

Essex High School Program of Studies 2016-2017



**2 Educational Drive
Essex Junction, VT, 05452
(802)879-7121**

ehs.ccsuvt.org

School Code: 460-135

Member of the College Board
Approved by the Vermont State Department of Education
Accredited by the New England Association of Schools and Colleges
Member of the National Association for College Admissions Counseling (NACAC)
Member of the New England Association for College Admission Counseling (NEACAC)
Member of the New England Secondary School Consortium (NESSC) League of Innovative Schools
All EHS School Counselors are members of the American School Counseling Association (ASCA)

Principal's Message

Dear Students and Parents,

Essex High School provides a comprehensive, rigorous, innovative curriculum and schedule. Our curriculum is designed to help meet the numerous needs and interests of our students as they prepare for college and career options. Our world is rapidly changing and the needs of our students graduating from high school now are different than what their parents experienced.

The 2016-2017 Program of Studies offers a wide variety of courses designed to meet graduation requirements and also to allow students to pursue flexible pathways of interest. I encourage students to optimize their math skills, be able to write effectively in many venues, and proficiently deliver oral presentations individually, and as part of a team. These are crucial skills you should develop while attending Essex High School, regardless of your college or career aspirations.

Please consider the following when thinking about your course selections:

- What skills do you wish to learn during your time at Essex High School?
- Are your choices challenging?
- Are your choices congruent with your personal learning plan?
- Are you taking full advantage of our wide array of offerings?
- Are you considering a Center for Technology - Essex course or program?
- Are you considering an internship your junior or senior year?
- Are you considering a Virtual High School Collaborative or Vermont Virtual Learning Cooperative online course?
- Have you planned an extra-curricular activity?
- Have you considered a community service project?
- Are you interested in developing a research project in an area that interests you?
- Are you learning foundational, personal finance skills and concepts?
- How will your many experiences here enhance career opportunities for you?

Choices are not always clear and simple. Please take full advantage of our school counseling staff, teachers, and administrators when making your selections.

I know you are fortunate to be enrolled in Essex High School. We have a proven track record of success. Please be an active learner and take full advantage of all that we have to offer. Remember: What you learn today, you earn tomorrow.

Respectfully,
Rob Reardon, Principal

Table of Contents

Core Values and Beliefs	4
Information and Definitions	4
Academic Year	
Daily Schedule	
Flex Block	
Full-time and Part-time Status	
Personal Learning Plans (PLPs)	
9th and 10th Grade Course Selection and Multiple Pathways	
Course Levels and Sequences	
NCAA Clearinghouse and Athletic Eligibility	
Alternative Credit Options	6
Career and Technical Education	
Independent Programs	
College Courses	
Virtual/Online Learning	
Learning Labs and Study Skills Support	8
Supportive Study Skills	
Learning Lab	
ACE Program	
Graduation Requirements	9
Student Educational Plan Worksheet	10
<u>2016-2017 Course Offerings</u>	
Academy Pathways: AVPA and STEM	12
Business Education	13
Driver Education	15
English	15
English Language Learners (ELL)	21
Fine Arts	22
Health and Physical Education	28
Mathematics	30
Practical Arts	34
Science	38
Social Studies	43
World Languages	48
Center for Technology - Essex	51
Burlington Technical Center	52

CORE VALUES AND BELIEFS

Mission Statement/Narrative

Essex High School is a mission-driven and learning-centered community that believes, through both independent and collaborative engagement, everyone can develop excellence in their individual pursuits. We offer a rigorous and varied curriculum and believe in challenging students to think critically and act responsibly, compassionately, and respectfully. We foster intellectual curiosity and resourcefulness, so that students can engage in their learning to achieve the behaviors, skills, and knowledge essential to becoming contributing members of their community and citizens of a diverse and ever-changing world.

Learning Expectations/Outcomes adopted May 2011 as a part of the EHS accreditation process through the New England Association of Schools and Colleges (NEASC)

ACADEMIC COMPETENCIES

1. Read and critically analyze a range of texts, media, and forms of art for a variety of purposes.
2. Communicate clearly and creatively for a variety of purposes and audiences.
3. Engage in the writing process when producing formal pieces of writing.
4. Demonstrate a command of grammar, usage, and mechanics in writing.
5. Formulate questions and solve problems.
6. Effectively analyze and evaluate information in order to draw valid conclusions.
7. Demonstrate mathematical literacy and reasoning skills.
8. Understand which learning styles and strategies best facilitate their own learning.
9. Demonstrate an understanding of personal finance.
10. Use appropriate technological tools and information literacy skills to solve problems and enhance learning.

SOCIAL COMPETENCIES

1. Demonstrate and foster compassion, respect, responsibility, and integrity.
2. Work cooperatively and collaboratively with peers and adults within the school and greater community to support academic, personal, and social development.
3. Make decisions that will positively influence social, emotional, and physical health and well-being.
4. Understand choices have consequences.

CIVIC COMPETENCIES

1. Understand and exhibit citizenship in order to be a contributing member of a democracy and of a global community.
2. Understand a wide variety of post-secondary options.

INFORMATION AND DEFINITIONS

Essex High School (EHS) provides a rigorous and varied curriculum in order to support every student with access to state graduation requirements and to support students in pursuing individual interests. Courses listed in this Program of Studies may change due to insufficient enrollment, budgetary constraints, staffing changes, or other factors, including changes in state and national curriculum.

Academic Year

The academic year includes four quarters, each approximately nine weeks in length.

Daily Schedule and Course Credits

EHS follows a “block” schedule with alternating A and B days including four full blocks per day. Full-block courses last for 80 minutes, and split-block courses last for 38 minutes. Courses can be: one semester long for a full block (.5 credit); full year, split-block (Health only, .5 credit); or full year, full block (1 credit). Some courses offer 1.5 or 2 credits based on additional time or alternative formats.

Flex Block

Flex Block happens for 30 minutes every day. One day per week students meet with their Flex Block advisor to schedule their Flex Blocks for the rest of the week. Scheduling options include academic support at the request of the student or teacher, enrichment activities, and other opportunities including open gym and the library.

Full-time and Part-time Status

Full-time students have at least six classes per semester. Science and Math classes with labs (1.5 blocks) count as two classes, Health (.5 block) counts as one class, and pre-approved alternative credit options count as one class. Part-time students are not eligible to participate in co-curricular activities including athletics, cannot receive Latin Honor designation at graduation, and are not eligible for Honor Roll. Less than full-time status may also affect certain Federal/State benefits and insurance coverage. Approval for exceptions must be obtained from the administration.

Personal Learning Plans (PLPs)

Beginning with the 2015-2016 school year all students in grade nine, and eleventh and twelfth graders taking a dual enrollment course, will create a Personal Learning Plan (PLP). This formal plan and process involves self-assessment by the student to set and achieve learning goals based on personal, academic, and career interests. PLPs cover personal, academic, and career development in an action plan including deadlines and annual updates.

9th and 10th Grade Course Selection

Grades 9 and 10 serve as the foundation of a student's Essex High School education while allowing students the opportunity to explore subjects of interest. Incoming 9th grade students are required to enroll in four core courses (Math, English, Social Studies and Science) and may choose to take additional electives, including courses that fulfill graduation requirements. Students are encouraged, but not required, to schedule at least one study hall. A typical student's first two years at EHS include the following courses:

9th GRADE		10th GRADE	
9th Grade English	1 credit	10th Grade English	1 credit
9th Grade Social Studies	1 credit	U.S. History	1 credit
Mathematics	1 credit	Mathematics	1 credit
Earth and Physical Science	1 credit	Biology	1 credit
Electives	2-4 credits	Electives	2-4 credits

Course Levels and Sequences

Some courses are designed around student interest and are open to students of all ability levels. Others are organized around both interest and ability levels. Content areas offering leveled courses describe difficulty levels in their introductory sections. Students or parents interested in exploring a level change during the semester can begin by communicating with the course teacher or with their School Counselor. Requests are then processed through the School Counseling Office and approved by School Administration.

Some content areas have courses that follow a sequence. For example, typically a student is required to take French I before French II. Exceptions are considered if a student demonstrates proficiency in some way. Students who feel they may meet this exception should discuss course selection with their teacher.

NCAA Clearinghouse and Athletic Eligibility

Students who intend to play sports at a Division I or Division II college must register with the NCAA Initial-Eligibility Clearinghouse during 11th or 12th grade. For specific information about NCAA eligibility requirements, consult the website at www.ncaaclearinghouse.org. For more information about EHS Athletics, please visit ehs.ccsvt.org/athletics.

ALTERNATIVE CREDIT OPTIONS

Students may have the opportunity to design an alternative program which suits their learning needs in order to satisfy graduation requirements. These alternative options can provide students with learning opportunities which may not be available at EHS or may not fit into the student's school day.

Career and Technical Education

The Center for Technology - Essex (CTE - *go-cte.org*) and Burlington Technical Center (BTC - *burlington-tech.info*) provide opportunities for EHS students to access rigorous technical training. Although some of the same courses are available at both centers, each center has its own unique delivery model. Students can visit programs at each center to decide which one best meets their educational goals and interests. CTE and EHS are co-located on the same campus. For more information about pursuing technical education opportunities, students can see course information at the end of this document, visit the CTE and BTC websites, and speak with their EHS School Counselor.

Independent Programs

COMMUNITY INTERNSHIP

This option is now a credit-bearing course. For more information, please see the full course description in the Business section.

COMMUNITY SERVICE

Students can earn .5 credit for 60 hours of community service. Students interested in receiving this elective credit must complete a pre-approval form BEFORE starting community service. A documented description of the community service activity and signatures from on-site supervisors are required. Students will receive a Pass/Fail grade.

INDEPENDENT STUDY

An independent study must be an integral part of an individual student's program that cannot be met through any of the existing curriculum offered at EHS or cannot be met because of the student's schedule. This learning experience may occur on the EHS campus or off site depending on the unique needs identified by the student in his/her application. Since academic credit can only be awarded by a certified professional, the instructor/evaluator must hold secondary school certification in the proposed content area of study. All Vermont Agency of Education-adopted standards and proficiencies must be addressed appropriately in the proposed learning opportunity.

A student interested in an independent study option should first meet with the teacher or teacher leader in the content area in which the student wishes to receive independent study credit. The student should then meet with their School Counselor to obtain any additional information and the independent study form. The form provides specific criteria necessary for a successful experience. Signatures required for approval include the student, parent, teacher or Curriculum Content Leader, School Counselor, and Principal.

College Courses

Students interested in receiving high school credit for a college course must meet with their School Counselor BEFORE starting the course.

DUAL ENROLLMENT

Vermont's Flexible Pathways Act (Act 77) provides high school students who are Vermont state residents the opportunity to use two college course vouchers during their 11th or 12th grade years in high school. Students may apply for a voucher for the semester they wish to enroll in a dual enrollment course. The voucher covers the cost of tuition for a course of up to four credits at any participating Vermont college. The voucher DOES NOT cover the cost of materials, textbooks, or transportation. Dual enrollment courses can provide both high school and college credit when successfully completed. Interested students should meet with their School Counselor and visit www.vtdualenrollment.org for more information.

EARLY COLLEGE

Early College is a full-year alternative to the senior year of high school. Students take courses in college, completing their senior year of high school and their freshman year of college simultaneously, tuition-free. For more information please contact your School Counselor and go to education.vermont.gov/flexible-pathways/early-college. You can find information about one example of a science and technology-focused Early College program here: www.vtc.edu/vast-faqs

Virtual/Online Learning

Virtual/online learning courses are delivered through the Internet. Course work is conducted through a learning platform that may include electronic forums, discussion groups, external resources, quizzes, Skype, social rooms, and electronically-submitted assignments. Learning activities may include pair work, small group work and project work. Courses are taught by licensed teachers with special training in online student support. Online class work time is flexible and can happen during and outside of the regular school day.

To receive EHS credit, students must meet with their School Counselor BEFORE starting the course to seek approval for taking the course and to complete the necessary forms. Options for accessing virtual/online learning opportunities for required and/or elective courses include the following programs:

VERMONT VIRTUAL LEARNING COOPERATIVE (VTVLC)

The Vermont Virtual Learning Cooperative (VTVLC) is a partnership of Vermont's K-12 schools and teachers offering online courses. VTVLC offers semester .5-credit or year-long 1-credit courses. Courses meet rigorous national standards and are designed to meet or exceed school graduation requirements. Twenty-five student slots are available per semester. For more information about VTVLC please visit their website (www.vtvlc.org). Completion of a credit pre-approval form is required BEFORE registering for a class - see your School Counselor for paperwork.

THE VIRTUAL HIGH SCHOOL COLLABORATIVE (VHS)

VHS online study program provides students with challenging and engaging student-centered courses that both enrich and expand EHS course offerings. Students gain 21st century global competence skills while participating in an online learning environment with a diverse peer group. VHS addresses students' educational needs by creating an additional pathway to college and career readiness. Twenty-five student slots are available per semester. For more information about VHS please visit their website (www.TheVHSCollaborative.org). Completion of a credit pre-approval form is required BEFORE registering for a class - see your School Counselor for paperwork.

OTHER ONLINE PROGRAMS AND CORRESPONDANCE COURSES may be available and must be pre-approved. For more information and approval for credit for available programs, students must meet with their School Counselor BEFORE registering for a class.

LEARNING LABS AND STUDY SKILLS SUPPORT

SUPPORTIVE STUDY SKILLS

.5 Elective credit per semester

This course is a specialized instructional program for students who have Individual Education Plans (IEPs). Students receive individualized instruction in reading, writing, oral language and/or math. They may also receive support with organization, behavior/social skills and/or study skills. The focus of the program is to help students understand their abilities and needs and to improve their academic skills so that they may become more independent in their learning.

LEARNING LAB

This full-block or split-block opportunity provides academic support for all content areas. Learning Lab access is determined through either the Educational Support Team or the student's 504 team.

ACE PROGRAM

The ACE Program is the Alternative Center for Education for Essex High School. It is located in the Park Street School in Essex Junction. ACE offers students an opportunity to combine the learning of basic academic skills with the acquisition of life skills and work experience. The individualized academic instruction is geared to the abilities, needs, and interests of each student. Students work to complete the necessary credits to graduate from Essex High School. The ACE Program is an educational resource option, and students who attend ACE may also attend courses at Essex High School and the Center for Technology-Essex. The ACE Program has a maximum enrollment, and students are selected through an application process.

Proficiency-Based Grading and Graduation Requirements for class of 2020

In accordance with Vermont Law Act 77 and the Vermont Education Quality Standards, the Class of 2020 will be able to demonstrate proficiency in the following areas:

- a) Literacy, including critical thinking, language, reading, speaking, listening, and writing.
- b) Mathematical content and practices, including numbers, operations, and the concepts of algebra and geometry.
- c) Scientific inquiry and content knowledge, including concepts of life sciences, physical sciences, earth and space sciences, and engineering design.
- d) Global citizenship, including the concepts of civics, economics, geography, world language, cultural studies, and history.
- e) Physical and Health education.
- f) Artistic expression, including visual, media, and performing arts.

Teachers will work with administrators to create draft proficiency-based graduation requirements and specific proficiency measures for each course. EHS and the school board plan to involve students, parents, and community members in February/March of 2016 in the transition to the proficiency-based system. An emphasis on each of the VT Agency of Education's five transferable skills will be incorporated into the teaching and learning process for each proficiency area. These transferable skills are clear and effective communication, self-direction, creative and practical problem solving, responsible and involved citizenship, and informed and integrative thinking.

STUDENT EDUCATIONAL PLAN WORKSHEET

Please use the worksheet on the next page
and these EHS Graduation Requirements
to help plan your academic path at Essex High School

EHS GRADUATION REQUIREMENTS

These requirements reflect a commitment to student learning.

To receive a diploma, students must earn a minimum of 24 credits, which must include the following:

- 4 credits English including 9th grade English, 10th grade English, and 2 additional credits based on the quadrant system
- 3 credits Mathematics
- 3 credits Science, including 1 credit each in Physical Science and Natural Science
- 3 credits Social Studies, including 1 credit in World Studies, 1 credit in U.S. History, and .5 credit in American Government
- 1 credit World Language
- 1 credit Fine Arts
- .5 credit Practical Arts
- 1.5 credit Physical Education, including .5 credit in Give Me Five
- .5 credit Health
- .5 credit Computer Applications
- 6 additional credits to reach a minimum of 24 credits

While completion of this program satisfies graduation requirements, students should reflect upon their post-secondary plans such as course requirements for college acceptance when choosing courses.

Essex High School Student Educational Plan

Name: _____

School Counselor: _____

Date discussed: _____

Class of: _____

Career Interests: _____

School if other than EHS:

REQUIRED SUBJECT AREAS	Grade 9, 20__-20__		Grade 10, 20__-20__		Grade 11, 20__-20__		Grade 12, 20__-20__		Other, 20__-20__		Credits
	Credits	Grade	Credits	Grade	Credits	Grade	Credits	Grade	Credits	Grade	
English (4)											0
Math (3)											0
Science:											
Physical (1)											0
Natural (1)											0
other (1)											0
Social Studies:											
World Studies (1)											0
U.S. History (1)											0
American Gov. (1/2)											0
other (1/2)											0
Languages (1)											0
Fine Arts (1)											0
Pract. Arts (1/2)											0
Physical Ed. (1½)											0
Health (1/2)											0
Computer (1/2)											0
Electives											0
Total Credits Required: 24	Grade 9 credits:	0	Grade 10 credits:	0	Grade 11 credits:	0	Grade 12 credits:	0	Other credits:	0	0

Essex High School

Courses

2016-2017

Academy Pathways: AVPA and STEM	12
Business Education	13
Driver Education	15
English	15
English Language Learners (ELL)	21
Fine Arts	22
Health and Physical Education	28
Mathematics	30
Practical Arts	34
Science	38
Social Studies	43
World Languages	48
Center for Technology - Essex	51
Burlington Technical Center	52

ACADEMY PATHWAYS

What is an EHS Academy? EHS Academies are not stand-alone schools but consist of an integrated pathway of courses and learning opportunities within EHS. Academy students fulfill the standard graduation course requirements but participate in Academy Pathway requirements as well. Currently EHS offers students the opportunities to participate in two academy pathways: the Academy of Visual and Performing Arts (AVPA) and the Science, Technology, Engineering & Mathematics (STEM) Academy.

Academy of Visual and Performing Arts (AVPA)

AVPA is for students who wish to develop a passion for learning through exploration, creation and immersion in the arts. In addition to a rigorous experience within EHS visual and performing arts courses, students receive intensive exposure to professional artists through an arts lecture series, hands-on workshops and field trips. The internship and capstone courses offer AVPA students immersion into relevant, real-world arts settings. Students who wish to obtain the AVPA endorsement may sign up at any time during their high school career.

AVPA ENDORSEMENT REQUIREMENTS

Students are eligible to receive the Academy of Visual and Performing Arts endorsement from Essex High School after meeting the following requirements:

- Earn at least three credits in visual and performing arts courses.
- Successful completion of the AVPA Internship Course, usually during junior year.
- Successful completion of the AVPA Capstone Project during senior year.
- Receive 30 points in experiential learning opportunity credits (ELOs) such as field trips, guest artist workshops, and other advisor-approved ELOs.
 - AVPA Field Trip - 3 points
 - Guest Artist Workshop - 4 points

Students interested in AVPA should enroll in a visual or performing arts course as soon as possible. These courses are: Art 1, Photo 1, Clay 1, Media Communications, Movie Production 1, Theater 1, Improv, Dance: Inclusion Fusion, Advance Dance Studio, Chorus, Symphonic Band, Orchestra, or Film Appreciation. Visual and performing arts teachers can help you with course selection and provide recommendations within a certain area of focus. Please see the Fine Arts section of this document for full course descriptions.

For additional information regarding AVPA, including how to sign up, please visit avpa.ccsuvt.org.

AVPA INTERNSHIP

Course Number F427

.5 Fine Arts credit

Grades 11-12

The first phase of this course involves a 20 hour pre-employment skills course. The curriculum includes interactive student activities, site visits with businesses, and classroom presentations by professionals and employers. Students learn soft job skills and prepare to be successful at an internship. The next phase includes a 40 hour internship with a local business where students gain real world experience and learn hard skills. Instructors track and support students throughout both phases of the course. The internship phase necessitates time and transportation outside of the school day. Students typically take this course their junior year.

Required for the AVPA endorsement.

AVPA CAPSTONE PROJECT

Course Number F428

.5 Fine Arts credit

Grade 12

This course actively engages students in the learning process by facilitating student-designed projects. This process allows students to learn about themselves and strengthen their organizational skills by moving an idea or dream toward a topic of interest, a post EHS application and/or a community need. It synthesizes previous learning, offers new interactions with ideas and people, results in a showcased product, and submits the student in charge of the project to a review and evaluation by a community panel. The work culminates in a formal presentation to the community. Students are expected to spend at least 40 hours of work on their capstone project.

Required for the AVPA endorsement.

Science, Technology, Engineering and Math (STEM) Academy

The STEM Academy is designed to support students interested in building a strong foundation in the STEM content areas and providing students with the opportunity to explore connections across different disciplines through additional experiences. Students who complete all of the components of the STEM Academy will receive the STEM Endorsement on their diploma to indicate that they have gone above and beyond in the areas of scientific exploration and creativity. This program has been created in conjunction with an advisory board consisting of representatives from institutions including UVM, GlobalFoundries and Champlain College. Students who wish to obtain a STEM Endorsement may start at any time in their high school career, however it is recommended to sign up at the end of the freshman year.

THE COMPONENTS OF THE STEM ACADEMY

1. Enrollment in STEM Advisory.
2. Creation of a STEM electronic portfolio.
3. Attendance at 10 STEM Lecture Series events or equivalent Experiential Learning Opportunities.
4. Successful completion of the STEM Internship course preferably during the junior year.
5. Successful completion of a STEM Capstone Project during the senior year. This project will be completed as an independent study in conjunction with your STEM advisory teacher. Capstone Projects must be approved in advance by the STEM Academy leader.
6. Four years of math.
7. Four years of science.

STEM INTERNSHIP

Course Number M130 (or M131 Online option) .5 Elective credit Grades 11-12

This one semester seminar course is for juniors and seniors who need to fill the internship requirement of the STEM Academy. Students will use digital research tools to follow current trends in technology and they will create an electronic portfolio of their experiences in the course. Pre-employment skills will be taught in conjunction with our Career Center. Students will then participate in a 40 hour internship at a local STEM business. If STEM Academy students are unable to fit the STEM Internship course into their schedule, they may sign up for Course Number M131 (the online option) to earn the 0.5 credit and complete the STEM Academy requirement. Students participating in the online version of this course will meet with the STEM Academy Leader to create a plan for the course, including preparation of an electronic portfolio on their own time and participation in at least 40 hours of off campus career experiences.

BUSINESS EDUCATION

Essex High School's teachers understand the need to prepare students for college, career, and life. In our economically competitive world, students must be equipped with basic business concepts and employment skills. Business Education teachers work to maximize the potential for all students' personal growth. Students have a variety of opportunities within the business course offerings and will find a course to fulfill their needs and interests.

ACCOUNTING I

Course Number B301 1 Elective credit Grades 11-12

This course is designed to teach students the principles of analyzing and recording business transactions manually and using Quickbooks software and Excel. Emphasis is placed on the role accounting plays in the interpretation of the financial condition of a business. This course is recommended for the job-bound student and is strongly recommended for students who are considering an Associate's or Bachelor's Degree in Business.

BUSINESS LAW

Course Number B303

.5 Elective credit

Grades 11-12

This course is designed for the student who wishes to have a grasp of everyday law and the implications it has on our daily lives with a focus on criminal and civil law and the legal system. A variety of topics to be explored include: Origins of Law, Law Enforcement and the Court System, Contractual Law, Insurance Law and Consumer Law. Several guest speakers enrich the curriculum. This course is recommended for students who are considering an Associate's or Bachelor's Degree in Business.

ECONOMICS

Course Number B315

.5 Elective credit

Grades 11-12

Today's world demands an understanding of basic Economic principles and concepts. Therefore, the focus of this course will highlight both Macro & Micro Economic topics; specifically, Capitalistic Theories, including a study of the Private and Public Sectors. The role of the Government Sector, Poverty, Urban Problems, and a look at Vermont's Economy will be presented to the student in terms of their relevance to the individual and his/her society. This course is recommended for students who are considering an Associate's or Bachelor's Degree in Business.

ENTREPRENEURSHIP

Course Number B325

.5 Elective credit

Grades 11-12

This course explores and prepares students to understand and implement skills necessary to manage businesses in all aspects of product and service selection, production and personnel management, obtaining financing, creating a business plan, evaluating financial reports, international business, and marketing of products and services. This course includes operational strategies in starting a business and franchising. Students will also explore tips on how to interview well and how to hire the right people. This course is recommended for students who are considering an Associate's or Bachelor's Degree in Business.

PERSONAL FINANCE

Course Number B330

.5 Elective credit

Grade 12

This course is designed to educate the 12th grader who is interested in the realities of the adult world. This course will highlight: budgeting, financial goal setting and financial planning, banking and credit, financing college, career choice and its impact on the paycheck, personal insurance policies, and investing. This course helps students make the important transition from high school to independent consumer.

COMPUTER LITERACY

Course Number B324

.5 Computer Applications credit

Grades 9-12

This course is designed to provide students the opportunity to explore a variety of tools by practicing perseverance and flexibility to complete tasks with technology applications.

The student will acquire advanced skills and knowledge in the following areas:

- Touch typing, formatting business letters, reports, spreadsheets and tables
- Professional skills in document formatting, email correspondence, and presentations
- Learning proper research skills using our library's resources and Internet sources
- Exploring career opportunities and the process of making career decisions

This course provides the student with the minimum computer literacy skills required for graduation. It is highly recommended that upon completion of this course the student acquires more computer skills by taking Critical Technology Skills.

ADVANCED COMPUTER LITERACY

Course Number B211

.5 Computer Applications credit

Grades 9-12

This course is designed for students who have already mastered the touch typing method and basic computer skills. In this course, students will enhance these skills by exploring advanced features of a variety of tools while practicing perseverance and flexibility to complete tasks with technology applications.

The student will acquire advanced skills and knowledge in the following areas:

- Touch typing, formatting business letters, reports, spreadsheets and tables
- Professional skills in document formatting, email correspondence, and presentations
- Learning proper research skills using our library's resources and Internet sources

- Exploring career opportunities and the process of making career decisions

This course provides the student with the minimum computer literacy skills required for graduation. It is highly recommended that upon completion of this course the student acquires more computer skills by taking Critical Technology Skills.

CRITICAL TECHNOLOGY SKILLS

Course Number B201

.5 Elective credit

Grades 9-12

Today's computer software is so easy to use that students often don't realize how much more there is to know that could be helpful in their everyday activities. The important role that computers play in a student's academic and career efforts demand that the student learns more than just the basics. Topics that are thoroughly explored: Microsoft Word, Excel, Access, PowerPoint and other presentation applications. In this course, students will learn about career opportunities through guest speakers (athletic directors, media, engineers) invited to class, possible related field trips, and career exploration research. The course work will be hands-on and practical to the individual student.

Prerequisites: Computer Literacy or Advanced Computer Literacy

COMMUNITY INTERNSHIP

Course Number B340

.5 Elective credit

Grades 11-12

This amazing opportunity offers students the chance to engage in real-life practical work experiences to explore career choices and meet future goals. Students will participate in in-class instructional sessions and coursework, then complete a 40-hour unpaid community internship experience at a local organization or business of the student's choice. This is a wonderful opportunity for the student who has demonstrated a strong interest and motivation to gain valuable work experience in a community setting. An informational interview for placement is required prior to the beginning of the course.

DRIVER EDUCATION

DRIVER AND TRAFFIC SAFETY EDUCATION

Course Number D001/D002

.5 Elective credit

Grades 9-12

This course is designed to develop good driving skills, knowledge and attitudes with an emphasis on safety. Classroom, simulation, range and road experience will be included. Students involved in a drug or alcohol incident during the semester will be dropped from Driver Education.

Requirements: Must obtain a Vermont Learner's Permit prior to the first day of class.

ENGLISH

English teachers at Essex High School believe in the power of literacy. EHS English courses focus on critical reading of literary and informational texts, effective writing and speaking skills, as well as vocabulary development. In selecting courses, students should consider their interests, abilities, and plans for the future.

Some course titles include level designations related to the rigor of the course:

- 300 level (also referred to as AP, Honors, or Advanced) courses are for students who have demonstrated exceptional ability in and a love for the subject matter.
- 200 level courses are for students who have demonstrated a high performance record in the subject matter and who will benefit from courses that have a rigorous curriculum and challenging pace.
- 100 level courses are for students who may choose not to continue the study of the subject matter after having met their graduation requirements.
- Courses with no level assigned are open to students who have taken any indicated prerequisites.

Grade 9 Courses

GRADE 9 ENGLISH

Course Number L229

1 English credit

Grade 9

In this humanities-based course students will read and analyze a variety of literary texts: novels, drama, short stories, poetry and non-fiction. Work will focus on structured writing, vocabulary development, reading comprehension, and discussions of literary and historical context. Students will be assessed and challenged as is appropriate for their needs and strengths, and emphasis will be placed on helping them make a smooth transition to the high school.

GRADE 9 HONORS ENGLISH

Course Number L230

1 English credit

Grade 9

This humanities-based course is designed for motivated 9th graders, confident in their reading and writing skills. Students will be challenged to think across disciplines through intensive reading and analyzing of literary texts. Work includes in-depth writing assignments, and where applicable, discussions of literary and historical context. Students will study novels, drama, short stories, poetry, non-fiction, and vocabulary. Emphasis will be placed on helping students make a smooth transition to the high school.

Grade 10 Courses

GRADE 10 ENGLISH

Course Number L204

1 English credit

Grade 10

This course is designed for students of various levels. It integrates a survey of traditional and contemporary literature and poetry, emphasizing reading for meaning and understanding, coherent writing, and effective speaking and vocabulary skills.

GRADE 10 HONORS ENGLISH

Course Number L106

1 English credit

Grade 10

This course is designed for ambitious, skilled students who are willing to challenge themselves and work independently. This course integrates the study of literature with further development of writing and speaking skills.

Grades 11 and 12 Electives

The Quadrant System: In order to expose students to a balance of reading and writing courses, juniors and seniors not taking AP courses must follow the quadrant system and earn a total of two English credits. These credits will be comprised of the following but do not need to be fulfilled in numerical order:

- .5 credit from Quadrant 1: Composition
- .5 credit from Quadrant 2: Foundational Literature
- .5 credit from Quadrant 3: Contemporary & Classical Literature
- .5 credit from Quadrant 2, 3, or 4: Special Topics in English

Note: Students who take AP Language and Composition their junior year and students who take AP Literature and Composition their senior year fulfill their quadrant requirements through those courses. Those who take AP Language and Composition but do not take AP Literature must take credits from quadrants two and three during their senior year. Those who do not take AP Language and Composition must take a course from quadrant one, plus one other course from quadrants two, three, or four during their junior year.

QUADRANT 1: Composition	QUADRANT 2: Foundational Literature
College Prep Composition Composition	American Literature Early American Literature Later American Literature Early British Literature Later British Literature World Literature
QUADRANT 3: Contemporary & Classical Literature	QUADRANT 4: Special Topics in English
Humanities Multi-Cultural Literature On the Path . . Science Fiction & Fantasy Shakespeare Short Stories Sports Literature and Writing Vermont Writers	Creative Writing Poetry Public Speaking

AP LANGUAGE AND COMPOSITION 300

Course Number L109

1 English credit

Grade 11

This course is designed for ambitious and skilled 11th grade students who possess an interest in how the English language works to convey important ideas in our culture. Distinct from a literary studies approach, AP Language and Composition focuses on the study of discourse or rhetoric. Rather than analyzing the forms of fiction or poetry, students will examine the communication strategies used in a wide range of texts: advertising copy, articles, essays, speeches, propaganda, letters, journals, and various styles of fiction that develop devices which inform those texts. Students will be asked to write concise analyses of those texts, developing a personal voice appropriate for college writing. Students will prepare for the Advanced Placement Language and Composition exam in May. Although most students need to take this course to prepare successfully for the AP exam, any student may choose to take the exam.

Requirements: Summer reading and writing.

AP LITERATURE AND COMPOSITION 300

Course Number L108

1 English credit

Grade 12

Highly motivated and skilled 12th graders who have a desire to work with significant literature will have the opportunity to read, discuss, and write about poetry, short stories, plays and novels of recognized literary merit. This course will prepare students for the Advanced Placement exam in Literature and Composition given in May. Students should be active readers and expect to write about literary topics. Although most students need to take this course to prepare successfully for the AP exam, any student may choose to take the exam.

Requirements: Summer reading and writing.

Quadrant 1: Composition

COLLEGE PREP COMPOSITION 200 (Q1)

Course Number L241

.5 English credit

Grades 11-12

This course prepares students for post-secondary writing. Using the process of brainstorming, outlining, drafting, revising, and editing, students learn to write a variety of well-organized, logical essays and produce writing that is largely free of minimum-standard writing errors. Students who have taken Advanced Placement Language and Composition may not enroll in this course.

COMPOSITION 100 (Q1)

Course Number L316

.5 English credit

Grades 11-12

This course teaches students to express their opinions in clear, logical, structured pieces of writing. While using a process approach that includes brainstorming, outlining, revising and editing, students will write about a variety of topics. Students will also review basic grammar and punctuation rules while working toward learning to write independently to produce a structured piece of writing that has a minimal number of grammatical, usage and mechanical errors.

Quadrant 2: Foundational Literature

AMERICAN LITERATURE 100 (Q2)

Course Number L332

.5 English credit

Grades 11-12

This course covers literature from Colonial times through the present day. As students consider what it means to be an American, they will read a variety of authors and genres, including novels, plays, short stories, poetry and non-fiction. Study revolves around issues and themes that have challenged, and will continue to challenge, citizens of our time. Students enrolled in this course will continue to develop reading, writing, and language skills.

EARLY AMERICAN LITERATURE 200 (Q2)

Course Number L227

.5 English credit

Grades 11-12

This course covers American Literature through the Civil War. As students consider what it means to be an American, they will encounter a variety of authors and genres including Native American myth and folklore, slave narratives, and writings that cover early American history through the Civil War. Students enrolled in this course should be prepared to tackle significant reading and writing assignments, and they should be willing to actively participate in class discussion.

LATER AMERICAN LITERATURE 200 (Q2)

Course Number L228

.5 English credit

Grades 11-12

This course focuses on post- Civil War literature, including novels, plays, short stories, poetry and non-fiction. Study revolves around issues and themes that have challenged, and will continue to challenge, citizens of our time. Students enrolled in this course should be prepared to tackle significant reading and writing assignments, and they should be willing to actively participate in class discussion.

EARLY BRITISH LITERATURE 200 (Q2)

Course Number L240

.5 English credit

Grades 11-12

What impact has British culture and literature had upon American society? From Beowulf to Chaucer to Shakespeare, these readings will challenge, stimulate, and help students understand British literary influences on our culture. Expect extensive required reading.

This course is offered every other year opposite Shakespeare. Offered 2017-2018.

LATER BRITISH LITERATURE 200 (Q2)

Course Number L213

.5 English credit

Grades 11-12

In this course, students read novels by authors such as Jane Austen, Thomas Hardy, and Mary Shelley. Specific titles and authors may change from semester to semester. Students also read the poetry and plays that define this era and continue to influence generations of writers. Beginning in the Romantic era and working up to modern times, this course involves extensive reading.

WORLD LITERATURE 200 (Q2)

Course Number L214

.5 English credit

Grades 11-12

Students learn to share the joys, sorrows, and struggles common to all peoples while recognizing the demands of different cultures and different eras. Students read and analyze demanding prose and poetry focusing on these universal qualities of humankind. Students should expect extensive reading.

WORLD LITERATURE 100 (Q2)

Course Number L319

.5 English credit

Grades 11-12

Acquaintance with cultural differences and universal themes is an opportunity that awaits students in this course. Students will read novels, short stories, plays, and poems that examine values from throughout the world and help them to understand world cultures. Frequent writing and daily reading assignments make up the core of this course.

Quadrant 3: Contemporary & Classical Literature

HUMANITIES 200 (Q3)

Course Number L210

.5 English credit

Grades 11-12

Socrates (a classic Greek philosopher from Athens) addressed one of life's most basic questions: "How should we live?" During this semester course, students will contemplate and debate the value of the humanities and explore emotionally and analytically the literary and artistic works of various writers, artists, film makers, and musicians. Students will begin to define for themselves how they should live, as they analyze and evaluate humanity's quest for truth and meaning as reflected in the literature we study. This course will focus on the development of critical and creative thinking skills, and will further develop students' reading, writing, and vocabulary skills.

MULTI-CULTURAL LITERATURE 200 (Q3)

Course Number L203

.5 English credit

Grades 11-12

This course focuses on reading and responding to contemporary, multi-cultural literature. Reading will include poetry, short stories, novels, and non-fiction that reflect the "varied voices" of people from many places in the global community. Students will research related topics through on-line articles, and give presentations on what they learn. Guest speakers will contribute perspectives from their experiences and travels.

SCIENCE FICTION & FANTASY 200 (Q3)

Course Number L250

.5 English credit

Grades 11-12

In this course students will read, analyze, and discuss a variety of science fiction and fantasy works, including theme-related poetry. Examples of texts students might read include *The Fellowship of the Ring*, by J.R.R. Tolkien; *Fear Nothing*, by Dean Koontz; *Ender's Game*, by Orson Scott Card, and *Magician: Apprentice*, by Raymond E. Feist. Students will examine common themes in science fiction and fantasy, figurative language and rhetorical devices, and the genre's relevance in today's society.

ON THE PATH ... (Q3)

Course Number L042

.5 English credit

Grades 11-12

Students will study topics of their own choosing to build their literacy and communication skills through in-depth, self-directed study in a dynamic and supportive environment. Students will learn multiple approaches for working with a wide range of written and visual texts. Students should expect to demonstrate and document their learning using electronic portfolios. If you want to build your skills, explore the world, and learn about yourself, get On the Path.

SCIENCE FICTION & FANTASY 100 (Q3)

Course Number L360

.5 English credit

Grades 11-12

In this course students will read, analyze, and discuss science fiction and fantasy works, including some theme-related poetry. Examples of texts students might read include *Harry Potter and the Sorcerer's Stone*, by J.K. Rowling, *Artemis Fowl*, by Eoin Colfer, and *The Hunger Games*, by Suzanne Collins. Students will examine common themes in science fiction and fantasy, study figurative language, and discuss the relevance of the genre in today's society.

SHAKESPEARE 200 (Q3)

Course Number L260

.5 English credit

Grades 11-12

In this course students will read several of Shakespeare's lesser-known works. Examples of plays that might be read include *Twelfth Night*, *The Winter's Tale*, *The Merchant of Venice*, and *Measure for Measure*. Students will read and analyze these demanding works in detail, focusing on universal and timeless topics such as seeming vs. being, justice vs. mercy, and the power and strength of women. Students will study Shakespearean syntax, the use of figurative language and rhetorical devices, and the art of Shakespearean stage craft.

This course is offered every other year opposite Early British Literature. Offered 2016-2017.

SHORT STORIES 100 (Q3)**Course Number L361****.5 English credit****Grades 11-12**

Students taking this course will study a variety of authors, genres, and time periods, and will increase their appreciation and enjoyment of fiction. This course will provide practice in reading, writing, and thinking skills.

SPORTS LITERATURE AND WRITING (Q3)**Course Number L014****.5 English credit****Grades 11-12**

In this course students will examine the unique relationship between sports and society through the lens of contemporary literature written by a range of authors, columnists, and journalists. Readings for this course are selected to be high-interest and thought provoking, and include both literary (novels, poems, stories) and informational texts (articles, biographies, commentaries, columns). Writing in this course will include argumentative, informative, and narrative pieces. Attention will be given to women's sports and outdoor writing (hunting and fishing). Students can expect to read texts such as *Friday Night Lights*, *Shoeless Joe*, and *The Best American Sports Writing of the Century*, along with writing on issues of today.

VERMONT WRITERS 200 (Q3)**Course Number L251****.5 English credit****Grades 11-12**

Though one of the smaller states in the union, Vermont is home to many nationally and world-renowned authors. Some of these authors are native Vermonters, and others have chosen to make Vermont their home. Some write about Vermont, while others live and work in Vermont while writing about faraway places. Vermont Writers focuses on authors that, through birth or choice, reside in Vermont. Students should expect to read a wide variety of texts, including novels, short stories, poems, and plays and continue work on the structured literary essay. Students should expect nightly reading and be able to work independently outside of class.

VERMONT WRITERS 100 (Q3)**Course Number L351****.5 English credit****Grades 11-12**

Though one of the smaller states in the union, Vermont is home to many nationally and world-renowned authors. Some of these authors are native Vermonters, and others have chosen to make Vermont their home. Some write about Vermont, while others live and work in Vermont while writing about faraway places. Vermont Writers focuses on authors that, through birth or choice, reside in Vermont. Students should expect to read a wide variety of texts including novels, short stories, poems, and plays. Vermont Writers 100 moves at a more moderate pace, and students are provided more support in reading and writing.

Quadrant 4: Special Topics in English**CREATIVE WRITING (Q4)****Course Number L012****.5 English credit****Grades 11-12**

In this course students will study and analyze short story and poetry techniques and will employ these techniques in their own writing. Creative Writing concentrates on the communication of ideas, stylistic techniques, experimentation with language, and proofreading competence. Students need discipline and enthusiasm for this course and should feel confident about their basic writing skills.

POETRY (Q4)**Course Number L011****.5 English credit****Grades 11-12**

Poetry is powerful. This course offers a varied view to understanding, analyzing, and writing poetry. Students will learn a full range of rhetorical devices, rhyme types, and figurative language that will allow them to delve deeper into the intent and meaning of poems. Students will leave this course with a new awareness of how poems communicate.

PUBLIC SPEAKING (Q4)**Course Number L013****.5 English credit****Grades 11-12**

Those who have a command of language have power. This course helps students develop and refine their public speaking ability, a necessary lifelong skill. This course requires extensive research, reading, and writing, and it provides frequent opportunities to perform in front of an audience. Debate is integrated if time and class size permits.

ENGLISH LANGUAGE LEARNING (ELL)

These courses support English Language learners with the language skills they need to be successful in high school. Students will practice and improve their skills in listening, speaking, reading and writing. Specific course content will depend on the language skill needs of each student. Credits earned for the ELL English course are applied toward English credits required for graduation. Course placement requires approval by ELL Teacher.

ELL ENGLISH

Course Number L492

1 English credit

Grades 9-12

This course is co-taught by an English teacher and an ELL teacher. The course is designed for English Language Learner (ELL) students with low language proficiency. The course will focus on providing intensive direct instruction and opportunity for students to practice and develop the reading, writing, vocabulary and critical thinking skills necessary to be successful in high school English courses. Learning goals include both ELL standards and English/Language Arts Common Core State Standards (CCSS). Learning materials include, but are not limited to, novels, informational text, short stories, and poetry. Successful completion of this course will allow the student to earn one English credit toward graduation requirements.

ELL COMMUNICATION

Course Number L491

1 Elective credit

Grades 9-12

This course is designed for English Language Learner (ELL) students with intermediate or advanced language proficiency. Students will continue to practice and build upon their English language, including reading, writing, speaking, listening, vocabulary, and grammar. Learning goals include both ELL standards and English/Language Arts Common Core State Standards (CCSS). Class activities include discussions of inter-cultural differences and adjustment to life in the United States. Instruction will be differentiated and individualized so that students can work on individual language learning goals. Successful completion of this course will allow the student to earn one elective credit towards graduation requirements. English credit is not granted for this course.

ELL LAB

Full-Block Course Number L494 1 Elective credit

Grades 9-12

Split-Block Course Number L497 .5 Elective credit

Grades 9-12

In this course, English Language Learners (ELLs) receive support for their content area school work. Students bring assignments to work on during class. The ELL teacher provides guidance, focusing on skills (listening, speaking, reading, and writing) that the student needs to work on the most. In addition, the ELL teacher communicates with the students' subject area teachers to find out how to best support individual students for their classes. Specialized materials, such as ELL dictionaries, are available for student use in ELL Lab. This course is open to all ELLs, regardless of their current level of service. Split-block or full-block options are available. Students will receive a grade of P (Passing) or NP (Not Passing). Successful completion of ELL Lab will allow students to earn elective credits towards graduation. English credit is not granted for this course.

FINE ARTS

EHS Fine Arts provides students with creative avenues for expression, innovation, and collaboration through courses in drama, music and the visual arts. The Fine Arts offer a multitude of options for students who want to try something new or to add depth to their existing skills. Students are required to take a minimum of one Fine Arts credit to graduate from EHS.

Music

All ensemble courses (Orchestra, Choirs, and Bands) are full year, full block courses. Due to the collaborative nature of ensemble study, split-blocks and independent study are not offered within these courses.

ORCHESTRA

Course Number F015

1 Fine Arts credit

Grades 9-12

Instrumentalists will learn in a varied repertoire of orchestral music. Credit is based on successfully completing the required daily participation as well as several public performances, which are required.

CONCERT CHOIR

Course Number F014

1 Fine Arts credit

Grades 9-12

This course is open to any student regardless of talent level, age, or background. No audition required. Students will develop vocal technique and music reading skills while performing a wide variety of choral repertoire, from Classical to Broadway. There is a mandatory concert per marking period. As a member of Concert Choir, students may audition for any of the co-curricular vocal ensembles that meet after school. Concert Choir may be repeated.

Requirements: Mandatory concert per marking period.

CHAMBER CHOIR

Course Number F083

1 Fine Arts credit

Grades 10-12

Chamber Choir is an advanced ensemble. Auditions will be held in January for the upcoming year. Students learn advanced music representing a variety of choral styles and historical periods. The course includes many performances inside and outside of school.

Prerequisite: Concert Choir

BAND 100: SYMPHONIC BAND

Course Number F102

1 Fine Arts credit

Grades 9-12

This course builds on the foundation developed through the 4th-8th grade band program. All freshman band students should enroll in this course. Students collaborate and become part of our musical community through solo & ensemble performances, festivals, concerts and travel experiences. Some performances outside of the school day are a required part of the curriculum. Students without instruments can contact the director for information regarding the use of a school-owned instrument. www.EssexBands.org.

Prerequisites: Previous band experience or through instructor approval. Students who have not been in band before and would like to begin should contact Ms. Finlayson during registration or at hfinlayson@ccsuvt.org as soon as possible to develop a plan for successful participation.

BAND 200: WIND ENSEMBLE

Course Number F116

1 Fine Arts credit

Grades 10-12

This course provides an advanced experience that builds on the foundation developed through Symphonic Band. Students collaborate and become part of our musical community through solo & ensemble performances, festivals, concerts and travel experiences. Some performances outside of the school day are a required part of the curriculum. Students without instruments can contact the director for information regarding the use of a school-owned instrument. www.EssexBands.org.

Prerequisite: Successful audition

JAZZ BAND 100: ESSEX JAZZ JUNCTION**Course Number F150****.5 Fine Arts credit****Grades 9-12**

This ensemble studies and performs the music of the foremost big band composers, past and present. This course meets Tuesdays and Thursdays from 7-7:55AM. Performances outside of the school day are a required part of the curriculum. www.EssexBands.org.

Prerequisite: Enrolled in an EHS band or orchestra course except for piano, bass and guitar players.

JAZZ BAND 200: ESSEX JAZZ ORCHESTRA**Course Number F151****1 Fine Arts credit****Grades 9-12**

This ensemble studies and performs the music of the foremost big band composers, past and present, and is one of the most active ensembles at EHS. This course meets Mondays and Fridays from 7-7:55am. Performances outside of the school day are a required part of the curriculum. www.EssexBands.org.

Prerequisites: Successful audition during the last week of January. Enrolled in an EHS band or orchestra course except for piano, bass and guitar players.

GUITAR I: BEGINNING GUITAR**Course Number F420****.5 Fine Arts credit****Grades 9-12**

This course is designed to provide the musical novice with the fundamental guitar skills needed to perform at an introductory level. Students will learn basic music skills and guitar techniques from the perspective of the performer. The regular classroom time will be spent learning to read music and guitar tablature while playing traditional songs and other skills-appropriate music. Recommended for any student who wishes to begin guitar study or for students who play by ear and would like to learn to read music. Prior musical background is not necessary. All class materials, including guitars and books, will be provided by the school.

GUITAR II: THE GUITAR EXPERIENCE PROJECT G.E.P.**Course Number F152****.5 Fine Arts credit****Grades 9-12**

Students of intermediate or advanced playing ability will develop individual goals and generate projects that cater to their specific interests and needs. Transposition, music reading, soloing, transcription, ear training, songwriting, ensemble playing and more are possibilities in this course. Final projects may include producing, designing and recording your own CD and a public performance. G.E.P. can be repeated for credit. All class materials, including guitars and books, will be provided by the school.

Prerequisites: Successful completion of Guitar I: Beginning Guitar or instructor approval.

PIANO LAB I**Course Number F010****.5 Fine Arts credit****Grades 9-12**

This course is designed for students who want to learn how to read music while acquiring the ability to play simple piano pieces with both hands. The lab allows group playing as well as silent individual practice. This course is for beginning pianists

PIANO LAB II**Course Number F079****.5 Fine Arts credit****Grades 9-12**

This course is a continuation of Piano Lab I. Piano Lab II students will finish Alfred Adult Beginner book 1 or begin book 2. They will improve their piano technique through songs, scales and standard piano classics including a variety of genres. Students will compose, improvise, study the historical origins of the instrument and perform great piano works. Piano Lab I and II students may be mixed within the same class.

Prerequisites: Piano Lab I or at least 2 years of private instruction.

MUSIC TECHNOLOGY**Course Number F307****.5 Fine Arts credit****Grades 10-12**

This course offers students an introduction to current composition, recording, and production technologies. Students will focus on hands-on, project based learning in areas including basic composition and arrangement, audio recording, stage audio, and stage lighting. This course builds on music notation concepts, and is therefore open to any student who has taken a prior instrumental or vocal music course or can demonstrate knowledge of core music concepts such as basic music notation symbols and the ability to read pitch. Offered 2016-2017.

AP MUSIC THEORY

Course Number F305

1 Fine Arts credit

Grades 10-12

This course is a rigorous introduction to the fundamentals of harmony and standard music notation practices, equivalent to an introductory level college music theory course. Students will be encouraged to take the AP Music Theory Exam in May.

This course is offered every other year. Offered 2017-2018.

Prerequisites: Prior music instruction inside or outside of school or instructor permission

Dance

DANCE: INCLUSION FUSION

Course Number F023

.5 Fine Arts credit

Grades 9-12

In this entry level course, beginning students will be introduced to the art form of expressive movement. Students may explore the fundamentals of modern, jazz, hip hop, a bit of tap, and some contemporary/lyrical pieces. Students will be encouraged to develop and learn choreographed pieces, concluding with a public performance. This is an active course and students are required to wear appropriate dance clothing for all classes. Students are encouraged to take this course more than once for multiple credits.

ADVANCED DANCE STUDIO

Course Number F060

.5 Fine Arts credit

Grades 9-12

Students are required to have a strong foundation in basic dance fundamentals such as rhythm, form, style, and coordination. The emphasis in this course is student generated choreography and exploring various dance forms. Students are expected to go outside their comfort zone in setting personal goals as dancers. The course can vary according to student interest, needs, skills and experiences. It will be up to the students to collaboratively and individually choreograph pieces with public performances outside the school day expected. This is a physical course and appropriate dance clothing must be worn for all classes. Students are encouraged to take this course more than once for multiple credits.

Prerequisites: Inclusion Fusion and/or permission from Dance Instructor.

Theater

THEATER I: INTRO TO ACTING

Course Number F007

.5 Fine Arts credit

Grades 9-12

This course introduces students to the elements of stage performance, including voice, body movement, creating basic character, and stage terminology. Through acting games and exercises, students develop skills and confidence to take creative risks, work collaboratively and react spontaneously. The course explores monologue and scenic performance, as well as one act plays.

THEATER II: SPECIAL TOPICS

Course Number F061

.5 Fine Arts credit

Grades 10-12

Open to all students who have completed Theater I or with Instructor Permission. This course continues to strengthen vital acting skills such as voice and movement, while focusing on the development of a personal acting technique. Students are encouraged to take this course more than once for multiple credit, as the focus of study for the course will change according to student interests, needs, skills, and experiences. Special Topics may include Acting Method work beginning with Stanislavski, in which actors will explore popular acting techniques throughout the twentieth and twenty-first century with the intent of forming their own creative practice. Other Special Topics explored might be Classical or Shakespearean Studies, Scene and Text Analysis, Social Justice Theater, The Art of Directing, and/or Acting for the Film and the Camera. Public performances of student work are expected.

Prerequisites: Theater 1 and/or permission from Theater Instructor

FILM I: APPRECIATION & CRITICISM

Course Number F082

.5 Fine Arts credit

Grades 9-12

Students will learn a variety of critical and technical methods to move beyond merely watching films to understanding them as active, critically engaged viewers. Through in-depth analysis of each film in class and

in written criticisms, students learn to express their ideas and feelings about film and explore artistic choices that affect a film's impact on the viewers.

Requirement: Parent permission of film titles is required

IMPROVISATION I: COMEDY

Course Number F108

.5 Fine Arts credit

Grades 9-12

This course explores the principles of comedy improvisation. Students will develop and strengthen creative thinking skills, spontaneity, vocal and physical prowess, and collaboration through the use of theater improvisation exercises. Topics include comedy theory, performance principles, pantomime, storytelling, and characterization. This course emphasizes thinking creatively and quickly, and helps students gain confidence and ease in speaking and performing publicly.

Visual Art

ART I: HALF YEAR

Course Number F058

.5 Fine Arts credit

Grades 9-12

In this one semester foundational course, students will explore and experiment with several different artistic media and techniques. Imagination and a sense of adventure are needed as art elements and principles, design and composition are studied through drawing, painting, collage, sculpture and other media. This course is required for those students desiring to pursue any of the advanced courses offered in the fine arts including Digital and Graphic Design, Drawing and Painting, Art II, Art III, and AP Art.

ART I: FULL YEAR EXPLORATION

Course Number F073

1 Fine Arts credit

Grades 9-12

This foundational level course is geared for students who are highly motivated and interested in the visual arts and applying to the Academy of Visual and Performing Arts. This course provides a broader foundation with various two dimensional and three dimensional media, techniques and processes and includes inspirations and references from art history and world cultures.

ART II

Course Number F026

1 Fine Arts credit

Grades 10-12

This course is specifically designed to begin a student's portfolio for college admission. Students will concentrate on advanced techniques and design problems in the following areas: drawing, painting, printmaking and sculpture. The course will focus on developing observational skills while fostering creative imagination. Students will examine the styles of both historical and contemporary artists while developing their own personal style of expression. Students who are planning to take Art III and Advanced Placement in Art should take this prerequisite course during their Grade 10 year.

Prerequisite: Art I

DRAWING AND PAINTING

Course Number F049

.5 Fine Arts credit

Grades 9-12

This course is offered for students who cannot take a full year of Art II. The course will focus on the same advanced techniques and design problems using a wide range of media including pencil, charcoal, pastel, pen and ink, watercolor and acrylics. The course combines observational drawing with the use of the imagination as a means of transforming visual ideas onto a two-dimensional surface. Students are recommended to combine this course with any specialty course (clay, photography, and sculpture) to meet the prerequisites for Art III.

Prerequisite: Art I

ART III

Course Number F093

1 Fine Arts credit

Grades 11-12

This course is intended for highly motivated students who wish to take AP Art and/or pursue art in college. This course will focus on developing the "breadth" portion of your AP or college portfolio with a variety of visual media and subject matter. Observational drawing will be stressed as students continue to develop personal visual imagery through intensive work in drawing, painting, mixed media, printmaking and sculpture.

This course will focus on introducing students to historical and contemporary artists. Toward the end of the course, students will select a particular visual topic based on an individual interest and begin a concentration of a related body of work that focuses on a process of investigation, growth, and discovery.

Prerequisites: Art II or Drawing and Painting

AP ART

Course Number F028

1 Fine Arts credit

Grade 12

This course is designed for students who wish to take the AP Art exam and/or pursue art in college as a career. This very intensive course is structured to prepare students to submit a comprehensive portfolio for the Advanced Placement Examination in May or for college admission. The first semester of the course focuses on the “breadth” portion of the portfolio where students continue to work in a variety of media including drawing, painting, mixed media, sculpture and printmaking. The second “concentration” portion of the semester is spent focusing on a specific area of interest and developing a personal style of expression.

Prerequisites: Art III or permission of the teacher.

CLAY I

Course Number F040

.5 Fine Arts credit

Grades 9-12

In this course students express themselves in clay to make both functional pottery and sculptures. Students will explore line, shape, form, color, and texture as tools of expression and learn basic building techniques including pinch, coil, slab, and sculpting.

CLAY II

Course Number F041

.5 Fine Arts credit

Grades 9-12

In this course students expand and develop their basic knowledge of clay construction, allowing for more self-expression. Students will make more advanced projects via hand building or the pottery wheel. New techniques in building and glaze decorating will be explored. Students continue to develop a personal style.

Prerequisite: Clay I

CLAY III

Course Number F094

.5 Fine Arts credit

Grades 10-12

In the first quarter students refine already established hand-building, wheel throwing, and glazing skills while creating far more challenging projects (i.e. sets, teapots, lidded containers, altered wheel forms, etc.). In the second quarter students choose an area of personal concentration and expression, creating a cohesive body of clay work.

Prerequisite: Clay II

PHOTOGRAPHY I

Course Number F350

.5 Fine Arts credit

Grades 9-12

In this course students will create expressive and artistically composed photographs. Students will learn how to use digital SLR cameras, and edit on the computer using Photoshop. Students will be able to critique photos in terms of composition and how it makes the viewer respond.

PHOTOGRAPHY II

Course Number F351

.5 Fine Arts credit

Grades 10-12

Students will learn advanced digital and film camera techniques as well as editing using Photoshop. The art of photography masters will be highlighted. Students will develop a personal style and critiquing skills. This course may be taken more than once for additional credit.

Prerequisite: Photography I

MEDIA COMMUNICATIONS

Course Number I038

.5 Fine Arts OR Practical Arts credit

Grades 9-12

This course is for you if you are interested in Digital Media. It covers Photoshop, audio recording and editing as well as digital video production. This course will give you a broad understanding of digital media through hands on project based learning.

MOVIE PRODUCTION I

Course Number F356

1 Fine Arts OR Practical Arts credit

Grades 9-12

Students will learn about many of the skills required to conceive and produce a short movie. Story elements and composition, screenplay, lighting, basic to advanced camera work, audio recording for film, critique of award winning films, career exploration, and small-group filmmaking will help students gain real life film-making skills.

EHSPN

Course Number F357

1 Fine Arts OR Practical Arts credit

Grades 10-12

Students will focus on the creation of the EHS sports show EHSPN. This course is for students interested in video production, acting for the camera and/or sports reporting. This course allows students with a wide range of skill sets (music, acting, comedy, motion graphics, photography) to showcase their work for the school audience. This course may be repeated for credit.

Prerequisites: Movie Production I, Media Communications, Improv, or instructor permission.

MOVIE PRODUCTION II: ADVANCED CINEMA

Course Number F358

1 Fine Arts OR Practical Arts credit

Grades 10-12

This course will focus on the creation of high quality short films. Projects will incorporate larger group film-making as well as outside works for festivals and clients. Emphasis will be on advanced video DSLR use, lighting, scripting and storytelling. This course will allow you to build on your skills from Movie Production I and fully explore video production in a more professional manner.

Requirements: AVPA Film students are required to take this course after completing Movie Production I.

Prerequisites: Movie Production I or EHSPN

COMPUTER ANIMATION I or II

Course Number I106

.5 Fine Arts OR Practical Arts credit

Grades 10-12

Computer Animation 1 focuses on learning the basics of creating digital animation. Topics include how to create 2d and 3d models effectively and how to render still images and video. We will use industry standard animation software to create exciting 3d objects and short animations. If you possess a bit of computer savvy and have a passion for animation, this course is for you. In Computer Animation II see your hard work come alive! Employ the basic techniques learned in Computer Animation I to develop your own stories. You will finely tune modeling and animation skills while creating character animations.

WEB DESIGN

Course Number I043

.5 Fine Arts OR Practical Arts credit

Grades 10-12

This course teaches the fundamentals of web page design and website development. The following topics will be covered: the structure of the World Wide Web, HTML, CSS, designing for accessibility, PHP programming, and database interaction. This course will feature hands on project based learning with students working on dynamic websites that grow in functionality as the semester goes on.

DIGITAL AND GRAPHIC DESIGN

Course Number F090

.5 Fine Arts OR Practical Arts credit

Grades 9-12

Using the computer as an artistic medium, you will explore the creative process and create digital artworks. You will be introduced to current computer programs, Photoshop and Illustrator and will experiment with different ways the programs can be used to create digital art. In Photoshop you will learn about pixels, layers, layer masks and other tools. In Illustrator you will learn about vectors, creating custom illustrations, typography, logo development and marketing, and much more.

Prerequisites: One of the following courses: Art 1 (half or full year), Clay 1, Photography 1, Movie Production 1, Media Communications, Computer Animation I, or Web Design.

SPECIAL TOPICS: GUERRILLA ARTS

Course Number F302

.5 Fine Arts credit

Grades 9-12

Guerrilla art has been described as a fun and insidious way of sharing your vision with the world. It is a method of art making which entails leaving anonymous art pieces in public places. It can be done for a variety of reasons, to make a statement, to share ideas, to send out good karma, or just for fun. In this seminar,

students will concentrate on creating pieces for public enjoyment.

This course is offered every other year. Offered 2017-2018.

Prerequisites: One of the following courses: Art 1 (half or full year), Clay 1, Photography 1, Movie Production 1, Media Communications, Computer Animation I, or Web Design.

Interdisciplinary Art Course

21st CENTURY DESIGN

Course Number Q225

.5 Fine Arts AND .5 Physical Science credit

Grades 11-12

The dawning reality of the 21st century is that global society values form as much as function. Science and engineering no longer guarantee success. Artistic worth is no longer a luxury, it is a requirement. In this course, students participate in all aspects of the design process. Integrating art and science, students will explore the qualities of successful design and the role of individuals in the design process. This course will feature practical applications of artistic and technical skills, and will culminate with a unique design work for each student.

This course is offered every other year. Offered 2016-2017

HEALTH & PHYSICAL EDUCATION

Health and Physical Education at Essex High School embrace the belief that: "...intelligence and skill can only function at the peak of their capacity when the body is healthy and strong; that hardy spirits and tough minds usually inhabit sound bodies." John F. Kennedy

Health Education

To graduate from Essex High school, a student must earn one-half credit in Health education. This course is offered in a split block, full year format. Two Health education courses are available. Both Health courses address the skills and course content described below. The courses are designed to be developmentally appropriate for their participants. The course for 9th graders is designed to meet the developmental needs of young adolescents as they transition from middle school to high school. Health for 10th-12th graders is designed for students preparing to transition from high school to their future life, college, or career pursuits.

9th GRADE HEALTH

Course Number P002

.5 Health credit

Grade 9

10th-12th GRADE HEALTH

Course Number P008

.5 Health credit

Grades 10-12

All students in Health Education will gather, research, understand and critically analyze information to make informed healthy choices. They will acquire the skills needed to interact in positive ways with others and become contributing members of a healthy society.

Students will learn to predict the consequences of their decisions recognizing that what they choose today will make a significant difference in their futures. Students will use acquired skills and information to take responsibility for their behavior as they transition from adolescence to adulthood. Students will practice and learn the following skills:

- Assertive communication
- Decision making
- Goal setting
- Research methods
- Risk assessment

Content areas include alcohol, tobacco & other drugs, family & social health, growth & development, human sexuality, nutrition, personal safety, self-image and stress.

Physical Education

All students are required to accumulate 1.5 credits in physical education. “Give Me Five” is the required course to satisfy the Personal Fitness requirement for graduation. Every course is offered in both semesters. Students will not receive credit for enrolling in a course more than once. Because the foundation of each course is activity, a student must participate daily to receive PE credit. All courses include both fitness training and skill development. There are no medical exemptions from physical education. Courses will be adapted for students with special needs.

ACTIVITY IS AN ADVENTURE

Course Number P221

.5 Physical Education credit

Grades 9-12

This course provides a non-traditional approach to physical education. Participants engage in experiences that focus on both intrapersonal and interpersonal development. There are four broad units of instruction: Initiatives, Team Building, Trust, and Problem Solving. Course participation enhances students’ communication skills, decision making, compassion, tolerance, leadership, trust, and collaboration. Due to the nature of activities, students must expect and be comfortable with physical contact. The course climate encourages the development of community, creativity and risk taking in a structured environment. In addition to the four primary units of instruction students will experience a low ropes course, learn to belay and climb and also geocache.

RIGHT ON TARGET

Course Number P222

.5 Physical Education credit

Grades 9-12

This course includes instruction in a variety of target sports/activities. These may include such activities as archery, tennis, badminton, frisbee golf, floor hockey, and pickleball.

HAVE A BALL

Course Number P223

.5 Physical Education credit

Grades 9-12

This course includes instruction in a variety of traditional team sports. These may include: volleyball, basketball, soccer, football, softball, whiffleball, speedaway, and rugby. This course may best be suited for students with a competitive spirit.

GIVE ME FIVE

Course Number P220

.5 Physical Education credit

Grades 9-12

This required course provides instruction in the 5 health related aspects of fitness – cardiovascular fitness, flexibility, muscular strength/muscular endurance and body composition. Students will participate in a developmentally appropriate training program designed to achieve and maintain aerobic capacity, flexibility, and muscular strength/endurance within a healthy fitness zone. Training will include instruction and participation in a variety of activities that support fitness outcomes. This training may include: cardiovascular training progressions and games, Pilates, plyometrics, yoga, and strength training using equipment such as kettle bells, dynabands, bosu balls, physioballs, medicine balls, and free weights. The academic component of the course will focus on the principles of training as they apply to these areas of fitness. Students will study the anatomy and physiology of muscle and will understand the body’s physiological response to training.

CARE & PREVENTION OF ATHLETIC INJURIES

Course Number P300

.5 Elective credit

Grades 11-12

This course is designed to introduce students to the care and prevention of athletic injuries. The course is a comprehensive introduction to preventing, recognizing, evaluating, treating, and rehabilitating basic athletic injuries. Units of instruction will include human anatomy and physiology, kinesiology, protective taping and wrapping techniques, first aid and CPR. Students will also explore different career opportunities within athletic training and related fields. The course includes classroom and laboratory/practical instruction. Students successfully completing the course may be certified in basic first aid, CPR, and AED. They will be capable of assisting a professional certified athletic trainer and be prepared for advanced study of sports medicine. Students may enroll in the course concurrently with their third P.E. course or after receiving 1.5 P.E. credits.

MATHEMATICS

The Mathematics team at Essex High School strives to offer a variety of courses to provide a solid foundation for all students. Throughout each Mathematics course at Essex High School, teachers will reinforce the following eight mathematical practices in order to develop logical and critical thinking skills, which will enhance students' problem solving, modeling and investigative abilities.

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Most students follow the sequence of Algebra I, Geometry, and Algebra II to prepare for College Entrance examinations (ACT and SAT) during Grade 11. A new semester course in probability and statistics is being added this year in response to the increased focus on this field of study and on standardized tests including SBAC and the new SAT test (starting in 2016). In addition to the sequence of courses mentioned above, it is recommended that all students take a course in probability and statistics.

Some course titles include level designations related to the rigor of the course:

- 300 level (also referred to as AP, Honors, or Advanced) courses are for students who have demonstrated exceptional ability in and a love for the subject matter.
- 200 level courses are for students who have demonstrated a high performance record in the subject matter and who will benefit from courses that have a rigorous curriculum and challenging pace.
- 100 level courses are for students who may choose not to continue the study of the subject matter after having met their graduation requirements.
- Courses with no level assigned are open to students who have taken any indicated prerequisites.

Historically, students not receiving teacher recommendations have not been successful when moving on to the next course. It is recommended that students earn a grade of 80 or better to move from one 100 level course to the subsequent 100 level course. It is recommended that students earn a grade of 85 or better to move from one 200 level course to the subsequent 200 level course. It is recommended that students earn a grade of 90 or better to move from a 100 level course to the subsequent 200 level course.

MATH 100

Course Number M315

1 Mathematics credit

Grades 9-12

This course allows for individualized instruction for those students who would benefit from more preparation and support with fundamental mathematical concepts including additive and multiplicative reasoning. Appropriate math interventions will be designed for each student dependent upon the student's developmental level and current math skills

Prerequisite: Teacher recommendation

PRE-ALGEBRA 100

Course Number M316

1 Mathematics credit

Grades 9-12

This course is meant to prepare students for the study of Algebra. Course content will explore mathematical concepts that provide a foundation for success in Algebra. Students will become familiar with properties of mathematics and the language of algebra. Topics to be covered include algebraic expressions, integers, equations, decimals, fractions, exponents, ratios, proportions, percents, area, graphing, and probability.

Prerequisite: Teacher recommendation

Algebra I Courses

Algebra I gives students a foundation in algebra to prepare for further mathematics courses. It is designed to provide students with the necessary algebraic techniques to solve practical problems. It is intended for more independent students who are confident in their skills with fractions, decimals and proportional reasoning. Topics covered include the development of the language and structure of algebra, the real number system, a study of linear functions and inequalities, operations with algebraic expressions, factoring, polynomials, radicals, and an introduction to quadratic and exponential functions. Lessons integrate the use of technology, including graphing calculators.

ALGEBRA I WITH LAB 100

Course Number M317 **1 Mathematics and .5 Elective credits** **Grades 9-12**

This course is designed with an extra split-block to allow students time to reinforce, develop, and practice concepts taught in class.

Prerequisites: Teacher recommendation and Pre-Algebra

ALGEBRA I 200

Course Number M207 **1 Mathematics credit** **Grades 9-12**

Prerequisites: Teacher recommendation and Pre-Algebra

Geometry Courses

The emphasis of these courses is on plane geometry but it also includes basic solid and coordinate geometry. Major topics include triangles, quadrilaterals and other polygons, parallel and perpendicular lines, circles, area of polygons, transformations, right triangle trigonometry, and volume of polyhedra. A variety of problems and proofs provide the student with the opportunity to do some independent, creative and original thinking. This course also enables students to use the techniques of logical inference so they can discover and establish geometrical relationships. A strong understanding of algebra is an important prerequisite skill for geometry.

GEOMETRY WITH LAB 100

Course Number M321 **1 Mathematics and .5 Elective credits** **Grades 10-12**

This course is designed with an extra split-block to allow students time to reinforce, develop, and practice concepts taught in class.

Prerequisites: Teacher recommendation and Algebra I

GEOMETRY 100

Course Number M322 **1 Mathematics credit** **Grades 10-12**

Prerequisites: Teacher recommendation and Algebra I

GEOMETRY 200

Course Number M209 **1 Mathematics credit** **Grades 9-12**

Prerequisites: Teacher recommendation and Algebra I

Algebra II Courses

Algebra II gives college-bound students a more in-depth exposure to algebraic concepts and structures. Some of the topics covered are real numbers, equations and inequalities, fractions, exponents, radicals, sequences and series, complex numbers, and graphing and analysis of functional relationships, including quadratic, polynomial, exponential, logarithmic, and trigonometric functions. There will be an emphasis on transformations of these functions. Lessons integrate the use of technology, including graphing calculators. Geometric concepts are brought in as review and to emphasize the connection between the mathematical fields.

ALGEBRA II 100

Course Number M310 **1 Mathematics credit** **Grades 10-12**

Prerequisites: Teacher recommendation, Algebra I, and Geometry

ALGEBRA II 200**Course Number M211****1 Mathematics credit****Grades 10-12**

Prerequisites: Teacher recommendation, Algebra I, and Geometry

ALGEBRA II HONORS 300**Course Number M111****1 Mathematics credit****Grades 10-12**

This course is the first in a 3 year series of mathematics courses intended for students who have demonstrated a superior aptitude for, and interest in, the discipline of mathematics. The topics of instruction include both traditional Algebra II and Precalculus subjects. Among these are rational expressions, equations and inequalities, complex numbers, functions, conic sections, logarithms, systems, sequences, series and probability. A CAS TI-Nspire graphing calculator is highly recommended for all students in this course.

Prerequisites: Recommendation of the Geometry teacher. Considerations for recommendation include exceptionally strong performance in Algebra I 200, and Geometry 200.

Additional Mathematics Courses**MATH OF FINANCIAL LITERACY****Course Number M309****1 Mathematics credit****Grades 11-12**

This course is designed for students who are interested in gaining an understanding of financial topics and the mathematics behind them. This course will investigate in depth such topics as: income and budgeting, financial goal setting, the time value of money, banking and personal income taxes, renting vs. owning, and debt repayment. This course is designed to help students understand the impact of individual choices on occupational goals and future earnings potential. Lessons integrate the use of technology, including graphing calculators, spreadsheet programs, and many Internet sources to perform mathematical calculations. By the end of the course, students will have a detailed understanding of the mathematics behind some key personal finance issues that affect their lives, as well as the skills and knowledge needed to improve their financial future.

Prerequisites: Teacher recommendation and Algebra I

ALGEBRA & TRIGONOMETRY 100**Course Number M312****.5 Mathematics credit****Grades 11-12**

This course is intended for college bound students as an alternative to taking Pre-Calculus. The course will include a review of algebra skills as well as the further development of advanced algebra concepts covered in Algebra 2 and operations in matrices. Time will be given for preparation for standardized tests such as the ACT and SAT. The fundamentals of trigonometry will also be explored. Students looking for a full year (1 credit) of math are encouraged to also sign up for Probability and Statistics.

Prerequisites: Teacher recommendation and Algebra II

PROBABILITY & STATISTICS**Course Number M313****.5 Mathematics credit****Grades 9-12**

How can we become more informed consumers of information? This course is designed to explore and understand the role statistics play in our everyday lives. Data collection, description, and analysis are studied as ways to report findings and build mathematical models for prediction and decision making. Probability is used to assess the usefulness of models. Lessons integrate the use of technology, including graphing calculators and/or computer software to produce charts and graphs. Examples from such fields as economics, business, education, psychology, sociology, biology, and medicine will be examined.

Prerequisites: Credit or concurrent enrollment in Algebra 1

PRE-CALCULUS 200**Course Number M216****1 Mathematics credit****Grades 10-12**

The focus of this course will be topics from Trigonometry and Analytic Geometry. Trigonometric functions of the general angle in the coordinate plane are discussed along with such topics as standard position, co-ter-

minal angles, positive and negative angles, reference angles and radian measure. Various relationships between functions are developed and formulas derived which are used in solving trigonometric equations and proving identities. Graphing the various functions and the inverse relations are included. The laws of sines and cosines are derived and used in problem work. The rectangular coordinate system is reviewed. Various formulas are used such as distance, midpoint, the angle between two lines, and distance from a point to a line. Graphs of relations and functions emphasizing domain, range, symmetry, and asymptotes are included. Exponential and logarithmic functions are discussed and graphed, as are parametric and polar equations and conic sections. This course is designed for students who are planning on a career with an emphasis on mathematics.

Prerequisites: Teacher recommendation and Algebra II

HONORS PRE-CALCULUS 300

Course Number M115

1 Mathematics credit

Grades 10-12

This course is designed for the student who plans to study AP Calculus (level BC) the following year. Topics included in this course are: trigonometry, vectors, polar and parametric equations, limits and some work with derivatives with an emphasis on problem solving and applications throughout. A CAS TI-Nspire graphing calculator is highly recommended for all students in this course.

Prerequisites: Teacher recommendation and Algebra II

AP STATISTICS 300

Course Number M112

1 Mathematics credit

Grades 11-12

This course is designed for the student who is interested in pursuing a career in natural science, social science, engineering, mathematics or any other career that involves performing research and/or interpreting research results. The purpose of the course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The emphasis of this course is on the use of graphical and numerical techniques to study patterns and departures from patterns, experimental design, probability, sampling distributions, and statistical inference. A CAS TI-Nspire graphing calculator is highly recommended for all students in this course.

Prerequisites: Teacher recommendation and Algebra II or higher

INTRODUCTION TO CALCULUS 200

Course Number M217

1 Mathematics credit

Grades 11-12

This course is designed for students who want to continue their studies of mathematics but are not interested in taking the Advanced Placement test at the end of the year. Students planning on a career in science, mathematics, or engineering will be well prepared to take a college Calculus course and in some cases go on to 2nd semester Calculus. The curriculum will be very similar to the AP Calculus AB course listed below. The major difference will be a less rigorous coverage of the material in some areas. A CAS TI-Nspire graphing calculator is highly recommended for all students in this course.

Prerequisites: Teacher recommendation and Pre-Calculus

AP CALCULUS (AB) 300

Course Number M117

1 Mathematics credit

Grades 11-12

This course is designed to prepare students to take the AP Calculus AB exam. Any student planning on a career in science, mathematics, or engineering is urged to take this course. Some of the topics are advanced topics in algebra, limits and continuity, concepts of a derivative, derivatives of functions and applications, integrals, areas, and volumes of revolution. Students planning on taking the Advanced Placement test should confer with the teacher in early spring. A CAS TI-Nspire graphing calculator is highly recommended for all students in this course.

Prerequisites: Teacher recommendation and Pre-Calculus

AP CALCULUS (BC) HONORS 300

Course Number M122

1 Mathematics credit

Grades 11-12

This course is the culmination of the honors program in mathematics. Students are expected to enter the course with knowledge of limits and basic derivatives. The curriculum for the course will include techniques and applications of derivatives, integration techniques and applications, the calculus of transcendental func-

tions, the calculus of parametric and polar equations and infinite series. It is expected that all students will take the BC Advanced Placement exam for this course. A CAS TI-Nspire graphing calculator is highly recommended for all students in this course.

Prerequisite: Teacher recommendation and Honors Pre-Calculus 300

AP COMPUTER SCIENCE A 300

Course Number M127

1 Mathematics credit

Grades 10-12

This course emphasizes object oriented programming methodology with a concentration on problem solving and algorithm development and is meant to be the equivalent of a first-semester college level course in Computer Science. It also includes the study of data structures, design, and abstraction. Students will learn to: design and implement solutions to problems by writing, running, and debugging computer programs; use and implement commonly-used algorithms and data structures; develop and select appropriate algorithms and data structures to solve problems; code fluently in an object-oriented paradigm using the programming language Java; read and understand a large program consisting of several classes and interacting Objects; recognize the ethical and social implications of computer use. In evaluating student programming solutions, consideration will be given to program correctness, error handling, and the organization, format, and documentation of the code. This course is recommended for students who intend to pursue study in scientific or technical fields. Students in this course may be candidates for the AP Computer Science A exam in May. Additional time outside of class is required. No prior programming knowledge is required.

Prerequisites: Teacher recommendation and Geometry 200 or Algebra II.

INTRODUCTION TO COMPUTER APPLICATION DEVELOPMENT

Course Number M225

1 Elective credit

Grades 10-12

The goal of this course is to give students the knowledge and skills necessary to obtain a software development internship. Students will learn how to use the Javascript programming language to develop web and mobile applications. The course will cover the underlying architecture of the internet as it relates to applications. The course will emphasize a team approach to application development using tools such as source control, debuggers, and text editors.

Prerequisites: Teacher recommendation and Geometry 200 or Algebra II

PRACTICAL ARTS

Practical Arts is available to students under two areas of study-Family and Consumer Science and Technology Education. The variety of courses increase student learning in "hands-on" class lab situations. The courses in Practical Arts help students to make connections between their learning and personal/career choices. Once the .5 credit graduation requirement is met, students have a wide variety of elective options where practical skills are learned and can be used throughout their adult lives.

Family and Consumer Science

SINGLES COOKING

Course Number H002

.5 Practical Arts credit

Grades 9-12

This is an introductory hands-on food preparation course. We emphasize basic cooking skills, safety and sanitation, wise consumer habits, and healthy nutritional choices. Units begin with independent cooking and progress into group planning and team preparation of more advanced dishes. Students will also complete projects that correspond with current food issues and trends. This course or Food Science and Nutrition is recommended for all students.

FOOD SCIENCE AND NUTRITION

Course Number H001

.5 Practical Arts credit

Grades 9-12

If you are a foodie, but you are also interested in food science, wellness, and understanding the role food

plays in maintaining a healthy life, then this course is for you. Students explore the relationship between food and science through the development of cooking skills in this project based course. Students interested in the careers of dietetics, nutrition, physical therapy, and food technology should consider this course. This course or Singles Cooking is recommended for all students. This course is offered every other year. Offered 2017-2018.

INTERNATIONAL FOODS

Course Number H003

.5 Practical Arts credit

Grades 10-12

This is an advanced course designed for students who wish to learn about food and its relationship to our multicultural world. This hands-on course is a spectacular opportunity to prepare and learn about food, history, and various diverse cultures. When not in the kitchen, students will supplement their learning with food based research and cooking projects. Students are expected to apply their knowledge from Singles Cooking or Food Science and Nutrition in order to continue building their skill set. This is a good course for students interested in advanced cooking and/or a career in food services.

Prerequisites: Singles Cooking or Food Science and Nutrition

SEWING DESIGN I or II or III

Course Number H005

.5 Practical Arts credit

Grades 9-12

Three options - Students may take this course more than once for credit and pick their own focus.

One option: Learn valuable sewing skills that may save you money or lead you to an exciting profession. Learn to sew outdoor clothing, everyday wear, accessories or special occasion clothing. Create, design and/or sew items for your home, dorm room or apartment. Students in the Performing Arts program can use these skills for stage productions here at EHS.

Second option: Integrate textiles and sewing to create your own projects. Learn about fabrics and their unique properties.

Third option: Tailor the course to meet your needs and make your own personal plan - sewing, designing or working with fabrics, careers! You decide. A great choice for students interested in careers related to fashion, fashion merchandising/marketing, art, fiber arts design, textiles, theater costuming, sewing or starting your own related business. Students can take this course for AVPA credit.

This course is offered every other year. Offered 2016-2017.

CHILD DEVELOPMENT

Course Number H008

.5 Practical Arts credit

Grades 9-10

This course is an exciting and fun way to learn about children's social, emotional, physical, and intellectual development from birth to age 12 from a practical, hands-on perspective. Students will plan, prepare, and run an in-class preschool during the mid-point of the semester. The Electronic Baby is also a part of this course! Students are required to care for the baby for one weekend during the semester. Students interested in learning more about children and working with them in the future should consider this course.

CHILD PSYCHOLOGY AND DEVELOPMENT

Course Number H004

.5 Practical Arts credit

Grades 11-12

This course is an excellent opportunity for students interested in various careers working with children: education, nursing, social work, psychology, special education, physical and occupational therapy, law enforcement, and pediatrics should consider this course. This course introduces developmental theory with an emphasis on collaboration. Students are required to visit a local child care center to observe and interact with children. Students plan, prepare, and run a preschool at EHS during the semester. Any student may take this course, including students who have taken H008.

ON YOUR OWN

Course Number H009

.5 Practical Arts credit

Grades 10-11

This course is designed to prepare students with life skills for living on your own. Students explore the following areas: personal development, financial literacy, careers, and personal living space. These units will be explored through goal-setting, decision and communication skills, mental health, credit and money management, insurance and taxes, interest inventory, job searching, resume and cover letter writing, interviewing and presentation skills, roommate scenarios and living skills, and more. The course content is

approached with hands on experiences, group work, discussion, projects, and more.

INTERIOR DESIGN I or II

Course Number H012

.5 Practical Arts credit

Grades 9-12

First year students (I) will create living spaces using design and decorating concepts. A practical skills unit using fabrics, tile, wall paper and wood will give students experience with home design materials. Students interested in careers related to architecture, design, decorating, event planning, and town planning should consider this course. This is a project based course including community field trips and guest speakers. Second year students (II) will have opportunities to work with real clients and professionals in the community to increase their skills and knowledge. Independent options to visit and shadow professionals in the field are available. Field Trips to local vendors and “hands-on” class activities will give real life experiences in designing, cost bidding, and marketing. Students interested in studying related topics in college should sign up for a second year. Students can take this course for AVPA credit.

Technology Education

BUILDING DESIGN

Course Number I033

1 Practical Arts credit

Grades 9-12

In this course we will learn about architectural styles, design, and engineering through hands-on work with drafting tools, AutoCAD software, and scale model construction using FabLab equipment (Laser Engraver & 3D printer), and we will even get to design and build cool items using our woodworking tools. This course is especially helpful for students hoping to study engineering or architecture after high school, but is also beneficial for anyone who wants to confidently make plans and build elements for the home. Students can take this course for AVPA credit.

ELECTRONICS

Course Number I016

.5 Practical Arts credit

Grades 9-12

This course is a fun way to get introduced to electronics which do appear on SAT and ACT exams. No experience is necessary since we will learn the basics of electronic components, read schematics and construct circuits with confidence. We'll work with one component at a time to gain proficiency with these tiny pieces and then we will build neat circuits in preparation for a project which incorporates all of our learning into an electronic device “invention”. This final project will even get our hands on some of the FabLab equipment (Laser Engraver & 3D printer).

MEDIA COMMUNICATIONS

Course Number I038

.5 Fine Arts OR Practical Arts credit

Grades 9-12

This course is for you if you are interested in Digital Media. It covers Photoshop, audio recording and editing as well as digital video production. This course will give you a broad understanding of digital media through hands on project based learning.

MOVIE PRODUCTION I

Course Number F356

1 Fine Arts OR Practical Arts credit

Grades 9-12

Students will learn about many of the skills required to conceive and produce a short movie. Story elements and composition, screenplay, lighting, basic to advanced camera work, audio recording for film, critique of award winning films, career exploration, and small-group filmmaking will help students gain real life film-making skills.

EHSPN

Course Number F357

1 Fine Arts OR Practical Arts credit

Grades 10-12

Students will focus on the creation of the EHS sports show EHSPN. This course is for students interested in video production, acting for the camera and/or sports reporting. This course allows students with a wide range of skill sets (music, acting, comedy, motion graphics, photography) to showcase their work for the school audience. This course may be repeated for credit.

Prerequisites: Movie Production I, Media Communications, Improv, or instructor permission.

MOVIE PRODUCTION II: ADVANCED CINEMA

Course Number F358

1 Fine Arts OR Practical Arts credit

Grades 10-12

This course will focus on the creation of high quality short films. Projects will incorporate larger group film-making as well as outside works for festivals and clients. Emphasis will be on advanced video DSLR use, lighting, scripting and storytelling. This course will allow you to build on your skills from Movie Production I and fully explore video production in a more professional manner.

Requirements: AVPA Film students are required to take this course after completing Movie Production I.

Prerequisites: Movie Production I or EHSPN

COMPUTER ANIMATION I or II

Course Number I106

.5 Fine Arts OR Practical Arts credit

Grades 10-12

Computer Animation 1 focuses on learning the basics of creating digital animation. Topics include how to create 2d and 3d models effectively and how to render still images and video. We will use industry standard animation software to create exciting 3d objects and short animations. If you possess a bit of computer savvy and have a passion for animation, this course is for you. In Computer Animation 2 see your hard work come alive! Employ the basic techniques learned in Animation 1 to develop your own stories. You will finely tune modeling and animation skills while creating character animations.

WEB DESIGN

Course Number I043

.5 Fine Arts OR Practical Arts credit

Grades 10-12

This course teaches the fundamentals of web page design and website development. The following topics will be covered: the structure of the World Wide Web, HTML, CSS, designing for accessibility, PHP programming, and database interaction. This course will feature hands on project based learning with students working on dynamic websites that grow in functionality as the semester goes on.

DIGITAL AND GRAPHIC DESIGN

Course Number F090

.5 Fine Arts OR Practical Arts credit

Grades 9-12

Using the computer as an artistic medium, you will explore the creative process and create digital artworks. You will be introduced to current computer programs, Photoshop and Illustrator and will experiment with different ways the programs can be used to create digital art. In Photoshop you will learn about pixels, layers, layer masks and other tools. In Illustrator you will learn about vectors, creating custom illustrations, typography, logo development and marketing, and much more.

Prerequisites: One of the following courses: Art 1 (half or full year), Clay 1, Photography 1, Movie Production 1, Media Communications, Computer Animation I, or Web Design.

YEARBOOK

Course Number I034

1 Practical Arts credit

Grades 9-12

This course provides students with a strong foundation for careers in journalism, publishing, editing, photo-journalism/photography, graphic design, advertising, marketing, and business management. Students will study magazine journalism including layout and design techniques, writing and editing copy, headlines and picture captions, as well as planning for creative coverage of the school year. This course provides the study of and practice in planning, marketing (advertising and book sales), and distribution of the yearbook. This is a rigorous course with weekly deadlines. Students will be required to work with their team to ensure that proofs are submitted in a timely fashion. Some deadlines will require that students work after school, on weekends, and holidays. The quality of the book is directly related to the quality of content, cooperation and overall dedication of students. This course may be taken multiple times for credit. Students who retake the course will be eligible to apply for editor-in-chief positions. Students may choose to participate in a Spring Summit for high school journalism students in NYC and Adobe Certificate Exams, and may submit work for consideration for national awards. Taking courses such as Graphic Design, Photography, Journalism, and Business before or along with Yearbook can help students build their skills in this area.

JEWELRY

Course Number I027

.5 Practical Arts credit

Grades 9-12

In this course you will get to work with copper, brass, and real sterling silver to create rings, necklaces,

earrings, bracelets, and more. You will work with torches to solder metals together and to make glass beads to include on pieces of your own design. When you take this course for a second or third time you will further the skills developed during your first encounter with these materials and work with Precious Metal Clay (PMC), intricate sawing of sheet metal, chain creation, and other “more advanced” pieces. This course fits nicely with the Visual Arts strand for students involved in the Academy for Visual and Performing Arts (AVPA).

HOW THINGS WORK

Course Number I030

.5 Practical Arts credit

Grades 9-12

Wow-what a class! By manipulating tools and appliances you will learn about how machines can make our lives easier. We will investigate Newton’s Laws of motion and the mechanical advantages of hydraulic jacks, levers, and ramps. How do I wire a house safely? What are the tricks for getting plumbing to NOT leak? How do small engines work (lawn mowers, chainsaws, weed whackers, etc.)? We’ll even have an opportunity to use the FabLab equipment (Laser Engraver & 3D printer) on a project that demonstrates some forces learned earlier in the semester. Get your hands into really fun THINGS through this course of hands-on discovery.

SCIENCE

Philosophy: Scientific literacy is vital for all students to become informed citizens in order to make responsible and ethical decisions about both personal and global issues. The science content area provides many laboratory-based opportunities to achieve scientific literacy through a diverse offering of core and elective courses.

So what courses should students take? Three credits of science are required for graduation at Essex High School. College bound students should take a minimum of four years of science.

Some course titles include level designations related to the rigor of the course:

- 300 level (also referred to as AP, Honors, or Advanced) courses are for students who have demonstrated exceptional ability in and a love for the subject matter.
- 200 level courses are for students who have demonstrated a high performance record in the subject matter and who will benefit from courses that have a rigorous curriculum and challenging pace.
- 100 level courses are for students who may choose not to continue the study of the subject matter after having met their graduation requirements.
- Courses with no level assigned are open to students who have taken any indicated prerequisites.

Grades 9 & 10

Core course placement in Science in 9th and 10th grade is based on student readiness and interests, but does not limit student access to courses in grades 11 and 12. All courses are designed to generate strong science literacy for all students.

Students interested in multiple AP science courses as 11th and 12th graders may want to take two science core courses in either Grade 9 or 10. This is known as “doubling” and is available with a science teacher recommendation. Students will also want to consider how their math courses align with their choices for science when deciding whether to double.

Grades 11 & 12

Course placement in 11th and 12th grade should be based on a student’s career interest and the competitive nature of their college choices. Doubling in 11th and 12th grade is quite common because of the wide variety of science electives.

Courses Offered:

EARTH AND PHYSICAL SCIENCE 100

Course Number Q310

1 Physical Science credit

Grade 9

This is an introductory course designed to provide students with scientific literacy in the earth and space sciences. Topics are explored through inquiry, discussion, projects, lab investigations, research and technology. The course will focus on the study of the Earth's lithosphere, atmosphere, hydrosphere, and its relationship to other planetary bodies. Students enrolled in this course analyze and describe Earth's interconnected systems and how they are changing due to natural processes and human influence.

EARTH AND PHYSICAL SCIENCE 200

Course Number Q212

1 Physical Science credit

Grade 9

This is an introductory course designed to provide students with scientific literacy in the earth and space sciences. It is an in-depth study building on previous scientific knowledge. Students are expected to be able to work independently. Topics are explored through inquiry, discussion, math applications, projects, lab investigations, research and technology. The course will focus on the study of the Earth's lithosphere, atmosphere, hydrosphere, and its relationship to other planetary bodies. Students enrolled in this course analyze and describe Earth's interconnected systems and how they are changing due to natural processes and human influence.

Biological Sciences

There are three biology courses offered to meet the needs of all of our students in differentiated ways. Each is a college preparatory, lab-based course that includes life science and human body topics as outlined by the Next Generation Science Standards.

BIOLOGY 100

Course Number Q312

1 Natural Science credit

Grades 10-12

This course introduces the student to biology theories and concepts with class activities, experimentation and some projects. Topics include scientific method and experimentation, biochemistry, cell structure and function, genetics, ecology, evolution, human body systems.

BIOLOGY 200

Course Number Q210

1.5 Natural Science credit

Grades 9-12

This course introduces the student to biology theories and concepts with class activities, experimentation and some projects. Strong study skills and the ability to work independently are key elements needed for success in Biology 200. Topics include scientific method and experimentation, biochemistry, cell structure and function, genetics, ecology, evolution, and human body systems.

Recommended: Completion of or concurrent EPS 100 or 200

ADVANCED BIOLOGY

Course Number Q107

1.5 Natural Science credit

Grades 11-12

This course is intended for the student who is interested in studying in more depth the major areas covered in the first year course in Biology. This course utilizes inquiry activities, group and individual projects, and class discussions to investigate ideas in biology. Biochemistry, cell biology, evolution, genetics, ecology, and body systems are studied. The course is mostly aligned with the AP Biology curriculum and some students take the AP exam in May. Due to the long-term nature of several units and laboratory investigations, some material that is required for success on the Advanced Placement exam is not covered during class time. To fully prepare for this rigorous exam, interested students are expected to meet outside of class on several occasions during the second semester.

Recommended: Completion of Biology 200 and Chemistry 100 or 200

Chemistry Sciences

There are four chemistry courses offered to meet the needs of all of our students in differentiated ways. Most students take chemistry after completing biology and it is the third of the core sciences.

CHEMISTRY 100

Course Number Q320

1 Physical Science credit

Grades 10-12

This course introduces students to theories and concepts with experimentation and projects. It has been successfully completed by those students who have an interest in chemistry but are thinking of a career outside of the science field, for example fine arts or business. This course provides an excellent foundation in the basic topics of general chemistry, always placing an emphasis on how chemistry relates to daily life. Lectures, demonstrations, videos, computer simulations and traditional hands-on lab activities are used throughout this course. Topics include acids and bases, atomic and molecular structures, chemical bonds, chemical formulas, chemical reactions, classifying matter, gas laws, mole concept, nuclear chemistry, nomenclature, periodic trends, phases of matter, properties of water, and introduction to energy relationships. Basic algebra skills are very important, though this course requires much less computation than Chemistry 200.

Recommended: Completion of one science credit and completion of or concurrent Algebra I

CHEMISTRY 200

Course Number Q220

1.5 Physical Science credit

Grades 10-12

This course introduces students to theories and concepts primarily through experimentation. It has been successfully completed by students who desire to have a mathematical-based study and are possibly thinking of a career that would require this information, for example engineering, health, medical fields, environmental or other science related careers. Lectures, demonstrations, videos, computer simulations and traditional hands-on lab activities are used throughout this course. Topics include acids and bases, atomic and molecular structures, chemical bonds, chemical formulas, chemical reactions, classifying matter, gas laws, mole concept, nuclear chemistry, nomenclature, periodic trends, kinetics and equilibrium, mathematics of chemistry, thermodynamics, and stoichiometry. Strong algebraic math skills are required because many concepts involve processing relevant computations and analyzing lab data.

Recommended: Completion of one science credit and completion of or concurrent Algebra II

AP CHEMISTRY

Course Number Q122

1 Physical Science credit

Grades 11-12

This course is designed to be the equivalent of the general chemistry course usually taken during the first college year. For some students, this course enables them to undertake second-year work in the chemistry sequence in their first year at college or to register in college courses in other fields where general chemistry is a prerequisite. For other students, the AP Chemistry course fulfills the college laboratory science requirement and frees time for other courses. AP Chemistry is a rigorous curriculum that includes the following topics: atomic theory and atomic structure, chemical bonding, nuclear chemistry, gases, liquids and solids, solutions, reaction types, stoichiometry, equilibrium, kinetics, thermochemistry, and descriptive chemistry. Students are expected to spend a considerable amount of time outside of class to complete assignments.

Recommended: Completion of Chemistry 200

Physics

There are three physics courses offered to meet the needs of all of our students in differentiated ways. Most students take physics after completing chemistry and it is the fourth of the core sciences.

PHYSICS 100

Course Number Q306

1 Physical Science credit

Grades 11-12

This course stimulates higher level cognitive skills by emphasizing the laws of physics as they relate to the everyday world. This course provides opportunities for multiple learning styles via projects and laboratory investigations. First semester topics include motion, Newton's Laws, and energy conservation. Second semester topics include heat, waves, sound, optics, and electricity. Algebra skills are necessary for success here, but this course demands much less computation than Physics 200. Physics 100 includes traditional hands-on laboratory work and also computer-interfaced laboratories.

Recommended: Completion of one science credit and completion of or concurrent Algebra I

PHYSICS 200

Course Number Q211

1.5 Physical Science credit

Grades 11-12

This course covers topics of classical physics. Newtonian mechanics (vector-based), gravitation, conservation of energy, and momentum are covered in the first semester. The second semester covers electrostatics, DC circuits, waves, sound, light, and optics. Demonstrations and videos are used to supplement the lectures and to provide historical background for the laws of physics. Computer simulations, computerized data collection and analysis, and traditional hands-on lab activities are used throughout the course.

Recommended: Completion of Algebra II

AP PHYSICS

Course Number Q123

1 Physical Science credit

Grades 11-12

Scientists and engineers are changing the world all of the time. They dream up creative, practical solutions and work with other smart, inspiring people to invent, design, create and discover things that matter. AP Physics is a great foundation course if this sounds interesting to you. The topics covered during the course of the year are mechanics and electricity & magnetism. Methods of calculus will be introduced as appropriate with plenty of assistance available as needed. The course will include MIT video lectures, group problem solving, demonstrations, and laboratory activities.

Recommended: Completion of Physics 200 and completion of or concurrent Calculus

Science Electives

ANATOMY AND PHYSIOLOGY

Course Number Q322

1 Natural Science Credit

Grades 11-12

This course will cover the basic principles of human anatomy and physiology. Topics will include the structure and function of cells, tissues and organ systems of the body, homeostasis and growth and development. Lab work will be an integral part of this course.

Recommended: Completion of Biology 100 or 200

BELIZE FIELD STUDY

Course Number Q005

.5 Natural Science credit

Grades 10-12

This course meets for a split-block for the full year. The curriculum involves content specific to studying the rainforest and marine ecosystems and the geography and culture of Belize. The course culminates with a ten-day trip to Belize. The trip and SCUBA certification are optional, and are available for an additional fee. Students who take the trip will spend half of the time in a rainforest reserve and half of the time on a small island marine reserve. Visits will also be made to Mayan ruins and the zoo. Students will also complete a service project at a small village school.

BOTANY

Course Number Q016

1 Natural Science Credit

Grades 11-12

The year begins and ends outside: in the fall, we're studying forest ecology and identifying trees; in the spring, our attention turns to the school landscape where we get our hands dirty designing and planting the gardens out front. The remainder of the year is split between the greenhouse and the classroom. We start seeds, grow seedlings into plants and then either use them for the gardens or donate to the food shelf. The topic of ethnobotany, society's uses of plants, is explored through the creation of various products made entirely of plants (baskets, beads, twine, etc.). The physiology and mechanics of plants and flowers are examined using scientific experiments and microscopy. This course is very hands-on and interactive and relies heavily on in-class projects and labs.

Recommended: Completion of Biology 100 or 200

DESIGNING SOLUTIONS TO GLOBAL CHALLENGES

Course Number Q230

1 Physical Science Credit

Grades 11-12

Engineering is the application of science to problem solving. Design is the creative expression of knowledge. Engineering Design is an open-discovery art form where the principles of iterative exploration enable us to find solutions to global challenges. Join other Vermont students in this collaboration between the University of Vermont and area high schools. Successful students who choose to use a dual enrollment voucher or

STELLAR ASTRONOMY & BEYOND

Course Number Q323

.5 Physical Science credit

Grades 10-12

This course offered during Semester 2 explores the amazing and revolutionary discoveries made by astronomers about the cosmos. From our earliest ancestors to the present day, smart and creative people have been making observations and building innovative instruments to better understand the universe we live in. This second semester course will cover the life cycle of our Sun and how it produces its energy, the evolutionary path of other stars, the strange properties of red giants, white dwarfs, neutron stars and black holes, our Milky Way galaxy, dark matter and dark energy, and the history and fate of our universe as we understand it today. This course is independent of Planetary Astronomy and can be taken either before or after. Recommended: Completion of one science credit

ROBOTICS

Course Number Q226

.5 Physical Science credit

Grades 9-12

Robotics is one of the fastest growing fields of science. It combines engineering and science in a playfully interactive way. Students will design interactive systems that sense the world around them, make decisions, and then perform actions in the world around them. This course is designed for all ability levels, with students having input on the focus and scope of their learning. Student experiences will include laboratory-based project planning, experimentation, design, fabrication, programming, problem solving, teamwork, testing, evaluation, documentation, and presentation.

21st CENTURY DESIGN

Course Number Q225

.5 Fine Arts AND Physical Science credit Grades 11-12

The dawning reality of the 21st century is that global society values form as much as function. Science and engineering no longer guarantee success. Artistic worth is no longer a luxury, it is a requirement. In this class, students participate in all aspects of the design process. Integrating art and science, students will explore the qualities of successful design and the role of individuals in the design process. This course will feature practical applications of artistic and technical skills, and will culminate with a unique design work for each student.

This course is offered every other year. Offered 2016-2017

SOCIAL STUDIES

Essex High School's Social Studies teachers recognize the importance of acquiring the skills, knowledge and understanding of the foundational principles advantageous for students to become active and informed citizens. All students should select courses to fulfill their Social Studies requirements while also thinking about their interests and plans for the future in making selections.

Required Courses:

9th Grade Social Studies	1 credit	9th grade, fulfills World Studies requirement
United States History	1 credit	typically 10th grade, fulfills U.S. History requirement
American Government	.5 credit	fulfills American Government requirement
Social Studies Elective	.5 credit	typically 11th or 12th grade

9th Grade Course

9th GRADE SOCIAL STUDIES

Course Number S330

1 World Studies credit

Grade 9

This humanities-based course will focus on what it means to be a global citizen. It encourages students to think across disciplines by reading, writing, analyzing, and discussing topics from history and literature. While learning about modern global history, students will study art, novels, drama, short stories, poetry, and non-fiction, throughout the year. An emphasis will be placed on building community, establishing positive learner traits, and helping students make a smooth transition to the high school.

10th-12th Grade Courses

U.S. HISTORY

Course Number S215

1 United States History credit

Grades 10-12

Typically taken in the 10th grade, the purpose of this required course is to have students explore the legacy that they have inherited from the historical events in the United States over the previous 165 years. To achieve this, students will begin their studies with the rise of sectionalism in America and the resulting period of war and reconstruction. From there students will explore the rise of modern America as a political, cultural, and economic world power. Students will analyze the changing role of government in response to economic problems including the development of monopolies, the Great Depression, and the turmoil of the 1960s and 70s. Students will explore the social turmoil of the mid-twentieth century and understand its causes and effects on modern America, while also analyzing the role of the U.S. in international affairs from the world wars to the cold war and modern conflicts. By the end of the course students will demonstrate a greater understanding of the role of America in the world today and the historical legacy of that role.

AMERICAN GOVERNMENT

Course Number S216

.5 American Government credit

Grades 10-12

American Government is a required course. The goal of the course is for students to reach an enduring understanding that the American democratic system of government requires an informed citizenry that actively engages in the political process. Toward this end students will examine the foundations of American government; the structure and principles of the Constitution; the rights and freedoms provided to citizens; the role of the citizen, interest groups, political parties, and the mass media in shaping government policy; and the development of domestic and foreign policies.

THE AMERICAN SPIRIT

Course Number S221

.5 Social Studies credit

Grades 10-12

What does it mean to be an American today? This course is a thematic study of different perspectives of Americans from the 1950s through present day. Using primary sources, fiction and nonfiction, students will learn to be open to the ideas of others while appreciating the reality of historical events through the eyes of people who were there. This is a student-centered course, providing an opportunity for active learning through activities such as debate, interviews, journalism, theatre, community service and projects. Students will leave this course with an appreciation of the diversity of American ideas as well as a better understanding of their own heritage and views.

CURRENT ISSUES

Course Number S245

.5 Social Studies credit

Grades 10-12

This course is designed as a discussion-based course focusing on local, national and world issues. Throughout the semester students will use current publications, media, and technology to stay informed about the issues facing us today at the local, state, national, and global levels. This course will emphasize the importance of being an involved and informed citizen. Learning will be hands-on and actively changing with an opportunity to learn how to develop, articulate, support, and defend opinions and positions.

FACING HISTORY AND OURSELVES

Course Number S246

.5 Social Studies credit

Grades 10-12

The goal of this course is to explore and analyze the complex factors contributing to the Holocaust, interpret the events of 1933-1945, and evaluate the impact of the genocide on post-war Europe and generations that followed. We will look at several genocides, as well as the Holocaust, both chronologically and thematically. With an understanding of such issues as prejudice, discrimination, and racism, students are equipped to analyze contemporary political situations, think critically about ethical responsibility, and respond actively to injustice.

INTRODUCTION TO GENDER STUDIES

Course Number S242

.5 Social Studies credit

Grades 10-12

In this course, we will look at the diverse cultural, historical, and social experiences of women in history as well as a variety of issues facing young women in the world today. We will examine women's roles and

accomplishments in history, literature, politics, art, and music. We will ask critical questions about the portrayal of women in the media and women's place in politics, and make connections with other cultures. We will also discuss the effects of this portrayal on men. This course will use *The Feminine Mystique*, excerpts from textbooks, internet, speakers, newspapers, and videos. Students will keep a journal of their reflections, questions, and current events. The culmination will be to produce a research project based on a relevant topic of their choice. This is a course to raise your awareness of the status of women in the world today and throughout history.

INTRODUCTION TO GREAT IDEAS IN PHILOSOPHY

Course Number S009

.5 Social Studies credit

Grades 10-12

Students have the opportunity to explore alternative perspectives on the purpose of our lives. This creative introduction to philosophy and the workings of our minds explores the "great ideas" of history: from Socrates and Lao-Tze to Dewey and Kierkegaard. While focusing on the lives of great thinkers like Buddha and Aristotle, students gain insights into how we live today. Students will explore the nature of change and how our perceptions of reality are altered by our circumstances. In addition, students will be asked to actively participate in class discussion through the use of the Socratic Seminar. The two essential questions students will evaluate are "What does it mean to be Human?" and "Who am I?" Ultimately, students will think deeply about how to lead an ethical and meaningful life. During the second quarter the class will engage in a service learning activity related to topics in the course. A variety of texts and handouts provide stimulating reading and reflective prompts for personal writing.

INTRODUCTION TO WORLD GEOGRAPHY

Course Number S204

.5 Social Studies credit

Grades 10-12

This course offers a study of people, places, and environments at the state, regional, national, and international level by examining both the physical and human geographical world. Using the six essential elements of geography, students will learn content and skills that will help them navigate our society and a changing world. Additionally, this course will examine the relationship between geography and other social sciences including, economics, political science, history, sociology, and anthropology.

WE THE PEOPLE

Course Number S011

.5 Social Studies credit

Grades 10-12

Students enrolled in this course will participate in the *We the People... the Citizen and the Constitution* program established by an act of Congress. The primary goal of the program is to promote civic competence and responsibility among the nation's students. The culminating activity is a simulated congressional hearing state competition in which students "testify" before a panel of judges. In this competition students demonstrate their knowledge and understanding of constitutional principles, government, and politics and have opportunities to evaluate, take, and defend positions on relevant historical and contemporary issues. Content covered includes the Philosophical and Historical Foundations of the American Political System, creation of the Constitution, the values and principles embodied in the Constitution, institutions and practices of the American government, the development and expansion of protections in the Bill of Rights, and the roles of the citizen in American democracy. It is expected that students enrolled in this course will have a strong interest in Government and Politics, are willing to work collaboratively with classmates, compete in state competition, and if successful in regionals and the national competition in Washington DC. This is an intense, demanding, and exciting academic endeavor.

Strongly recommended: Completion of American Government, OR successful completion or concurrent enrollment in AP U.S. Government and Politics.

WORLD CULTURES

Course Number S213

.5 Social Studies credit

Grades 10-12

Students will concentrate on the cultural, social, political, and economic traditions of countries in Africa, Latin and South America, Asia, and the Middle East. Students will use textbooks, periodicals, newspapers, the internet, and speakers to gain a more thorough understanding of other cultures.

AP COMPARATIVE GOVERNMENT & POLITICS

Course Number S141

.5 Social Studies credit

Grades 10-12

This course will provide students with the tools necessary to develop an understanding of some of the world's political structures and practices. The course will encompass the study both of specific countries and of general concepts used to interpret the key political relationships found in virtually all national politics. Six countries form the core of the course; Great Britain, Russia, China, Mexico, Nigeria and Iran. These nations will be compared across the criteria of power structures, political institutions, citizen participation, political and economic change, and public policy. Students will be exposed to different theoretical and practical frameworks that are the foundations for a variety of different political systems. Special attention will be paid to the interaction of nations across their own boundaries through warfare, diplomacy, trade, intergovernmental organizations, and non-governmental organizations. Students who enroll in this course will prepare for the Advanced Placement Exam in May. Enrollment is open to all who are interested in international comparisons of government & politics and who are willing to work hard to develop an advanced understanding in the discipline.

Strongly recommended: Successful completion of AP U.S. Government & Politics or American Government.

AP ECONOMICS

Course Number S136

1 Social Studies credit

Grades 10-12

This course is intended for students who wish to engage in advanced economic studies equivalent to 2 semesters of college-level coursework. This is an excellent course for students who are considering majoring in Business in college as well as those who plan on a career in public service or public policy fields. After becoming familiar with basic economic concepts (scarcity, opportunity cost, comparative advantage, etc.) students will spend approximately one semester studying microeconomics and one semester studying macroeconomics. Topics in microeconomics include the nature and function of product markets (supply & demand, consumer choice, production and costs, firm behavior and market structure), factor markets, as well as market failure and the role of government. Topics in macroeconomics will include the measurement of economic performance (GDP, inflation, unemployment), national income and price determination, the financial sector, fiscal & monetary policies, as well as international trade and finance. This course is designed to prepare students for the College Board's Advanced Placement Microeconomics and Advanced Placement Macroeconomics exams. Enrollment is open to all who are interested in the discipline and are willing to work hard and learn. A strong background in mathematics has been a consistent indicator of success for students in this course.

AP U.S. GOVERNMENT & POLITICS

Course Number S140

1 American Government credit

Grades 10-12

This course will give students an analytical perspective on government and politics in the United States. The course includes both the study of general concepts used to interpret U. S. politics and the analysis of specific examples. Topics and questions that will be explored are the Constitutional underpinnings of U. S. Government, Political Beliefs and Behaviors, Political Parties, Interest Groups and Mass Media, Institutions of National Government, Civil Rights and Civil Liberties and Public Policy. Students will examine the various institutions, groups, beliefs, and ideas that constitute U.S. politics. A variety of theoretical perspectives and explanations for behaviors and outcomes will be inspected. Particular attention will be given to events and issues locally, statewide, nationally, and worldwide that are of timely importance. Lastly, the goal of this course is to develop the qualities of civic-mindedness, civic intelligence, and civic literacy through application and analysis of content covered. Enrollment is open to all who are interested in current events and issues, politics, and U.S. Government and who are willing to work hard to develop an advanced understanding in the discipline. This course can replace only the semester American Government credit.

**Special Note: Beginning with the class of 2017, this course completes the American Government requirement for graduation but does not fulfill the ½ credit Social Studies elective requirement.

AP U.S. HISTORY

Course Number S134

1 United States History credit

Grades 10-12

This challenging course is comparable to an introductory college course and requires students to be interested in history and self-motivated. Students will actively engage with material covering pre-Columbian times into the 21st century. Higher order skills including analysis, interpretation, and synthesis, will be necessary

for success. Writing will constitute a major portion of assessment, and classes will often be devoted to discussion and other interactive strategies. This course is designed to prepare students for the College Board Advanced Placement exam. Since the course will be conducted as a seminar, students will be responsible for information covered outside of class. Enrollment is open to all who are interested in the discipline and are willing to work hard and learn. The ability to keep up with extensive reading and writing is required.

AP WORLD HISTORY

Course Number S135

1 World Studies credit

Grades 10-12

This course is the equivalent of a two semester college level introductory course and is designed to prepare students for the Advanced Placement World History exam. Students will cover the full history of human societies from 8500 B.C.E. to the present. Students will explore the origins and evolution of interactions between the world's cultures. Course activities will highlight the nature of change as it occurs over time and comparisons among major societies. Students will delve into multiple perspectives on historical evidence and discuss interpretive issues relevant to historical work. Specific themes will focus on technological advances, gender roles, demographic forces, cultural developments, and political structures. Enrollment is open to all who are interested in the discipline and are willing to work hard and learn. The ability to keep up with extensive reading and writing is required.

Grade 12 Only

PSYCHOLOGY

Course Number S229

.5 Social Studies credit

Grade 12

This course is a survey course of the field of psychology and serves as a valuable basis for college level psychology. Students will learn about many areas in the field, including research methods, genetics and behavior, the brain, altered states of consciousness, motivation and emotion, personality, personal attraction, stress and mental disorders. Students will have a better understanding of their behavior as well as the behavior of others. Psychology is a useful course for many occupations as well as a good preparation for helping students learn to recognize and cope with problems they will face in the adult world.

SOCIOLOGY

Course Number S230

.5 Social Studies credit

Grade 12

Our present world presents one of the more accelerated and comprehensive eras of social change. All areas of social relationships have been or are being examined or challenged, and in many cases are experiencing new patterns and values. This Grade 12 course attempts to relate these changes to each other and to the past. The primary purpose is to learn about basic sociological patterns, while exploring as many points of view as possible. Students will gain insight into some of the problems in our society and into information about the field of Sociology. This course will also help students to handle situations confronting them as individuals. A basic text is used covering such topics as: Heredity and Environment, Social Adjustment, Goals of Marriage and Family, and Behavior Problems of Children and Youth. Current publications, as well as supplemental books and a variety of films, records, and newspapers are used throughout the course.

WORLD LANGUAGES

EHS students are required to complete one year of a World Language in order to graduate. Currently most colleges and universities require or highly recommend a multi-year, same-language sequence of study for admission. Consequently many EHS students take multiple years of one or more languages. The languages offered at EHS are French, Spanish, and Japanese. EHS World Languages courses focus on interpersonal, presentational, and interpretive communication through literature, music, film, media, and the study of cultures related to the target languages. Students are encouraged to participate in linguistic and cultural exchanges. Students with pre-existing language skills may contact the World Languages office to schedule an appointment with a teacher of that language to discuss proper level of placement for the student.

French

FRENCH I

Course Number G201

1 World Language credit

Grades 9-12

This course is an introduction to the French language and the cultures of francophone countries and regions. The course emphasizes practical speaking and listening skills, while introducing basic reading comprehension and writing skills.

FRENCH II

Course Number G204

1 World Language credit

Grades 9-12

This course is the foundation for the intermediate and advanced levels of French at Essex High School. Students continue to develop speaking and listening skills, but also develop reading and writing skills. Students continue to study French-speaking cultures through literature, art, music and geography. This course is designed for students who have taken French I in middle school or high school.

Prerequisite: French I

FRENCH III

Course Number G206

1 World Language credit

Grades 9-12

In this course, the student will maintain and develop listening and speaking skills with increased emphasis on reading and writing. The teaching of more advanced grammar and vocabulary will equip students with the tools to express themselves at a more sophisticated level. Students will continue to study French-speaking cultures through text, media, music and film. This course will be conducted at least 75% of the time in French.

Prerequisite: French II

FRENCH IV

Course Number G207

1 World Language credit

Grades 9-12

Students will develop French interpersonal, presentational and interpretive language skills through the study of more complex grammatical structures and vocabulary. Students will navigate a variety of resources, including authentic oral and written materials, including correspondence with sister schools abroad, to gain a broader perspective of the French language and French-speaking cultures. This course will be conducted 90% of the time in French.

Prerequisite: French III

ADVANCED FRENCH CONVERSATION AND CULTURE

Course Number G108

1 World Language credit

Grades 9-12

This course is designed for students interested in developing a high level of linguistic and cultural competency. Students will work toward ease of communication and greater cultural knowledge through the study of film, literature, media, and correspondence with VIA Collaborative schools in France, Belgium, and Spain. This course will also focus on professional communication skills and cultural competency as preparation for working in an international environment. Advanced French Conversation and Culture takes a practical approach for students desiring to apply the French language in everyday life, within and outside of the school setting. This course will be conducted entirely in French.

Prerequisite: French IV

AP FRENCH LANGUAGE

Course Number G111

1 World Language credit

Grades 9-12

This course develops a high level of proficiency across the interpersonal, presentational, and interpretive modes of communication in French. Through authentic sources, including film, television, literature, journalistic excerpts, media, and correspondence with our VIA Collaborative schools in Belgium and France, students will focus on more sophisticated oral and written expression, linguistic accuracy fluency, and cultural competency. This course, conducted entirely in French, is comparable to fourth semester (or the equivalent) college/university courses in French, and will prepare students to take the Advanced Placement exam in May.

Prerequisite: Recommendation of previous French teacher

Japanese

JAPANESE I

Course Number G229

1 World Language credit

Grades 9-12

This course emphasizes conversation and cultural information necessary to communicate in this non-Western language. Students master two new alphabets: Hiragana and Katakana. Students are encouraged to take two years of Japanese at the high school.

JAPANESE II

Course Number G230

1 World Language credit

Grades 9-12

This course continues language development in the skills of listening, speaking, reading and writing in Japanese. There is expanded cultural study and use of language in the classroom. Students master up to 200 Kanji.

Prerequisite: Japanese I

Spanish

SPANISH I

Course Number G217

1 World Language credit

Grades 9-12

This course is an introduction to the Spanish language and culture. The course emphasizes speaking and listening comprehension, basic reading comprehension, and basic writing skills. Spanish I is a proficiency-based course. Students have the opportunity to move at their own pace by demonstrating understanding and skills required to reach each of the eight milestones of the course. Credit is granted based on the number of milestones successfully completed throughout the year. Students may also have the option to continue to Spanish II material at any point during the course after demonstrating understanding of all Spanish I milestones.

SPANISH II

Course Number G219

1 World Language credit

Grades 9-12

In this course, students create the foundation for the intermediate and advanced levels of Spanish at Essex High School. Students will continue to develop speaking, listening, reading and writing skills. Students will study Spanish-speaking cultures through readings, art, music and geography. Spanish II is a proficiency-based course. Students have the opportunity to move at their own pace by demonstrating understanding and skills required to reach each of the eight milestones of the course. Credit is granted based on the number of milestones successfully completed throughout the year. Students may also have the option to continue to Spanish III material at any point during the course after demonstrating understanding of all Spanish II milestones. By the end of the year, students are expected to use Spanish 75% of the time.

Prerequisite: Spanish I

SPANISH III

Course Number G221

1 World Language credit

Grades 9-12

In this course, the student will maintain and develop listening and speaking skills, with increased emphasis on reading and writing. The introduction of more advanced grammar and vocabulary will equip students

with the tools to express themselves at a more sophisticated level. Students will continue to study Spanish-speaking cultures through readings, media, music and film. This course will be conducted at least 75% of the time in Spanish.

Prerequisite: Spanish II

SPANISH IV

Course Number G222

1 World Language credit

Grades 9-12

In this course, students will maintain and develop listening and speaking skills, and will develop more advanced reading and writing skills through the study of more complex grammatical structures and vocabulary. Students will focus on the reading of selected literary works. The study of cultures will give students a broad perspective of Hispanic peoples throughout the world. This course will be conducted 90% of the time in Spanish.

Prerequisite: Spanish III

SPANISH V

Course Number G104

1 World Language credit

Grades 9-12

In this advanced language course, students will review grammar and be introduced to new, more complex grammatical structures. Conversation will be expanded to incorporate the three communicative modes: interpersonal, presentational, and interpretive. Students will explore Hispanic and Spanish literature and culture, both present and past, through literature and film. This course will be conducted entirely in Spanish.

Prerequisite: Spanish IV

AP SPANISH LANGUAGE VI

Course Number G105

1 World Language credit

Grades 9-12

This course will help students continue to develop more advanced proficiency across the three communicative modes: interpersonal, presentational and interpretive. Language skills will become more refined and will emphasize more sophisticated oral and written expression, as well as linguistic accuracy and fluency. Authentic sources, including literature representing Hispanic and Spanish authors, printed text, and audio material, will serve as the basis for the course and will incorporate historical, political and contemporary perspectives. The course is compatible with a fifth or sixth semester college course and will prepare students to take the Advanced Placement exam in May. This course will be conducted entirely in Spanish.

Prerequisite: Recommendation of previous Spanish teacher

CTE Embedded/Integrated Credits

EHS 2016-2017

www.go-cte.org

PROGRAM	MATH	PHYS or NAT SCIENCE	SOCIAL STUDIES	FINE ARTS	ENGLISH	PRAC. ARTS	OTHER
Automotive Tech	1	1 PS				0.5	Computer Apps .5
Automotive Tech 2	1	1 PS					
Building Tech: Residential	1	1 PS				0.5	
Building Systems	1	1 PS				0.5	
Childhood Education/HS			1		1	0.5	Computer Apps .5
Childhood Education/HS 2			.5		1		
Computer Animation				1	1	0.5	Computer Apps .5
Computer Animation 2		1 PS		1	1		
Computer Systems Technology	1	1 PS				0.5	Computer Apps .5
Computer Systems Technology 2	1	1 PS					
Cosmetology	1	1 NS			1	0.5	Computer Apps .5
Cosmetology 2	1	1 NS			1		
Dental Assisting	1	1 PS or NS				0.5	
Dental Assisting 2	1	1 PS or NS					
Design & Creative Media	1			1	1	0.5	Computer Apps .5
Design & Creative Media 2	1			1	1		
Engineering/Arch. Design	1			0.5		0.5	
Engineering/Arch. Design 2	1			1			
Engineering Design and Production Technology	1			1			
Health Informatics	1	1 PS			1	0.5	Computer Apps .5
Natural Resources - Forestry	1	1 PS or NS				0.5	
Natural Resources - Mechanical	1	1 PS or NS				0.5	
Professional Foods	1	1 NS				0.5	
Professional Foods 2	1	1 NS					
Pre-Tech	1	1 PS or NS		0.5	1	0.5	P.E. – 1
Pre-Tech Foundations: Intro to Engineering				0.5			0.5 EL
Pre-Tech Fndtns: Intro to Auto Tech/Transport						0.5	0.5 EL



Burlington Technical Center
www.burlingtontech.info

The Burlington Technical Center (BTC) offers morning or afternoon half-day technical programs for 11th and 12th grade students in a variety of fields. BTC programs are designed to be completed in two years, although some students attend for one year to begin an introduction to a career field. EHS students enrolled in BTC courses can earn three credits per year toward EHS graduation requirements (see “EHS Embedded Credits” chart below). EHS students are bused to BTC for their half-day morning or afternoon program and may also take EHS courses if their schedule allows. BTC Students acquire the knowledge, skills and attitudes necessary to become productive members of the workforce and to go on to further education and training. Students have the opportunity to be placed in cooperative job settings and to participate in internships so they can experience the workplace, get high school credit and earn a wage. Students have been placed in all major manufacturing companies and numerous small businesses within commuting distance of BTC. College and career exploration is an important part of each program. Many BTC programs offer college credits through dual enrollment programs at Community College of Vermont and Vermont Technical College. Visit the BTC web site for additional information and contact your EHS School Counselor to see how a BTC program can fit into your schedule.

BURLINGTON TECHNICAL CENTER COURSES FOR EHS STUDENTS	
Auto Body Repair I	Design & Illustration I
Auto Body Repair II	Design & Illustration II
Automotive Science & Technology I	Electronic Recording Arts I
Automotive Science & Technology II	Electronic Recording Arts II
Aviation Technology I	Human Development and Education I
Aviation Technology II	Human Development and Education II
Computer Systems I	Medical & Sports Sciences I
Computer Systems II	Medical & Sports Sciences II
Criminal Justice I	Welding/Metal Fabrication I
Criminal Justice II	Welding/Metal Fabrication II
Culinary/Professional Foods I	
Culinary/Professional Foods II	

EHS Embedded Credits

PROGRAM	MATH	SCIENCE	SOCIAL STUDIES	FINE ARTS	ENGLISH	PRAC. ARTS	OTHER
BTC Auto Body Repair II		1 (PS)					2 Elective
BTC Aviation Technology II	1	1 (PS)					1 Elective
BTC Criminal Justice II			1				2 Elective
BTC Design & Illustration II				1			2 Elective
BTC Electronic Recording Arts II		1 (PS)					2 Elective

Burlington Technical Center



2016-2017 Program Schedule

<u>Morning 9:35-11:47</u>	<u>Afternoon 12:09-2:21</u>
Auto Body Repair I	Auto Body Repair II (Science credit upon program completion)
Automotive Science & Technology I	Automotive Science & Technology II (Science credit upon program completion)
Aviation Technology II (Math & Science Credit upon program completion)	Aviation Technology I
Computer Systems I	Computer Systems II (Computer Science credit upon program completion)
Criminal Justice I	Criminal Justice II (Social Studies Credit upon program completion)
Culinary/Professional Foods I & II (Science credit upon program II completion)	Culinary/Professional Foods I & II (Science credit upon program II completion)
Design & Illustration I & II (Fine Arts Credit upon program II completion)	Design & Illustration I & II (Fine Arts Credit upon program II completion)
Electronic Recording Arts I	Electronic Recording Arts II (Science credit upon program completion)
Human Development and Education I & II (Social Studies Credit upon program II completion)	Human Development and Education I & II (Social Studies Credit upon program II completion)
Medical & Sports Sciences I	Medical & Sports Sciences II (Anatomy & Physiology Credit upon program completion)
Welding/Metal Fabrication I	Welding/Metal Fabrication II (Math Credit upon program completion)

Table of Contents

Core Values and Beliefs	4
Information and Definitions	4
Academic Year	
Daily Schedule	
Flex Block	
Full-time and Part-time Status	
Personal Learning Plans (PLPs)	
9th and 10th Grade Course Selection and Multiple Pathways	
Course Levels and Sequences	
NCAA Clearinghouse and Athletic Eligibility	
Alternative Credit Options	6
Career and Technical Education	
Independent Programs	
College Courses	
Virtual/Online Learning	
Learning Labs and Study Skills Support	8
Supportive Study Skills	
Learning Lab	
ACE Program	
Graduation Requirements	9
Student Educational Plan Worksheet	10
<u>2016-2017 Course Offerings</u>	
Academy Pathways: AVPA and STEM	12
Business Education	13
Driver Education	15
English	15
English Language Learners (ELL)	21
Fine Arts	22
Health and Physical Education	28
Mathematics	30
Practical Arts	34
Science	38
Social Studies	43
World Languages	48
Center for Technology - Essex	51
Burlington Technical Center	52