filmmaking. Members of this class will examine different critical approaches to film, learn how to "read" a movie, and study the work of prominent directors throughout the last century, one of whom they will research independently. Additionally, they will conceptualize, write, storyboard, shoot, edit, and screen before an audience of hundreds their own short-form motion pictures.

Semester-long Courses

Literary Genres

Each quarter of Literary Genres allows students to read a variety of fiction and non-fiction. The course is separated into units on Detective Fiction, Science Fiction, Horror, and an independent study of Young Adult Literature written by an author of their choice. Coursework includes both in-class and outside reading, creative and expository writing, and research using a variety of media including movies, television, and Internet sources. NOTE: Students may enroll in this semester course for one or both semesters.

Creative Writing

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 by which writers create challenging, engaging, entertaining, and inspiring works. Students study literary devices - such as mood, tone, and figurative language- 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 self-and-peer editing and writing conferences. NOTE: Students may enroll in this semester course for one or both semesters.

The Art of Storytelling *(Fall) (see Art offerings for Semester 2 course)*

Enjoy comic books, graphic novels or manga? Interested in telling an original story? If so, this hands-on, interdisciplinary 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 preparing to create this project, students will analyze famous (and not so famous) graphic novels, examine different ways to structure a narrative, and learn the processes of storyboarding, penciling, and inking.

Drama *(Spring)*

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

EXPLORING LIFE SKILLS

Exploring Life Skills

This course is designed to introduce all freshmen to the life skills and career opportunities in the areas of business, technology education, and agriculture. Each student will explore areas such as manufacturing, materials processing, graphic communications, personal finances, job preparation, computers, horticulture, natural resources, animal care, and mechanics. Time will be given for career exploration and planning, self-evaluation through career interest and learning styles inventories, and career guidance. At any time during the year students can join the FFA and can begin a Supervised Agricultural Experience program (SAE).

HEALTH AND PHYSICAL EDUCATION

HEALTH EDUCATION

All seniors and juniors are required to take and pass one marking period of health each year. Sophomores are required to take and pass a semester of health.

Sophomore Health

Sophomore Health covers the following units: drug and substance abuse, stress management, suicide prevention, death and dying, eating disorders, birth control and HIV/AIDS prevention.

Junior Health

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

Senior Health

Senior Health 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.

PHYSICAL EDUCATION

Students must take and pass physical education each year in order to graduate. Freshman and sophomore PE is one semester and junior and senior PE is one quarter each for a total of 1 ½ credits.

PE 9 has an emphasis on lifetime sports and teamwork. The four activities are golf, tennis, volleyball, and cooperative games.

PE 10 has an emphasis on fitness, as all sophomores are required to take the Connecticut State Fitness Tests. A full quarter will be devoted to fitness with activities that include lifting weights in the Fitness Center, mountain biking, running, cross-country skiing, snowshoeing, and fitness games. At the end of the quarter, students will be assessed in the PACER test for cardiovascular endurance, the push-up test for muscular strength, the curl-up test for muscular endurance, and the sit-and-reach test for flexibility. Self-defense is the other activity in which students will participate.

PE 11 and PE12 each have four activities and the individual classes will vote on two activities in which to participate..

PE 11 choices are volleyball, pickleball, team handball, and indoor soccer.
PE 12 choices are badminton, archery, tennis, and ultimate frisbee.

MATHEMATICS

In 2010, Connecticut joined 46 other states in adopting the Common Core State Standards in Mathematics (CCSS-M). The CCSS-M expect that mathematics instruction will focus on helping students to develop a greater understanding of the mathematical concepts that they are learning while simultaneously developing computational fluency. The CCSS documents note that "One hallmark of mathematical understanding is the ability to justify, in a way appropriate to the student's mathematical maturity, why a particular mathematical statement is true or where a mathematical rule comes from" (p. 4).

The curricula for all mathematics courses offered by HVRHS have been revised to reflect the requirements of the CCSS-M.

In addition to prescribing specific mathematical content for all high school students, the CCSS-M includes eight Standards for Mathematical Practice. These eight standards, described in detail below, guide instruction in all courses taught in the mathematics department.

1. Make sense of problems and persevere in solving them.
Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

2. Reason abstractly and quantitatively.
Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to *decontextualize*—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to *contextualize*, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved.
Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

3. Construct viable arguments and critique the reasoning of others.
Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions

communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

4. Model with mathematics.
Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

5. Use appropriate tools strategically.
Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

6. Attend to precision.
Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

7. Look for and make use of structure.
Mathematically proficient students look closely to discern a pattern or structure. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2×7 and the 9 as $2 + 7$. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects.

For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.

8. Look for and express regularity in repeated reasoning.
Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Noticing the regularity in the way terms cancel when expanding $(x - 1)(x + 1)$, $(x - 1)(x^2 + x + 1)$, and $(x - 1)(x^3 + x^2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results. (Adapted from *The Common Core State Standards in Mathematics*, pages 6-8).

Given the sequential nature of the courses in the College Prep (CP) and Honors (H) levels, a student earning a grade below 70 in a prerequisite course will need his or her teacher's approval to continue in that level. Should the student's teacher not believe that the level is appropriate, the student's parent or guardian will be asked to complete a level over-ride form, available from Guidance. Students should understand that courses in the Mathematics Department offered at the General Level (G) **will not** prepare a student for college admissions testing or for college-level mathematics.

Core Mathematics

This introductory course is designed for students who are not ready for college preparatory mathematics. The course includes study in four broad areas of mathematics: Numerical and Proportional Reasoning, Algebraic Reasoning: Patterns and Functions, Geometry and Measurement, and Working with Data. The majority of the student's experiences in this course involve the application of elementary mathematics to real-world situations.

As a result of their experiences in Core Mathematics 1, students are expected to become more confident problem solvers and better able to use mathematical procedures in 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 as tools for the solution of problems and to explore mathematical concepts.

Pre-Algebra G

This introductory course is designed to bolster the arithmetic and informal algebraic skills of students to prepare them for a formal course in Algebra. The course includes study in four broad areas of mathematics: Numerical and Proportional Reasoning, Algebraic Reasoning: Patterns and Functions, Geometry and Measurement, and Working with Data. The course is designed to allow students time to practice those skills that will be necessary for their success in Algebra I. Additionally, students will be exposed to relevant topics from probability and counting, data analysis, elementary mathematics, and geometry.

As a result of their experiences in Pre-Algebra, 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.

Workplace Math 1 G

Workplace Math 1 teaches algebraic concepts through real-world applications. Students who are pursuing a vocational or technical course of study or plan on joining the work force upon graduation from high school would most benefit from this class. 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 Pre-Algebra or Core Math 1. Workplace Math 1 is NOT open to students who have passed Geometry. Workplace Math 1 may not be taken concurrently with or following Workplace Math 2. This course is not open to freshmen.

As a result of their experiences in Workplace Math 1, 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.

Workplace Math 2 G

Workplace Math 2 teaches mathematical concepts as they are applied in the workplace. Students who are pursuing a vocational or technical course of study or plan on joining the work force upon graduation from high school would most benefit from this class. Students examine workplace-related situations and how they relate to mathematical concepts such as linear equations, non-linear equations, statistics, probability, geometry, and consumer math topics. Sequentially, this course is intended for those students who have successfully completed Workplace Math 1 or Pre-Algebra. Workplace Math 2 is NOT open to students who have passed Algebra 2. Workplace Math 2 may not be taken concurrently with Workplace Math 1. This course is not open to freshmen.

As a result of their experiences in Workplace Math 2, 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.

Algebra 1 CP

A fundamental concept in the study of mathematics is function. A function is a relationship between two quantities, and can generally be expressed in four ways: verbally, numerically, graphically and analytically. This course begins a student's exploration of functions that continues through the college prep and honors sequences into Calculus. Along the way, students will write and solve equations and systems of equations to model real-world problems, draw graphs to describe linear and non-linear relationships, collect and describe data, investigate sequences (both arithmetic and geometric), and develop facility with operation on polynomials.

As a result of their experiences in Algebra 1, students are expected to develop both procedural competence and conceptual understanding. Students should be prepared to write regularly to describe the procedures that they

employ and to explain and defend their reasoning. Students will use scientific and graphing calculators as tools for the solution of problems and to explore mathematical concepts.

Prerequisites: 70 or higher in Pre-Algebra or teacher recommendation and a required score on both the Iowa Algebraic Readiness Test (75th percentile) and a departmental basic skills assessment (75 percent). Students entering Algebra 1 are expected to be able to compute with positive and negative numbers (without a calculator), to plot points on a coordinate plane, and compute with ratios, proportions, and percent. Students without these prerequisite skills must enroll in Pre-Algebra.

Geometry CP/H

The Common Core State Standards in Mathematics suggest "the fundamental purpose of the course in Geometry is to formalize and extend students' geometric experiences from the middle grades" (p. 27). This formal course in plane geometry exposes students to the important definitions, postulates, and theorems that describe the world around them. Students typically will study areas such as congruent and similar figures; parallel lines; right triangles and right triangle trigonometry; volume; properties of circles; coordinate geometry; and applications of probability. Throughout the course, students employ inductive reasoning (experiments in pattern generation) to generate predictions (conjectures) about various geometric figures and then use deductive reasoning (formal proofs) to validate those predictions.

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

Prerequisite: Successful completion of Algebra 1. Students with final grades of 70 or lower in Algebra I are strongly encouraged to audit Algebra 1 (either concurrently with Geometry or prior to enrolling in Geometry) to improve their skills.

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: 70 or higher in Algebra I and successful completion of, or co-registration with, Geometry. A student who earned a grade of 70 or lower in Algebra 1 is strongly encouraged to audit Algebra 1 prior to enrolling in Algebra 2 to obtain the needed background knowledge for this course.

Algebra 3 CP

This third year of algebra, which serves as a bridge between high school and college mathematics, continues the student's study of functions and 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 studied in Algebra 3 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: 70 or higher in Algebra 2. Students who anticipate needing a formal calculus course (taken either at HVRHS or in college) should enroll in Precalculus.

Precalculus H

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 studied in Algebra 3 CP 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: 70 or higher in Algebra 2H. 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 2 CP 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 required for the student to be prepared for Precalculus H.

Advanced Placement Calculus

Calculus provides the base upon which higher mathematics rests. This course combines the analytical and geometric ideas gained in previous course work 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: 70 or higher in Precalculus and recommendation of the department. A student who has taken Algebra 3 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.

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: 70 or higher in Algebra 2 or recommendation of department.

Independent Study Advanced Placement Calculus 2 (BC) (not offered in 2015-2016)

Additional topics in the study of the 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.
This course is graded Pass/Fail only.

Prerequisites: 70 or higher in Advanced Placement Calculus and permission of the instructor and department chair.

MUSIC

Band

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.

Chorus

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.

Music Theory 1

This course was 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 2010 and Practica Musica programs.

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

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 teacher permission.

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 Pro Tools. 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 .

SCIENCE

In preparation for CAPT, all freshmen should enroll in the appropriate level of Concepts in Chemistry and Physics. 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 G, CP	Earth Science CP
Physics CP, H	Environmental Science CP	
A.P. Biology	Marine Biology CP	

Students should discuss their appropriate course sequence and placement with their science teacher, guidance counselor, and parent/guardian.
Three years of science are required for graduation. Students should carefully consider post-graduate plans when selecting science electives **.**

Grade 9

Concepts in Chemistry and Physics CP/ G

This course emphasizes the basic chemical and physical concepts that underlie a great deal of our technology. Students will learn how those concepts are applied in our lives. The nature of matter, the chemistry of water, and the use of natural resources form the first part of the course. The chemistry of carbon provides the background for understanding the role of polymers (plastics) and carbon-based fuels in our society. The energy transformations associated with combustion, electric currents and nuclear reactions are explored in the second half of the course. All of these concepts are applied to protecting our environment and quality of life as they inform our decisions about transportation, development, and the use of energy and resources.

Concepts in Chemistry and Physics H

This course explores the same standards as Concepts in Chemistry and Physics CP; however, topics are dealt with in more depth and at a more demanding pace.

Prerequisite for CCP H: Recommendation by eighth grade teacher and guidance counselor

Grade 10

Biology CP

This is the second course in the science sequence for students who have successfully completed Concepts in Chemistry and Physics 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: Concepts in Chemistry and Physics CP or permission of the instructor

Biology G

This is the second course in the science sequence for students who have successfully completed Concepts in Chemistry and Physics G. Biology G is divided into four major areas: ecology, cells, genetics, and physiology. A focus is placed on the use of the scientific method in the context of biological study.

Biology H

This is the second course in the science sequence for students who have successfully completed Concepts in Chemistry and Physics H. 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. Participation in the school science fair is required.

Prerequisite: Concepts in Chemistry and Physics H or permission of the instructor

Grade 11 and Electives

Chemistry CP

This course in conceptual chemistry explores the basic principles and theories of chemistry in the context of societal problems. 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, Geometry (which may be taken concurrently) or permission of the science department chair

Chemistry H

This course presents 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. Emphasis is given to laboratory investigations using mathematical and analytical problem-solving skills. Writing about chemical concepts is a major focus of the course.

Prerequisites: Biology H, Algebra 2 (which may be taken concurrently), or permission of the instructor

Earth Science CP

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: Concepts in Chemistry and Physics and Biology

Environmental Science CP

This demanding survey course examines some of the major topics in environmental science including climate change, biodiversity loss and green energy. This is done through class discussion, reading popular literature and conducting experiments. The students will also spend time doing environmental monitoring in the surrounding school ecosystem.

Prerequisites: Concepts in Chemistry and Physics and Biology

Forensic Science G/CP

This course is a basic introduction to the use of science and the scientific method in crime solving. Problem solving and study of physical evidence will be stressed; therefore, lab activities and analysis of "crime scenes" will be frequent. Topics explored will include fingerprinting, blood typing, hair and fiber analysis, toxicology, DNA and biotechnology. Taking this course at the CP level requires the completion of additional assignments.

Prerequisite: Concepts in Chemistry and Physics, Biology

Marine Biology CP

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: Concepts in Chemistry and Physics, and Biology

Advanced Placement 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 prepared to take the national advanced placement exam.

Prerequisite: Successful completion of Biology CP or H, Chemistry, and Precalculus (which may be taken concurrently), or permission of the instructor

Physics CP

Physics CP 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, electrostatics, and nuclear physics. The course also connects with other sciences and includes aspects of the history and philosophy of science. Laboratory experience and specialized computer use 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.

Prerequisite CP level – Concepts in Chemistry and Physics, Biology, and Algebra 2 (which may be taken concurrently)

Physics H

Physics H is an introductory one-year college preparatory analytical and mathematical physics course that touches on most of the aspects of general physics including vectors, mechanics, sound, light, magnetism, electrostatics, and nuclear physics. The course also connects with other sciences and includes aspects of the history and philosophy of science. Laboratory experience and specialized computer use 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. Students taking Physics at the H level should be comfortable with quantitative thinking and algebraic reasoning.

Prerequisite: H level – Concepts in Chemistry and Physics, Biology and Precalculus (which may be taken concurrently).

Students may also obtain science credit (.5) through courses offered by the Agricultural Education Department. They are Equine Science, Freshwater Fish and Wildlife, and Veterinary Science. Please see the Agriculture Science and Technology Education section of this book for more details.

SOCIAL STUDIES

Grade 9

History 9H

Limited to those students who have demonstrated unusual promise for mature and independent work, this course features the study of ancient and medieval cultures, with a focus on the development of Western heritage through the Renaissance. Team teaching combines history with art, music, and the study of literature in English 9H. An inquiry approach, development of skills (especially process writing), use of original sources, guest speakers, and field trips are incorporated into this class. Summer reading assignments are a required part of the curriculum. Students enrolled in History 9H must also be enrolled in English 9H.

Social Studies 9 CP/G

The successful completion of Social Studies 9(CP or G) is required of all freshmen except those enrolled in History 9H. The Social Sciences Department believes that to be effective citizens in a changing world, our students must learn to understand and empathize with the common humanity of all people. To further that aim, this course focuses on non-Western culture and history. Topics of the class include China, India and Pakistan, Africa, and the Middle East . The course also focuses on the development of fundamental social studies skills, including critical reading, independent research, persuasive writing, oral presentation, and effective group work. College Prep students are required to do additional reading, writing, and research. All Social Studies 9 students are required to complete summer reading.

Grade 10

History 10H

This course is an extension of the work done in History 9H and focuses on Europe from the Renaissance to the present. The study of history connects with the study of literature in English 10H. Art and music are included in an overall examination of the ideas and institutions which have helped shape the modern world. Summer reading assignments are a required part of the curriculum. Students enrolled in History 10 H must also be enrolled in English 10 H.

Modern European History CP/G

This course focuses on the development of Western Civilization from the sixteenth century to the present. Current events, with an emphasis on news from Europe, is included. The course proceeds on a chronological basis and is supplemented by a variety of oral and written projects, guest speakers, films, and field trips. College Prep students are required to do additional reading, writing, and research. All Modern European History students are required to complete summer reading.

Grade 11

History 11H

United States History at the Humanities level emphasizes the relationship between the American past and the American present. Using a problem-solving approach whereby the textbook serves only as one among many resources, this course calls upon the student to play an active role in the learning process. The development of persuasive writing skills is a key component of this course. The state 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 History 11H must also be enrolled in English 11H. 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.

United States History CP/G

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 the Colonial Era 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. College Prep students are required to do additional reading, writing, and research. All United States History students are required to complete summer reading.

Senior Year and Electives

Civics

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

Civic Life & Documentary Filmmaking

Civics is a required course for graduation in the State of Connecticut. Civic Life presents students with an alternative method of preparing to exercise their political responsibilities as engaged and informed citizens by using the tool of documentary filmmaking. Students will identify and actively investigate real stories in their community that address constitutional issues. They will participate in discussions both within their classroom and with students from other participating schools. Using a variety of writing projects, students will also learn about the documentary film genre. They will be exposed to the necessary elements of filmmaking, while examining the historical development of the government, the importance of the rule of law, and the rights and responsibilities of citizenship. The end result will be a student-produced documentary film about an issue that truly matters to the class members. Civic Life students are required to complete summer reading.

ECE Introduction to American Politics CP

This course 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 of $90 will apply to those students who wish to take this course for University of Connecticut Credit). Students in this course are expected to complete summer reading.

History 12H

The culmination of the Social Studies Humanities program, this course focuses upon ideas that have influenced the course of history, and their relationship to modern life. The course looks to apply philosophical ideals from all eras to better understand current issues. For example, in recent years the course has focused on the philosophy of war. Included is the development of research and writing techniques leading to the preparation and presentation of numerous essays of college quality. General objectives for the course are: to draw together concepts from the first three years of history courses in the Humanities sequence, to study the influence on history of great thinkers and their ideas, and to explore the relationship between historical events and contemporary life. Summer reading assignments are a required part of the curriculum.

Modern America CP

This course focuses on the contemporary world, from the end of World War II in 1945 to the present. As such, its major areas of study include the Cold War, Civil Rights Movement, Vietnam Era, and the post-9/11 world. A focus of this course is to prepare students for the written exercises they will encounter in college history classes. Ample opportunities for guided research are provided.

Psychology/Economics G

This course addresses two subjects of extreme importance to seniors graduating in the 21st Century: Psychology and Economics. Psychology surveys human development from birth to death with emphasis on theory and application of individual worth and self-actualization. Economics includes theory as well as a practical study of issues which must be understood by citizens of a globally interdependent world. Techniques, materials, and evaluation of content vary in each of the quarters. Student success in this course is dependent upon participation, interest, and completion of assignments, as well as competency in content areas as determined by quizzes and tests.

Sociology CP

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

Environmental History CP (Co-taught with the agriculture education department)

Student 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. Through interdisciplinary teaching with the Agriculture Education and Social Studies Departments, students will develop an understanding not only of the historical events but also of the nature of the American environment and its resources.

Students will read works from authors such as John Burroughs, Rachel Carson, and John Muir. Major topics of study will include: The American Environment in 1491, Colonists in the New World, The First Ecological Movement, The Cotton South and the Civil War, The Exploitation of the Great Plains, Wilderness and Conservation in the Early 20th Century, and the Modern Ecological Movement.

Students will also gain first-hand experience - through field exercises and a supervised environmental history project - in reading an historical landscape and examining how man has both utilized and altered it.

Students in this course will receive .5 credits in Social Studies and .5 credits in Agriculture Education.

SPECIAL EDUCATION

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 special needs. All programming is determined by PPT agreement.

Co-taught General Education- A Special Education and General Education teacher team to provide differentiated instruction to students to maximize learning and academic success.

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.

Learning Strategies- May be offered for credit. The course is designed to improve academic skills and maximize independence, organization and self-knowledge for success in the high school setting and beyond.

LS1 (9-10 graders) focuses on remediating and building academic skills based on IEP goals and objectives as well as developing self-awareness and strategies for increasing independence.

LS2 (11-12 graders) focuses on improving academic skills based on IEP goals and objectives as well as building college and career readiness, independence and living skills (ie budgeting) in preparation for post-secondary living.

Individualized Education subject area courses- by PPT recommendation. Students who exhibit significant deficits in basic academic skills are remediated through small group or individualized instruction per IEP goals and objectives.

Transition and Work Study experiences- by PPT recommendation. Students who require more individualized or intense life or social skills training. Students can either shadow, or work at various work sites with different levels of supervision and instruction to prepare them for employment after graduation.

Alternative Learning Program for Student Success (ALPSS)- The ALPSS program is a cohort of students who require on-site therapeutic counseling services in partnership with Wheeler Clinic, and individualized Special Education academic instruction. Although the amount of time each student spends in the ALPSS classroom varies, all students demonstrate a need for a closely supportive and therapeutic environment to act as an anchor for their daily school experience.

Related Services – Counseling, Speech Language, Occupational and Physical Therapy are available as agreed upon by the PPT per individual student need.

TECHNOLOGY EDUCATION

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. This course may be repeated for additional credits by contracting for independent study with the instructor. Students may enter or exit this course at mid-year.

Prerequisite: 1 credit of Introductory Metal Technology and permission of instructor

Class limited to 16.

Advanced Woodworking Technology

This course gives the student an opportunity to apply previously gained skills and knowledge toward independent projects. New areas of learning include shop organization and equipment maintenance. THIS COURSE MAY BE REPEATED FOR ADDITIONAL CREDITS BY CONTRACTING FOR INDEPENDENT STUDY WITH THE INSTRUCTOR.

Prerequisite: 1 credit of Introductory Woodworking Technology or permission of instructor

Class limited to 16.

CAD (Computer Assisted Drafting)

CAD is a self-directed, tutorial based course designed for students desiring comprehensive training in computer assisted drafting. CAD is offered concurrently with the Drafting and Electronic Publishing course and is arranged for by the student through a contract with the instructor.

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 14.

Introductory Automotive Technology

Students will learn the fundamentals of the operation of the modern automobile as well as routine and preventative maintenance and basic repairs. The process of purchasing and owning/operating an automobile will be learned by working with amortization charts and studying various forms of insurance coverage. Driving issues will be the topic of discussions and writing assignments to include safety, State laws and driver distractions. A State Police officer is invited to join such discussions. Students completing this course will be knowledgeable in all areas of car ownership.

Prerequisite: Power Technology

Class limited to 16.

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 metalwork, mechanical and physical joining, forging and casting, heat treatment, brazing and soldering, MIG and Arc welding as well as other supportive technologies employed to complete the fabrication of planned project work. A unit requiring a technical write-up of a semester project is also a key focus as technology concepts present many opportunities to support interdisciplinary coursework. Students may enter this course at mid-year.

Class limited to 16.

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.

Power Technology

This course explores the various ways that energy is harnessed to produce work. In short, the technology of applying power to do that work. The traditional study of two and four stroke engines remains an early focus of the course but the idea is to move further into all aspects of power technology including the study of energy forms. Individual project work will entail the planning and fabrication of a small mouse-trap or CO2 vehicle. Students completing this course will have a solid understanding of the means by which resources are used for transportation and energy. Multimedia and hands-on presentations comprise the greater part of instruction.

Class limited to 16.

Production Graphics

This course will use a hands-on approach to teach students how to design and execute graphic arts projects. 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 screen process of printing will allow students to execute artwork and designs on a varied number of substrates including vinyl stickers and magnets. Black and white chemistry photography will provide opportunities for students to truly understand the workings of cameras and will teach the concepts of chemical reactions, focal length, light exposure and material handling to produce professional quality matted images.

Introductory Black and White Photography

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.

Technology Education Exploration

Technology Education Exploration is a semester course exposing the student to selected manufacturing, and communication experiences. This activity based course allows students to learn through the use of common tools, processes, technology, and materials. Special emphasis is placed on workplace competencies including: resource management, interpersonal skills, information processing, systems analysis, and application of technologies.

Class limited to 16 students.

WORLD LANGUAGES

French 1 CP

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.

French 2 CP

The course is a continuation of French 1. Emphasis is placed on student's vocabulary and increasing his 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

French 3 CP

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 and engages in a more mature and extensive reading program.

Prerequisite: French 2

French 4 H

At this level, students 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. Students also receive a broad introduction to some of the key names, titles, and themes of the history and literature of France. The goal of the course is to enable students to communicate intelligently and accurately.

Prerequisite: French 3

French 5 H

French 5 has been 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. Using well-known and widely accepted texts and materials, 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

Independent Study Latin 1 CP

This course is directed by the self-disciplined student who has already successfully completed at least two years of French, German or Spanish. The Artes Latinae CD-Rom program was developed by Dr. Waldo Sweet of the University of Michigan and is designed to provide step-by-step learning through direct contact with the wisdom and daily activity of the ancient people. This course is taken pass/fail and must be the student's seventh course.

Prerequisite: Senior or junior standing and permission of instructor; limited enrollment.

Independent Study Latin 2 CP

This course offers the student who has successfully completed the Independent Study Latin 1 program an opportunity to continue his/her study of Latin. The CD-Rom program Artes Latinae - level 2 is used. This course is taken pass/fail and must be the student's seventh course.

Prerequisite: Senior standing and permission of instructor; limited enrollment.

German 1 CP

At this introductory level of German, students will acquire essential listening, speaking, reading and writing skills through oral practice of conversational phrases, vocabulary and simple sentences and questions related to basic communication needs. Students use the German language daily in dialogs, oral exercises and drills. Reading and writing skills as well as grammar are reinforced through class work and homework assignments. Students are also exposed to an introduction of culture in German speaking countries.

German 2 CP

Students enrolled in the second year of German will review vocabulary, phrases and grammatical structures presented in level one. Increased use of the target language in the classroom is expected and encouraged. Students will expand their vocabularies and improve their skills in comprehending, speaking, reading and writing German. Students also learn more about the culture and traditions in German-speaking countries.

Prerequisite: German I

German 3 CP

In German 3 the student continues to refine and strengthen those skills developed in the first two levels. A review and strengthening of grammatical principles precedes a smooth transition into new structures and usages. Even though extensive reading and writing are emphasized, oral expression and accent is centered on as well. A continuation of the culture and history of German speaking countries is included.

Prerequisite: German 2

German 4 H

German 4 extends the learning and practices utilized in the first three levels and leads quickly to a more intensive study of composition, vocabulary, and expression through extensive reading, speaking, and writing in German. Almost total reliance on the use of spoken German is insisted upon as the medium of communication at this level. Selections from various authors and poets will augment periodicals and text materials as the written bases of study.
Prerequisite: German 3

German 5 H

At this level, students will review German vocabulary, idioms, and grammar in conjunction with a program of reading, writing, and speaking. Selections from classical and contemporary German literature as well as current periodicals will be read and discussed in German. Students will write short compositions on a variety of topics.

Prerequisite: German 4

Spanish 1 CP

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.

Spanish 1X (Part 2) G

This course has similar goals to Spanish 1, but the basic grammar and vocabulary of the Spanish language are presented over a two-year period. The students will acquire the essential listening, speaking, reading and writing skills necessary for communicating practical, everyday needs. A variety of learning methods and materials is used to enhance skill development. This course is recommended for general students who may experience difficulty in learning a foreign language.

Prerequisite: Teacher and/or Guidance Counselor recommendation

Spanish 2 CP

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

Spanish 2 X (Part 2) G

This course has similar goals to Spanish 2, but the basic grammar and vocabulary of the Spanish language are presented over a two-year period. The students will further develop oral and written proficiency in the language through grammar presentation and an expansion of the student's vocabulary and writing skills. This course is recommended for general students who may experience difficulty in learning a foreign language.

Prerequisite: Spanish 1

Spanish 3 CP

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

Spanish 4 H

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

Spanish 5 H

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