



HAVERHILL HIGH SCHOOL



PROGRAM OF STUDIES 2016-2017

Haverhill High School
137 Monument Street
Haverhill, MA 01832

Haverhill Public Schools Mission Statement

The Haverhill Public School system is dedicated to ensuring each learner meets or exceeds rigorous academic standards to become citizens with integrity, skills, and the resources to succeed in the global community.

Haverhill High School Mission Statement

The Mission of Haverhill High School is to produce self-directed learners who read, write, and speak effectively in Standard English and who apply analytical and technological skills to interpret information and problem solve.



Haverhill High School Statement of Purpose

Haverhill High School, in cooperation with parents and community members, is committed to preparing all students with the skills necessary to become productive and socially responsible citizens in an ever-changing world. To this end, students plan their educational experiences with a view toward career choices, set goals, seek the assistance necessary to achieve their goals, and have high expectations for academic and personal growth.

Recognizing that our students have different backgrounds, interests, and abilities, Haverhill High School provides a wide range of educational programs and extracurricular activities to allow students to challenge themselves. The school offers a curriculum dedicated to linking a broad foundation in the liberal arts tradition with a variety of practical choices to prepare students for the transition to life and learning after high school.

All participants in the Haverhill High School partnership—students, teachers, administrators, support staff, parents, and community members—work together to create and sustain a safe, healthy, and supportive learning environment and physical facility. Our school is one where mutual respect and caring foster personal and social growth and responsibility.

Expectation #1	Academic	All students should read effectively in Standard English.
Expectation #2	Academic	All students should write effectively in Standard English.
Expectation #3	Academic	All students should speak effectively in Standard English.
Expectation #4	Academic	All students should apply analytical skills to interpret information and solve problems.
Expectation #5	Academic	All students should apply technological skills to interpret information and solve problems
Expectation #6	Social	All students should respect themselves and others, understand their rights and responsibilities, and welcome other students to become part of our learning community.
Expectation #7	Civic	All students should participate in one or more of the following: government, civic organizations, and/or community service.
Expectation #8	Civic	All students should contribute to a safe and healthy learning environment by respecting and maintaining the building and grounds.



Haverhill Public Schools

Office of the Superintendent

Dear Students of Haverhill High,

The courses offered at Haverhill High School have been designed to provide all students with an academically rigorous challenge. These courses meet the academic needs of our diverse student body. Along with our academic courses, we provide all with a rich and varied selection of career oriented offerings. Haverhill High School's mission is to provide all students with opportunities and experiences that will allow all to be properly prepared for college or a career. Haverhill High School, along with a wide variety of academic offerings, allows all to participate in many athletic as well as the arts and social offerings.

As Superintendent of the Haverhill School system, our staff has worked hard to ensure that you receive an excellent comprehensive education that will enable you to find success after high school. I believe Haverhill High School's curriculum offerings will allow you to excel in whatever endeavor you attempt, be it college, the military, or the world of work. I personally hope and expect that you understand that success only can be achieved by your hard work. The challenges and choices are yours for these four years in large part, and they shape how the balance of your life will be lived. I wish you all the best...

Sincerely,

James F. Scully



Haverhill High School
137 Monument St.
Haverhill, MA 01832
Phone: 978-374-5700 Fax: 978-374-5705

Beth Kitsos, Principal
bkitsos@haverhill-ps.org

Dear Students, Parents and Guardians,

The Haverhill High School 2016-2017 Program of Studies has been created for our students to use as they plan their course of study to meet state and local graduation requirements. The planning process will encourage them to set goals and to develop their own unique individual student success plans that will assist them in successfully achieving those goals. Students will have choices as they review the variety of courses offered at HHS that highlight the diversity of opportunities and will assist them to develop the skills required to become successful in post-secondary plans.

Haverhill High School students are encouraged to take full advantage of the myriad of opportunities and to challenge themselves to reach new academic heights. The variety of rigorous course offerings will encourage students to stretch themselves academically beyond their comfort zone. Our highly qualified professional educators are always available to assist students and parents as they navigate the various pathways and opportunities that Haverhill High offers the students of Haverhill.

We look forward to a positive and productive 2016-2017 school year! This is an exciting time to be a Haverhill High Hillie!

Sincerely,

Beth Kitsos

*Beth Kitsos
Principal*

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Haverhill High School hopes to offer all courses listed in this Program of Studies, but due to budget or enrollment priorities all offerings may not be available. Students and their parents or guardians should be aware of this possibility.

GRADUATION REQUIREMENTS

Twenty (20) credits are required for graduation from Haverhill High School. All students must satisfy the graduation requirements listed below. In addition, students must pass the English, Mathematics, and Science MCAS tests as required by state regulations to graduate with a Competency Determination (CD).

All students are strongly encouraged to meet the MassCore graduation requirements set forth by the Department of Elementary and Secondary Education. **MassCore is a state recommended, rigorous program of study that aligns high school course work with college and workforce expectations.** MassCore requires an additional credit in Mathematics, one credit in both World Language and Fine Arts, and two and a half additional courses, for a total of 22 credits.

Area of Study	HHS Credits 20	MassCore Credits 22
English (I, II, III, IV)	4.0	4.0
Social Studies (Including 1 Credit in U.S. History)	3.0	3.0
Mathematics (*Must include Algebra II)	3.0	4.0*
Lab-based Science	3.0	3.0
Computer Technology	0.5	---
School-to-Career	1.0	---
Fine Arts or World Languages	1.0	---
Fine Arts	---	1.0
World Languages (*Must be same language)	---	2.0*
Wellness	2.0	---**
Public Speaking (Class of 2019+)	.5	---
Electives	2.0	---
Additional Mass Core credits (*Must be from technology, school to career, business, or additional core academic areas)	---	5.0

Note: Graduation requirements subject to change with School Committee approval.

*** Required by law*

School-to-Career

Every student will eventually enter the work force. After high school, all students will choose to pursue an entry-level position in the workplace or secure additional skills and education by attending a two-year college, four-year college or a technical school.

Preparing all students to compete and perform in the real world is essential. The School to Career initiative provides the core proficiencies and academic competencies necessary for students to succeed in our globally competitive world. The School to Career vision is that this will be achieved through career-based learning experiences along with applied academics and increased emphasis on comprehensive career exploration.

Suggested Credits for Admission to Post-Secondary School

	English	Social Studies	Mathematics	Science	World Languages
Highly Selective Colleges	4	4	4-5	4	3-4
Four-Year Colleges	4	3	4	3-4	2-4
Two-Year Colleges	4	3	3	3	1-2
Technical Colleges	4	3	3	3	1-2



HAVERHILL HIGH SCHOOL FOUR YEAR PLAN

NAME: _____ COUNSELOR: _____

9 TH GRADE	10 TH GRADE	11 TH GRADE	12 TH GRADE
English I	English II	English III	English IV
World History I	World History II	U.S. History	
Mathematics	Mathematics	Mathematics	Mathematics
Lab Science	Lab Science	Lab Science	Science
Wellness 9	Wellness 10		
World Language I	World Language II		
Fine Art	Fine Art		
School-to-Career	School-to-Career		
Computer Tech	Academy Courses	Academy Courses	Academy Courses
Total Credits:	Total Credits:	Total Credits:	Total Credits:

HAVERHILL HIGH SCHOOL GRADUATION REQUIREMENTS

4 CREDITS OF ENGLISH	1 CREDIT WORLD LANGUAGE OR FINE ART
3 CREDITS OF SOCIAL STUDIES, WITH US HISTORY	0.5 CREDIT OF A COMPUTER TECH COURSE
3 CREDITS OF MATH	2.0 CREDIT OF WELLNESS
3 CREDITS OF LAB SCIENCE	3.5 CREDITS OF ELECTIVES
1 CREDIT SCHOOL-TO-CAREER	

PASS REQUIRED MCAS EXAMS: ENGLISH, MATHEMATICS AND SCIENCE

Post High School Plans:

- ____ 2 year College
- ____ 4 year College
- ____ Employment
- ____ Armed Services
- ____ Other

Promotion Requirements at HHS

4.5 Credits & pass English I and Algebra I to Enter Grade 10
9.0 Credits & pass English II to Enter Grade 11
13.5 Credits & pass English II to Enter Grade 12
20.0 Credits, pass English IV & MCAS to Graduate

4 Year MA State College and UMASS Requirements:

4 Credits of English
3 Credits of Math (Algebra I, Geometry, Algebra II)
3 Credits of Social Studies (including US History)
2 Credits of Foreign Language (single language)
3 Credits of Science

GPA of 3.0 is preferred

Grade Point Average Equivalents:

4.0 = A
3.0 = B
2.0 = C
1.0 = D

FRESHMAN ACADEMY

Overarching Goal: Develop a tiered support system that ensures opportunity, access and equity for ALL.

The Freshman Academy has been established to build a greater sense of school community and to foster a successful transition from middle school to high school. This supports the long-term goals for student achievement, and creates a school culture in which adults and peers support each student. This team structure builds a strong school community that encourages meaningful relationships, increases attendance rates, decreases behavior incidents, teaches organizational skills necessary to be successful, and fosters high student achievement. All first-time freshmen, except for those enrolled in the Classical Academy and the NAF IT Academy, will be in the Freshman Academy. Specific objectives of the Freshman Academy include:

- Ensuring the academic success of all students using a comprehensive, research-based approach.
- Creating a safe and orderly learning environment that intentionally addresses the social, emotional, and academic needs of ninth grade students.
- Maintaining on-going communication with parents to establish a positive working relationship.
- Providing teachers with consistent use of planning time for collaboration on all aspects of curriculum design and instruction to support the achievement of all students.

SPECIAL EDUCATION

The Special Education Department provides specially designed instruction to meet the unique needs of students with disabilities. Students eligible for Special Education services have Individualized Educational Programs (IEP) that can include both Special Education and Regular Education courses. The primary goal of the department is to support and encourage maximum student involvement in regular education courses to the extent appropriate.

The Special Education Department and the Haverhill High School community are committed to meeting the educational and emotional needs of students with learning challenges in the least restrictive environment. Each Haverhill High School student with special needs is placed in accordance with the TEAM evaluation process. This process involves exploring and documenting all regular education alternatives prior to referral to Special Education.

Participation in the following Special Education courses is predicated upon recommendations made via the TEAM process and the receipt of a signed Individualized Educational Program accepting the course(s).

THE CLASSICAL ACADEMY

The Classical Academy is an admissions exam program within Haverhill High School that engages academically promising students in a challenging college preparatory curriculum intended to broaden and deepen their knowledge, skills, understandings, and civic commitment. The Classical Academy creates scholars who are well-rounded, cultured, self-disciplined, critical thinkers who can compete at the highest academic levels.

The Classical Academy is a contemporary classical education with emphasis in Latin and the humanities. Students take an entrance exam and based on their scores, teacher recommendations and their middle school transcripts are accepted in to the program. Many students, who would have attended private schools, have opted to choose Haverhill High for the sole purpose of participating in this program.

Students have a prescribed four-year curriculum. All core courses are honors or Advanced Placement levels. Students are required to take a minimum of three (3) Advanced Placement (AP) courses. **Beginning with the Class of 2020, students will be required to take a minimum of four (4) Advanced Placement (AP) courses.** Classical Academy students must take and pass three years of Latin. There are courses offered which are unique to the program.

In their freshman year, students take a course called *A Classical Perspective*, which focuses on classical themes within literature and studio art. This interdisciplinary, project-based course incorporates and connects curricula from the Humanities, World Languages and Fine Arts. In addition to their core subjects, History, English, Mathematics, Science and Latin and their Classical

Perspective courses, students take Wellness and a World Language. Students are required to maintain no less than a “C” average in any subject; failure to do so in two or more, results in a probationary status. After the committee reviews students’ quarterly grades, anyone who fails to meet this standard at the time of final grades is excluded from the program.

In their sophomore year, students are required to take AP European History, English, Mathematics, Science and Wellness. In addition, they will take either: **a)** 2nd World Language (Honors Level) **b)** Another AP course (with teacher recommendation) or **c)** 1 credit worth of Fine Arts electives and/or electives from another academy in which the student is enrolled.

In their junior year, students take AP US History and AP English, as well as, creative writing or public speaking; Mathematics and Science. Students may elect one and a half courses and are encouraged to take a second language including modern languages (French, Spanish, Italian and German) or Ancient Greek. They may also take an additional mathematics or science or advanced placement course. Juniors and seniors are encouraged to do a community service project of their choosing.

Senior year, students take senior seminar and produce an eighty hour project about a topic of their choice, culminating in a presentation before a panel of expert judges. All other courses are elective. Students are encouraged to take advanced placement or honors level courses.

The goal is to offer these students a challenging unique opportunity with enhanced extracurricular activities within a public high school. Our teachers are encouraged to bring in guest speakers and lecturers and arrange field trips, which are tied to the curriculum. In the past, students have had lectures by a juvenile district court judge, a Buddhist monk and a performance by a professional storyteller/poet. Students have visited the Museum of Fine Arts, the John F. Kennedy Library, where they witnessed a political forum, and attended performances of *To Kill a Mockingbird* and *Julius Caesar*, just to mention a few.

Our objective is to offer students a rigorous program and to provide them with a foundational experience, for successful college studies. We create critical thinkers, problem-solvers and creative young adults who will meet the challenges in all their future endeavors and to become a responsible citizen.

9th Grade Courses

- English I Honors
- World History I Honors
- Algebra I Honors or Algebra II Honors
- Life Science Honors
- A Classical Perspective - Literature
- A Classical Perspective – Studio
- Latin I Honors
- Wellness
- Chosen Elective

10th Grade Courses

- English II Honors
- European History AP
- Geometry Honors
- Chemistry Honors
- Latin II Honors
- Wellness
- One of the following:
 1. 2nd World Language (Honors Level)
 2. Another AP course (with teacher recommendation)
 3. 1 credit worth of Fine Arts electives and/or electives from another academy in which the student is enrolled.
 4. Classical Philosophy in the 21st Century (Formerly Research Seminar)

11th Grade Courses

- Literature and Composition AP
- US History AP
- Algebra II or Precalculus Honors
- Physics Honors or any honors level science
- Creative Writing H or Public Speaking ½ credit
- Latin III Honors or Latin III Honors Accelerated
- Second Language (year 1) or Chosen Elective

12th Grade Courses

- Language and Composition AP or English IV Honors
- Senior Seminar Honors ½ credit
- Fourth year of Mathematics (Precalculus Honors, Calculus Honors or AP, Statistics Honors or AP, etc.)

Suggested Courses

- Physics AP or Biology AP
- Latin IV Honors or Latin AP
- Second Language (year 2), Art History AP or any Chosen Elective

BUSINESS ACADEMY

The Haverhill High School Business Academy is to provide students with the opportunity to integrate academic and occupational-related instruction prepare them for success in life, education, and the 21st century marketplace in a supportive educational environment. The Business Academy will include exposure to a wide spectrum of post graduate options, marketable skills, and job related possibilities. Students may have the opportunity to earn certifications in several of their courses.

To earn your academy designation at graduation you must complete the list of graduation requirements on page 6 and six (6) credits in your chosen academy electives listed below.

Possible Career Options

Accounting	Accountants, Auditors, Entrepreneurs, Bankers, Stockbrokers, Investors, Sales and Marketing Representatives
Game Development and Design	Game Designers, Game Developers
Web Development	Web Designers, Web Developers
Television Production	Film Crew, Film Editing
Culinary	Restaurant Chef, Line Chef, Dessert Chef
Fashion	Fashion Designer and Tailor
Woodworking	Carpenters, Architects, Cabinet Makers
Cosmetology	Hair Dresser, Nail Technician

Career Internship Opportunities

The purpose of the Career Internship is to provide students with a meaningful workplace experience working closely with a professional in a chosen field. The students will also participate in classes where they will build a career portfolio, including resumes, cover letters, interviewing skills, and ultimately, letters of recommendation. The students will also learn about labor laws and their rights in the workplace. This course runs during period J or two afternoons a week from 2:15 p.m.-5:15 p.m. Students will receive ½ credit per semester for satisfactory completion of all requirements.

Accounting Electives

Intro Business
Intro Economics
Intro Personal Finance
Money Matters
Entrepreneurship
Marketing
Honors Accounting
Banking Internship
Earning, Learning, and Investing

Business Electives

Money Matters
Intro to Personal Finance
Intro to Economics
Web I
Web II
Creative Writing

Game Development and Design Electives

Robotics
Web Design I
Web Design II
Photoshop for Digital Art
Illustrator for Graphic Design
Computer Technology
Approved STEM Elective

Web Development and Design Electives

Photoshop II
Illustrator II for Graphic Design
Game Design I
Game Design II
Approved STEM Elective

Television Production Electives

Web I
Web II
Public Speaking
Creative Writing
Photoshop for Photo and Digital Art
Illustrator for Graphic Design

Culinary Arts Electives

Food for Health and Nutrition
Multicultural Foods
Entrepreneurship, Business Marketing

Fashion Electives

Studio Drawing
Sculpture & 3D Design
Intro to Business
CAD
Photoshop I

Woodworking Technology or Construction Electives

CAD I
Class(es) in another Woodworking/Construction
Marketing
Money Matters
Entrepreneurship

Cosmetology Electives

Money Matters
Marketing
Entrepreneurship
Intro to Web Design
Photoshop for Photo and Design

FINE ARTS ACADEMY

The Fine Arts Academy seeks to encourage a lifelong appreciation and involvement in the arts. The Fine Arts Academy fosters the individual growth of all students providing them with skills they will utilize throughout their life. Our goal is to enable students to develop and achieve their creative and expressive potential. Students may specialize in either visual or performing arts. In addition to the General High School Sequence of Courses listed on page 7, students will take 6 of the following courses, depending on their area of interest:

Music/ Choral Major / Theatre Arts

- *2 Years of an instrument or chorus is mandatory.*
- *4 years is preferred if student wishes to pursue a college degree in Music/Performance. Seniors must perform in a recital for FAA distinction.*

To earn your academy designation at graduation you must complete the list of graduation requirements on page 6 and six (6) credits in your chosen academy electives listed below.

Possible Career Options

Visual/Graphic Design	Art Education, Art Therapy, Advertising, Art Historian/ Critic, Scientific & Medical Illustrator, Art Director, Industrial Designer, Fabric, Textile, Furniture Designer, Set Designer, Special Effects Makeup
Performing/Theater Arts	Music Education, Film Composer/ Arranger, Music editor, Music Therapy, Vocalist, Songwriter/Jingle writer, MIDI technician, Actor, Orchestra Musician, Session Musician, Music Publishing

Career Internship Opportunities

The purpose of the Career Internship is to provide students with a meaningful workplace experience working closely with a professional in a chosen field. The students will also participate in classes where they will build a career portfolio, including resumes, cover letters, interviewing skills, and ultimately, letters of recommendation. The students will also learn about labor laws and their rights in the workplace. This course runs during period J or two afternoons a week from 2:15 p.m.-5:15 p.m. Students will receive ½ credit per semester for satisfactory completion of all requirements.

Performing / Theatre Arts Electives

- AV Stage Tech
- Band
- Chorus/Chamber Chorus
- Electronic Keyboard Lab
- Fundamentals of Music
- Guitar Workshop
- History of Rock and Roll
- Introduction to Musical Software
- Jazz Band
- Music Exploration
- Music Theory

Performing / Vocal Arts Electives

- Chorus
- Chamber Chorus (tryout required)
- Guitar Workshop

Music Major or Instrumental Performance Electives

- Band and/or Chorus
- Electronic Keyboard Lab
- Guitar Workshop
- History of Rock and Roll
- Introduction to Musical Software
- Jazz Band
- Music Exploration

- Music Theory and Notation

Visual Arts / Graphics Electives

- Advanced Digital Design Workshop
- Advanced Jewelry Making
- Advanced Photo
- Advanced Printmaking
- Art History AP
- Art Studio AP
- Art History Survey
- Basic Foundations of Art
- Ceramics and Design I
- Ceramics and Design II
- Digital Design Workshop I
- Digital Design Workshop II
- Digital Photo and Imaging
- Illustration
- Jewelry Making
- Photo I
- Photo II
- Printmaking
- Sculpture and 3D Design
- Studio Drawing
- Studio Painting
- Survey of Art History

HUMANITIES ACADEMY

The humanities are the cornerstone of education and include such disciplines as English, history, classical studies, social sciences, art, philosophy and language. They teach students how to read and write and ways of teaching others to live fully and creatively in society. Additionally, they teach students how to use their imaginations, find beauty in experience, and reflect critically on that experience. They support all academic disciplines by clarifying social policy, developments in technology, economic ideals, and public and private values. Study of the humanities provides students with historical perspective and cultural awareness which gives them the ability to express themselves clearly and accurately, to critically evaluate, analyze and interpret ideas and actions, and the courage to make choices on shared values and priorities. The Humanities Academy will prepare students for careers in the fields of Humanities, Education and Political Science.

To earn your academy designation at graduation you must complete the list of graduation requirements on page 6 and six (6) credits in your chosen academy electives listed below.

Possible Career Options

Education and Social Services	Advocate, Teacher, College Professor, Human Rights Linguist , Social Worker, Anthropologist
Communications Electives	Journalist, Advertising Copywriter, Freelance Writer, Copy Editor in Publishing, Marketer, Communications Director, Publicist
Politics and Law Electives	Lawyer, Politician, Media Consultant, Political Consultant

Career Internship Opportunities

The purpose of the Career Internship is to provide students with a meaningful workplace experience working closely with a professional in a chosen field. The students will also participate in classes where they will build a career portfolio, including resumes, cover letters, interviewing skills, and ultimately, letters of recommendation. The students will also learn about labor laws and their rights in the workplace. This course runs during period J or two afternoons a week from 2:15 p.m.-5:15 p.m. Students will receive ½ credit per semester for satisfactory completion of all requirements.

Education and Social Services Electives – All students must earn a 75% or better on all electives

- Advanced Psychology
- Psychology
- Child Psychology I
- Child Psychology II
- Contemporary Issues
- Internship
- Public Speaking
- Sociology

Communications Electives

- Business Marketing
- Creative Writing
- Internship
- Journalism
- Networking in the 21st Century
- Philosophy
- Public Speaking

Politics and Law Electives

- Economics AP
- U.S. Government AP and Politics/Civics*
- Contemporary Issues
- Honors Constitutional Law/Constitutional Law
- Honors Psychology/Psychology
- International Relations
- Internship
- Introduction to Economics
- Philosophy
- Public Speaking

STEM ACADEMY

The Science, Technology, Engineering, and Math (STEM) Academy at Haverhill High School provides students with the framework, courses, and support to realize their potential for success in STEM careers. Within the STEM Academy, students have the opportunity to explore STEM related fields, develop 21st Century skills, and get a head start on their post-secondary education. By freshman year, many students have already developed an interest in STEM topics and wish to focus their high school studies in this field. STEM-related careers are expected to grow significantly in the coming years, providing tremendous opportunities for people with a strong STEM background.

Students in the STEM Academy choose from among six different academic pathways: Health & Life Sciences; Engineering; Physical Sciences; Earth and Environmental Sciences; Information Technology and Applied Mathematics. The choice of a pathway and the array of electives available allow students to explore areas of personal interest and experience real-world applications of mathematics and science principles.

The STEM Academy offers students opportunities to explore, build awareness and immerse themselves into STEM careers through field trips, guest speakers, project-based learning activities and internships. Students study a range of STEM topics by building an individualized schedule consisting of required and elective courses (see below). The STEM Academy is available to all students who are interested in science, technology, engineering, or mathematics

In addition to the General High School Sequence of Courses listed on page 7, students will take the following courses, depending on their area of interest. All STEM pathways require the successful completion of a minimum of six (6) courses.

Students are encouraged to plan their course of study in collaboration with Guidance. Some electives have pre-requisites that must be met prior to enrollment.

To earn your academy designation at graduation you must complete the list of graduation requirements on page 6 and six (6) credits in your chosen academy electives listed below.

Possible Career Options

Engineering:	Manufacturing, Chemical, Civil, or Mechanical Engineer, Drafter, Landscape Architect, or Surveyor
Physical Sciences:	Chemist, Forensics, Teacher, Product Safety Specialist, Energy Auditor, or Astronomer
Information Technology:	Cloud Architect, Computer Forensics, Health, IT Specialist, Web Developer, or Data Modeler
Life/Health Science:	Nurse's Aide, Medical Coding, Dental Assistant, X-Ray Technician, Nursing, EMT, Paramedic, Veterinarian, Physical Therapist, Exercise Sciences or Doctor
Earth & Environmental Sciences:	Meteorologist, Environmental Scientist, Oceanographer or Park Ranger
Applied Mathematics:	Financial Analyst, Cryptographer, Actuarial Scientist, Sports Statistician, or Risk Analyst

Career Internship Opportunities

The purpose of the Career Internship is to provide students with a meaningful workplace experience working closely with a professional in a chosen field. The students will also participate in classes where they will build a career portfolio, including resumes, cover letters, interviewing skills, and ultimately, letters of recommendation. The students will also learn about labor laws and their rights in the workplace. This course runs during period J or two afternoons a week from 2:15 p.m.-5:15 p.m. Students will receive ½ credit per semester for satisfactory completion of all requirements.

Engineering Electives

- Chemistry AP + Lab
- Computer Science AP
- Physics AP
- CAD#
- Calculus
- Computer-Aided Modeling#
- Physics
- Robotics#

Physical Science Electives

- Chemistry AP + Lab
- Computer Science AP
- Physics AP

- Astronomy#
- Calculus
- Computer-Aided Modeling#
- Probability and Statistics or Statistics AP

Life/Health Sciences Electives

- Biology AP
- Calculus
- Physics or AP Physics
- Precalculus
- Zoology

Earth & Environmental Sciences Electives

- Environmental Science AP

- Physics AP
- Astronomy#
- Computer-Aided Modeling#
- Intro to Oceanography#
- Meteorology#

- Computer Science AP
- Statistics AP
- Computer-Aided Modeling#
- Creative Software Solutions
- Intro to Programming
- Probability and Statistics

Applied Mathematics Electives

Information Technology Electives NAF IT

- Computer Science AP
- iSchool Applied Technology

- Replicating the Future
- Web Design

^ does not count toward pathway requirements

denotes ½ credit course

*Fourth year of math required for admission to state colleges and universities; may also be counted toward Physical Sciences and Life/Health Sciences pathways.





Programming & Web Development (CTE)

Industry Certifications

- OSHA General Industry Safety

Possible Career Pathways in Information Technology

- Computer Programmer
- Website Manager
- Help Desk Agent
- Computer Support Specialist
- Software Developer

Starting Salary and Job Outlook

Salaries vary by occupation and some jobs may require secondary education.

- Computer Supporter Specialist \$50k
- Web Developers \$63k
- Software Developer \$97k
- Database Administrator \$80k

Projected Growth for IT Careers:
12% (2014-2024) ↑

Source: Bureau of Labor Statistic Website
(Occupational Outlook Handbook:
www.bls.gov/ooh)

College/Industry Partners

We are currently working with local community colleges to provide concurrent enrollment opportunities.



Program Description

Programming and Web Development is a career technical program that prepares students for a career or post-secondary education in a broad and growing sector of the economy. Students will gain a variety of technical skills to prepare themselves for careers in computer maintenance and repair, programming, web development, software development and IT project management.

The program incorporates employability and career readiness activities including resume building, developing a portfolio, job search skills and interviewing skills. Using our career awareness-exploration-immersion model, students will have the opportunity to investigate various job opportunities through job shadowing, site visits, guest speakers and internships. Ultimately, students will be encouraged to complete their vocational program with a semester-long internship or capstone project.

In addition to providing ample opportunities for students to gain technical knowledge and skills, the program integrates health and safety issues, ethical issues, entrepreneurial and business concepts and professional workplace behaviors.

Program Content

- | | |
|--|--|
| • Computer Fundamentals | • Database Planning |
| • Basic, Intermediate and Advanced Programming | • Computer Networking |
| • Software Development | • Computer & Network Security |
| • Website Management | • Programming Languages: Java, Python |
| | • Business Management & Entrepreneurship |

Advisory Committee Partners

The Advisory Committee is currently under development.



Medical Assisting (CTE)

Industry Certifications

- OSHA General Industry Safety
- First Aid
- CPR
- EMT (optional)

Possible Careers

- Medical Assistant
- Registered Nurse
- Physician Assistant
- Certified Nurse Assistant
- Phlebotomist
- Radiological Technician
- Licensed Practical Nurse
- Physical Therapist
- Medical Doctor

Starting Salary and Job Outlook

Salaries vary by occupation and some jobs may require secondary education.

- EMT / Paramedics \$31k
- Clinical Lab Technician \$49k
- Medical Assistant \$30k
- Phlebotomist \$30k

Projected Growth for Healthcare Careers:
19% (2014-2024) ↑

Source: Bureau of Labor Statistic Website
(Occupational Outlook Handbook:
www.bls.gov/ooh)

College/Industry Partners

We are currently working with local community colleges to provide concurrent enrollment opportunities.



Program Description

The Medical Assisting program prepares students to provide both clinical and administrative support to a health care team in a hospital or office setting. The program will also prepare students for continued post-secondary education to meet their career goals. Students will be able to demonstrate appropriate health and safety practices; collect a medical history; communicate effectively with patients; maintain medical records; assist in medical procedures; triage a patient; obtain and test specimens; demonstrate understanding of EKGs and medications; and perform a venipuncture. Students will complete a clinical practicum prior to graduation.

The program incorporates employability and career readiness activities including resume building, developing a portfolio, job search skills and interviewing skills. Using our career awareness-exploration-immersion model, students will have the opportunity to investigate various job opportunities through job shadowing, site visits, guest speakers and internships. Ultimately, students will be encouraged to complete their vocational program with a semester-long internship or capstone project.

In addition to providing ample opportunities for students to gain technical knowledge and skills, the program integrates health and safety issues, ethical issues, entrepreneurial and business concepts and professional workplace behaviors.

Program Content

- | | |
|---|---------------------------------|
| • Safety & OSHA Standards | • Surgical Procedures |
| • Professional Practices in the Healthcare Industry | • Emergency & Triage Procedures |
| • Medical Records | • First Aid & CPR |
| • Managing Appointments | • EKG Basics |
| • Nutrition | • Medications |
| • Lab Skills | |

Advisory Committee Partners

The Advisory Committee is currently under development.



NAF Academy of Information Technology

(Career Technical Education)

Industry Certifications

- OSHA General Industry Safety

Possible Careers

Median Salary/Industry Growth/Education

- *Automated Manufacturing*
- *Computer Network Architects*
\$98k / 9% / Bachelor's
- *Computer Support Specialist*
\$50k / 12% / Entry Level – Bachelor's
- *Computer Systems Analyst*
\$83k / 21% / Bachelor's
- *Database Administrator*
\$80k / 11% / Bachelor's
- *Hardware Engineer*
- *IT Security Analyst*
\$89k / 18% / Bachelor's
- *Network & Computer Systems Admin*
\$76k / 8% / Bachelor's
- *Robotics Engineering*
- *Software Developer*
\$98k / 17% / Bachelor's

* Some jobs may require secondary education, a certificate or licensing.

Source: Bureau of Labor Statistic Website (Occupational Outlook Handbook: www.bls.gov/ooh)

College/Industry Partners

3M
Juniper Networks
Megahertz Computer
NAF (formerly National Academy Foundation)
Workforce Investment Board



Program Description

The NAF Academy of Information Technology is a career technical program that prepares students for a career or post-secondary education in a broad and growing sector of the economy. Upon completion of the program, students earn a NAFTrack Certification, which entitles them to preferential hiring opportunities with NAFTrack partners such as Juniper Networks, Cisco Systems, HP, AT&T, EMC², Verizon and Xerox. Students will gain a variety of skills across a broad spectrum of hardware and software solutions that drive technological innovation in a modern society.

The program incorporates college and career readiness activities (e.g. resume building, developing a portfolio, job search and interviewing skills) as well as opportunities for students to identify and build important qualities to be successful in this industry (e.g. critical thinking, communication, organization). Using our career awareness-exploration-immersion model, students will have the opportunity to investigate various job opportunities through job shadowing, site visits, guest speakers and internships. Students are required to complete a six-week internship between their junior and senior year.

In addition to providing ample opportunities for students to gain technical knowledge and skills, the program integrates occupational safety and health (OSHA), business ethics, entrepreneurial and business concepts and workplace etiquette.

Program Content

- | | |
|--|--|
| • Computer Fundamentals | • Business Management & Entrepreneurship |
| • Basic, Intermediate and Advanced Programming | • Client-Server Architecture |
| • Software Development | • Cloud Computing |
| • Hardware & Peripherals | • Analytical Skills |
| • Computer Networking | • Critical Thinking |
| • Troubleshooting | • Problem Solving |
| • Robotics | • Communication Skills |
| • 3D Printing | |

Advisory Committee Partners

3M, McGraw Hill, Omtool, Workforce Investment Board, Parents, Students

EARLY COLLEGE/CONCURRENT ENROLLMENT

Beginning August 2016, Haverhill High School and Northern Essex Community College have partnered to expand our dual enrollment offerings for students in junior and senior year beyond the Early College Program. This new collaborative program is called concurrent enrollment and courses offered will represent expanded subject areas to create seamless pathways of transfer credits through the Massachusetts Transfer Block. Courses offered through concurrent enrollment align with MassCore and ESSA and have been crosswalked by both HHS faculty and Northern Essex professors to ensure the integrity of the college course rigor. Courses offered through concurrent enrollment are college level courses for students who are looking for increased academic challenges while earning both high school and college credit. Students must take an Accu-placer exam and meet established benchmark scores to be eligible for participation. This computer-based exam must be taken in the Spring. There is an additional cost associated with concurrent enrollment. Students should see their Guidance Counselor to sign up. All students in the Classes of 2017 and 2018 who are currently in the Early College Program will continue with the previously established learning community model and earn up to 24 college credits.

Early College Program Class of 2017 and 2018 remaining courses:

11th Grade Courses

- English Composition I (3 credits)
- US History II (3 credits)
- Exploring the Arts (3 credits) S1
- Introduction to Sociology (3 credits) S2

- Introduction to Psychology (3 credits) S2

Concurrent Enrollment Options:

- Anatomy & Physiology (3 credits)
- Additional course TBA

12th Grade Courses

- English Composition II (3 credits) S1

ADVANCED PLACEMENT PROGRAM

Haverhill High School offers a rich program of Advanced Placement (AP) courses designed for students who wish to pursue a rigorous course of study that reflects college/university expectations. There are specific prerequisites for Advanced Placement courses, which can be found within each course description.

All students enrolled in an AP course must take the CollegeBoard Advanced Placement Test in the course area for which they are registered. The acceptance of college credit varies from each higher education institution. If an AP student does not take the AP exam, he or she will receive the quality points awarded for Honors credit rather than AP credit, and class rank will be recalculated. These tests are administered at the high school in May.

Below is a list of the Advanced Placement courses offered at Haverhill High School. The list includes the page number for course description of each AP course.

Course #	Course	Content Area	Page
H0023	English Language & Composition	Humanities	30
H0031	English Literature & Composition	Humanities	29
H1110	European History	Humanities	32
H1115	United States History	Humanities	33
H1200	United States Government & Politics	Humanities	34
H2234	Calculus AB	Mathematics	38
H2235	Calculus BC	Mathematics	38
H2238	Statistics	Mathematics	38
H2246	Computer Science- A	Mathematics	39
H3317	Biology	Science	40
H3343	Chemistry	Science	41
H3345	Physics 1	Science	43
H3336	Environmental Science	Science	42
H5526	Art History	Fine Arts	53
H5527	Art Major Studio	Fine Arts	53
H6627	Economics	School to Career/Business	56
H4761	Spanish Language and Composition	World Languages	48
H4496	Latin AP: Vergil	World Languages	48

HAVERHILL HIGH SCHOOL

COURSE OFFERINGS 2016-2017

ENGLISH

Pages 28-31

Course #	Course	Grade	Credit	Term
H0001	English I Honors	9	1	Y
H0003	English I College Prep	9	1	Y
H8005	Fundamentals of English I	9	1	Y
H0007	English Lab*	9, 10, 11, 12	½	S
H8007	Fundamentals of English II	10	1	Y
H0009	English II Honors	10	1	Y
H0011	English II College Prep	10	1	Y
H0031	English Literature and Composition AP	11, 12	1	Y
H0017	English III Honors	11	1	Y
H0019	English III College Prep	11	1	Y
H8009	Fundamentals of English III	11	1	Y
H0026EC	English Composition I (Early College NECC)	11	1	Y
H0023	English Language and Composition AP	11, 12	1	Y
H0025	English IV Honors	12	1	Y
H0027	English IV College Prep	12	1	Y
H8004	Fundamentals of English IV	12	1	Y
H0030EC	English Composition II (Early College NECC)	12	1	S
H0033	Written Expression in the 21 st Century	11, 12	½	S
H0035	Public Speaking	9, 10, 11, 12	½	S
H0037	Journalism	10, 11, 12	1	Y
H0040	Writers' Express:			
	An Apprenticeship for Peer Coaching	12	½	S
H0049	Sports Writing and Literature	10, 11, 12	½	S

*Graduation ½ credit only; NOT for English credit

HISTORY

Pages 31-36

Course #	Course	Grade	Credit	Term
H1101	World History I Honors	9	1	Y
H1103	World History I College Prep	9	1	Y
H1108	ELD World History I College Prep	9, 10, 11, 12	1	Y
H8121	Fundamentals of World History I	9	1	Y
H1109	World History II Honors	10	1	Y
H1111	World History II College Prep	10	1	Y
H1114	ELD World History II	10, 11, 12	1	Y
H8123	Fundamentals of World History II	10	1	Y
H1110	European History AP	10, 11, 12	1	Y
H1117	U.S. History II Honors	11	1	Y
H1119	U.S. History II College Prep	11	1	Y

Course #	Course	Grade	Credit	Term
H1122	ELD US History II College Prep	11, 12	1	Y
H1122EC	U.S. History II (Early College NECC)	11	1	Y
H8125	Fundamentals of US History II	11	1	Y
H1115	U.S. History AP	11	1	Y
H1125	History of the City of Haverhill	9, 10, 11, 12	½	S
H1127	Psychology	11, 12	½	S
H1127EC	Psychology (Early College NECC)	12	1	S
H1130	Psychology Honors	11, 12	½	S
H1200	U.S. Government and Politics AP	11, 12	1	Y
H1134	Constitutional Law Honors	11, 12	1	Y
H1133	Constitutional Law	11, 12	1	Y
H1135	International Relations College Prep	10, 11, 12	½	S
H1139	International Relations Honors	10, 11, 12	½	S
H1136	Philosophy	10, 11, 12	½	S
H1141	Contemporary Issues	11, 12	½	S
H1149	Networking in the 21 st Century	11, 12	½	S
H1645	Child Psychology I	10, 11, 12	½	S
H1647	Child Psychology II	11, 12	½	S
H1640EC	Introduction to Sociology (Early College NECC)	11	1	S
H1641	Sociology	10, 11, 12	½	S
H1140	The Holocaust and Crimes Against Humanities	10, 11, 12	½	S
H1153	Civics	9, 10, 11, 12	½	S2
H9610	Women's and Gender Studies	11, 12	½	S
H9611	The Contemporary Middle East	9, 10, 11, 12	½	S
H9600	A Classical Perspective – Literature	9	½	S
H9602	Classical Philosophy in the 21 st Century	10, 11, 12	½	S
H1145	Senior Seminar	12	½	S

MATHEMATICS

Pages 36-39

Course #	Course	Grade	Credit	Term
H2200	Grade 9 Mathematics Support*	9	½	S2
H2201	Grade 10 Mathematics Support*	10	½	S1
H2201	Foundations of Algebra	9	1	Y
H2207	Algebra I Honors	9	1	Y
H2209	Algebra I College Prep	9	1	Y
H2210	Algebra I College Prep A	9	1	Y
H2275	ELD Foundations of Algebra	9	1	Y
H2277	ELD Algebra I College Prep A	9	1	Y
H2215	Geometry Honors	9, 10, 11	1	Y
H2217	Geometry College Prep	10, 11, 12	1	Y
H2279	ELD Geometry College Prep	10, 11, 12	1	Y
H2212	Intermediate Algebra	11, 12	1	Y
H2223	Algebra II Honors	10, 11, 12	1	Y
H2225	Algebra II College Prep	10, 11, 12	1	Y
H2229	Precalculus Honors	11, 12	1	Y

Course #	Course	Grade	Credit	Term
H2232	Calculus Honors	12	1	Y
H2234	Calculus AP-AB	11, 12	1	Y
H2235	Calculus AP-BC	12	1	Y
H2237	Probability and Statistics	11, 12	1	Y
H2238	Statistics AP	12	1	Y
H2243	Introduction to Programming (CTE)	10, 11, 12	½	S1
H2280	Robotics	10, 11, 12	½	S2
H2246	Computer Science A AP	11, 12	1	Y
H2248	Computer Science: Game Design and Devel.	12	1	Y
H2258	Algebra & Trigonometry: A Functions Approach	12	1	Y
H6631	Accounting Honors	11, 12	1	Y

* Graduation credit only; NOT for Mathematics credit

SCIENCE, TECHNOLOGY & ENGINEERING

Pages 39-44

Course #	Course	Grade	Credit	Term
H3313	Biology Honors	9, 10	1	Y
H3315	Biology College Prep	9, 10	1	Y
H3387	Biological Systems and Ecology College Prep	10	1	Y
H7343	ELD Biology	9, 10, 11, 12	1	Y
H3317	Biology AP	11, 12	1	Y
H3317L	Biology AP Lab	11, 12	1	Y
H3319	Chemistry Honors	10, 11, 12	1	Y
H3321	Chemistry College Prep	10, 11, 12	1	Y
H3343	Chemistry AP	11, 12	1	Y
H3343L	Chemistry AP Lab	11, 12	1	Y
H3410	Biology: MCAS Prep*	9, 10	½	S
H3332	Anatomy and Physiology: Honors	11, 12	1	Y
H3331	Anatomy and Physiology College Prep	11, 12	1	Y
H3310	Introduction to STEM Careers	9, 10, 11, 12	½	S
H3352	Zoology and Lab College Prep	10, 11, 12	1	Y
H3353	Zoology and Lab Honors	10, 11, 12	1	Y
H3425	Medical Terminology & Human Diseases (CTE)	9, 10, 11, 12	½	S
H3341	Biotechnology & Forensics CP	10, 11, 12	½	S
H3308	Earth Science Honors	10, 11, 12	1	Y
H3309	Earth Science College Prep	10, 11, 12	1	Y
H3335	Environmental Science College Prep	10, 11, 12	½	S
H3336	Environmental Science AP	11, 12	1	Y
H3349	Meteorology College Prep	10, 11, 12	½	S
H3357	Introduction to Oceanography College Prep	10, 11, 12	½	S
H3355	Introduction to Astronomy College Prep	10, 11, 12	½	S
H3325	Physics Honors	10, 11, 12	1	Y
H3327	Physics College Prep	10, 11, 12	1	Y
H3345	Physics 1 AP	11, 12	1	Y
H3333	Introduction to Engineering I	11, 12	1	Y

Course #	Course	Grade	Credit	Term
H3334	Introduction to Engineering II	11, 12	1	Y
H3320	Computer-Aided Modeling in Physical Sciences	11, 12	½	S
H2243	Introduction to Programming (NAF IT CTE)	10	½	S1
H6136	Principles of IT (NAF IT CTE)	9	½	S1
H6137	Computing Systems (NAF IT CTE)	10, 11, 12	½	S2
H2280	Robotics	10, 11, 12	½	S2
H6652	Replicating the Future	11, 12	½	S
H6648	iSchool Applied Technology	10, 11, 12	½	S
H6651	CAD Computer Aided Drafting	10, 11, 12	½	S

*Graduation credit only; NOT for Science credit

WORLD LANGUAGES

Pages 45-49

Course #	Course	Grade	Credit	Term
H4497	Classical Greek I Honors	10, 11, 12	1	Y
H4500	Classical Greek II Honors	10, 11, 12	1	Y
H4499	Classical Greek III Honors	11, 12	1	Y
H4403	French I Honors	9,10,11,12	1	Y
H4405	French I College Prep	9,10,11,12	1	Y
H4407	French II Honors	9,10,11,12	1	Y
H4409	French II College Prep	9,10,11,12	1	Y
H4411	French III Honors	10, 11, 12	1	Y
H4415	French IV Honors	11, 12	1	Y
H4421	German I Honors	9,10,11,12	1	Y
H4423	German I College Prep	9,10,11,12	1	Y
H4425	German II Honors	9,10,11,12	1	Y
H4427	German II College Prep	9,10,11,12	1	Y
H4429	German III Honors	10, 11, 12	1	Y
H4431	German IV Honors	11, 12	1	Y
H4435	Italian I Honors	9,10,11,12	1	Y
H4437	Italian I College Prep	9,10,11,12	1	Y
H4439	Italian II Honors	9,10,11,12	1	Y
H4441	Italian II College Prep	9,10,11,12	1	Y
H4443	Italian III Honors	10, 11, 12	1	Y
H4445	Italian IV Honors	11, 12	1	Y
H4446	Italian V Honors	12	1	Y
H4483	Latin I Honors	9,10,11,12	1	Y
H4487	Latin II Honors	9,10,11,12	1	Y
H4491	Latin III Honors	10, 11, 12	1	Y
H4490	Latin III Honors Accelerated	11, 12	1	Y
H4493	Latin IV Honors	11, 12	1	Y
H4496	Latin AP: Vergil	12	1	Y
H4461	Spanish I Honors	9,10,11,12	1	Y
H4463	Spanish I College Prep	9,10,11,12	1	Y
H4465	Spanish II Honors	9,10,11,12	1	Y
H4467	Spanish II College Prep	9,10,11,12	1	Y

Course #	Course	Grade	Credit	Term
H4469	Spanish III Honors	10, 11, 12	1	Y
H4473	Spanish IV Honors	11, 12	1	Y
H4761	Spanish Language and Composition AP	11, 12	1	Y
H4755	Spanish for Native Speakers I (SNS1)	9,10,11,12	1	Y
H4757	Spanish for Native Speakers II (SNS2)	9,10,11,12	1	Y
H4759	Spanish for Native Speakers III (SNS3)	9,10,11,12	1	Y

ENGLISH LANGUAGE DEVELOPMENT

Pages 49-52

Course #	Course	Grade	Credit	Term
H7330	ELD Reading Comprehension I	9, 10	1	Y
H7336	ELD Reading Comprehension I	11, 12	1	Y
H7331	ELD Writing I	9, 10	1	Y
H7339	ELD Writing I	11, 12	1	Y
H7350	ELD Reading Comprehension II	9, 10	1	Y
H7332	ELD Reading Comprehension II	11, 12	1	Y
H7351	ELD Writing II	9, 10	1	Y
H7340	ELD Writing II	11, 12	1	Y
H7370	ELD Reading Comprehension III	9, 10	1	Y
H7333	ELD Reading Comprehension III	11, 12	1	Y
H7371	ELD Writing III	9, 10	1	Y
H7341	ELD Writing III	11, 12	1	Y
H7335	ELD Reading Comprehension IV	9, 10	1	Y
H7337	ELD Reading Comprehension IV	11, 12	1	Y
H7334	ELD Writing IV	9, 10	1	Y
H7352	ELD Writing IV	11, 12	1	Y
H7353	ELD Reading and Writing V	9, 10	1	Y
H7338	ELD Reading and Writing V	11, 12	1	Y
H1108	ELD World History I College Prep	9, 10	1	Y
H1114	ELD World History II College Prep	10, 11, 12	1	Y
H1122	ELD US History II College Prep	11, 12	1	Y
H2277	ELD Algebra I College Prep A	9, 10, 11	1	Y
H2275	ELD Foundations of Algebra	9, 10, 11, 12	1	Y
H2279	ELD Geometry College Prep	10, 11, 12	1	Y

FINE ARTS/VISUAL ARTS

Pages 52-54

Course #	Course	Grade	Credit	Term
H5501	Basic Foundations in Art	9,10,11,12	½	S
H5505	Studio Drawing**	9,10,11,12	½	S
H5507	Studio Painting**	9,10,11,12	½	S
H5519	Survey Art History	9, 10, 11, 12	½	S
H5511	Jewelry Making	10, 11, 12	½	S
H5512	Advanced Jewelry Honors	10, 11, 12	½	S
H5513	Ceramics and Design I**	9,10,11,12	½	S

Course #	Course	Grade	Credit	Term
H5514	Ceramics and Design II	10, 11, 12	½	S
H5515	Photography I**	9,10,11,12	½	S
H5517	Photography II	10, 11, 12	½	S
H5518	Advanced Photography	11, 12	½	S
H5526	Art History AP	11, 12	1	Y
H5527	Art Major Studio AP	11, 12	1	Y
H5502	Printmaking**	9,10,11,12	½	S
H5503	Digital Photography and Imaging**	10, 11, 12	½	S
H5504	Sculpture & 3-D Design**	10, 11, 12	½	S
H5510	Illustration Workshop	10, 11, 12	½	S
H5597	Theater Design and Stage Craft	10, 11, 12	½	S
H5506EC	Exploring the Arts (Early College NECC)	11	1	Y
H9601	A Classical Perspective – Studio	9	½	S
H5596	Digital Design Workshop I	10	½	S
H5598	Digital Design Workshop II	11	½	S
H5599	Advanced Digital Design Workshop	12	½	S

** For Grade 9, only after successful completion of #H5501 Semester 1

MUSIC AND PERFORMING ARTS

Pages 54-55

Course #	Course	Grade	Credit	Term
H5551	Chorus	9, 10, 11, 12	1	Y
H5559	Chamber Chorus Honors	10, 11, 12	1	Y
H5563	Band	9, 10, 11, 12	1	Y
H5565	Jazz Band Honors	9,10,11,12	1	Y
H5571	Guitar Workshop	9,10,11,12	½	S
H5572	History of Rock and Roll	10, 11, 12	½	S
H5570	Electronic Keyboard Lab	9,10,11,12	½	S
H5577	Fundamentals of Music	10, 11, 12	½	S
H5578	Introduction to Musical Software	10, 11, 12	½	S
H5579	Musical Theater	9,10,11,12	½	S
H5580	AV Stage Tech	10, 11, 12	½	S
H5581	Music Exploration	9,10,11,12	½	S

BUSINESS ACADEMY

Pages 55-61

Requirements

Course #	Course	Grade	Credit	Term
H6619	Accounting I	10, 11, 12	½	S
H6621	Accounting II	10, 11, 12	½	S
H9603	Introduction to Personal Finance	9, 10	½	S
H6628	Money Matters	11, 12	½	S
H6603	Introduction to Business	9, 10, 11, 12	½	S
H6615	Entrepreneurship (CTE)	10, 11, 12	½	S

Course #	Course	Grade	Credit	Term
H6625	Introduction to Economics	10, 11, 12	½	S
H6627	Economics AP	11, 12	1	Y

ACCOUNTING ELECTIVES

Pages 56 - 57

Course #	Course	Grade	Credit	Term
H6631	Honors Accounting	11-12	1	Y
H6629	Banking Internship	11-12	½	S

BUSINESS ELECTIVES

Pages 57

Course #	Course	Grade	Credit	Term
H6613	Business Marketing	11, 12	½	S
H6643	Earning, Learning, and Investing	11, 12	½	S
H6611	Computer Basics	9, 10, 11, 12	½	S
H6601	Computer Technology	9,10,11,12	½	S
H6694	Internship	10, 11, 12	½	S

GAME DEVELOPMENT AND DESIGN ELECTIVES

Pages 57 -58

Course #	Course	Grade	Credit	Term
H2243	Introduction to Programming	10, 11, 12	½	S
H6636	Game Design I	9, 10, 11, 12	½	S
H6645	Game Design II	10, 11, 12	½	S

WEB DEVELOPMENT AND DESIGN ELECTIVES

Pages 58

Course #	Course	Grade	Credit	Term
H6632	Web Development and Design I	9, 10, 11, 12	½	S
H6633	Web Development and Design II	10, 11, 12	½	S
H6634	Cartooning and 3D Animation I	10, 11, 12	½	S
H6644	Cartooning and 3D Animation II	10, 11, 12	½	S

TELEVISION PRODUCTION ELECTIVES

Pages 58 - 59

Course #	Course	Grade	Credit	Term
H6637	Introduction to Television	9, 10, 11, 12	½	S
H6640	Studio Television Production	10, 11, 12	½	S
H6638	Advanced Television Production	11, 12	½	S
H6639	Film Study Workshop	11, 12	½	S
H0055	Screenplay Writing and Production	11, 12	1	Y

CULINARY ARTS ELECTIVES

Pages 59 - 60

Course #	Course	Grade	Credit	Term
H6671	Introduction to Food and Nutrition	9, 10, 11, 12	½	S
H6675	Bake Shop	10, 11, 12	½	S
H6677	Multicultural Foods	10, 11, 12	½	S
H6676	Food for Health	10, 11, 12	½	S
H6673	Culinary Arts	10, 11, 12	½	S
H6674	Advanced Culinary Arts	10, 11, 12	½	S

FASHION ELECTIVES

Pages 60

Course #	Course	Grade	Credit	Term
H5501	Basic Foundations in Art	9, 10, 11, 12	½	S
H6679	Fashion I	10, 11, 12	½	S
H6681	Fashion II	10, 11, 12	½	S

WOODWORKING TECHNOLOGY OR CONSTRUCTION ELECTIVES

Pages 60-61

Course #	Course	Grade	Credit	Term
H6659	Introduction to Woodworking Technology	9, 10, 11, 12	½	S
H6666	Advanced Woodworking	10, 11, 12	½	S
H6669	Fine Woodworking Technology	10, 11, 12	½	S
H6667	House Construction	10, 11, 12	1	Y

COSMETOLOGY ELECTIVES

Pages 61

Course #	Course	Grade	Credit	Term
H6682	Cosmetology I	11, 12	½	S
H6683	Cosmetology II	11, 12	½	S

WELLNESS

Pages 61-62

Course #	Course	Grade	Credit	Term
H7704	Physical Education I	9, 10, 11, 12	½	S
H7708	Physical Education II	10, 11, 12	½	S
H7702	Health I	9, 10, 11, 12	½	S
H7706	Health II	10, 11, 12	½	S
H8766	Fundamentals of Wellness 9	9, 10, 11, 12	½	S
H8767	Fundamentals of Wellness 10	10, 11, 12	½	S

WELLNESS ELECTIVES

Pages 62-63

Course #	Course	Grade	Credit	Term
H7707	Team Sports	11, 12	½	S
H7715	Introduction to Coaching	11, 12	½	S
H7713	First Aid and CPR	11, 12	½	S
H7712	Personal Health and Fitness	11, 12	½	S
H7716	Addictions	11, 12	½	S

MARINE CORPS JUNIOR ROTC

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Course #	Course	Grade	Credit	Term
H6696	MCJROTC I	9, 10, 11, 12	1	Y
H6697	MCJROTC II	10, 11, 12	1	Y
H6698	MCJROTC III	11, 12	1	Y
H6699	MCJROTC IV	12	1	Y



COURSE DESCRIPTIONS

ENGLISH

Whether students plan to attend college upon graduation or to move directly into the workplace, they need strong communication tools. The English Department offers an array of courses to help students develop the necessary skills for success in the 21st century. All English classes engage students in reading, writing, speaking, and listening. Students read a range of complex texts, learn to cite evidence and analyze information, write effectively for a variety of purposes and audiences, and conduct meaningful research. In addition to giving and receiving feedback, students learn more about the basic traits of writing – ideas, organization, voice, word choice, sentence fluency, conventions, and presentation. Students also improve their language skills by learning principles of grammar and acquiring new vocabulary.

The English courses at Haverhill High School align with the Massachusetts Common Core Standards for English Language Arts. All students at Haverhill High School are required to pass four years of English. The English Department is committed to helping all students to achieve high academic standards. The department nurtures and challenges students, encouraging them to express their ideas clearly and to think critically about the world around them. The course offerings in the ELA curriculum enable students to become stronger readers, writers, speakers, listeners, and thinkers.

FRESHMAN ENGLISH PROGRAM

The Freshman English Program stresses competence in reading and writing. The study of literature includes short stories, novels, poetry, nonfiction writing, and a Shakespearean play. In addition to materials assigned for class study and discussion, outside reading assignments are required. Specific writing assignments will be used as a basis for developing and improving a student's writing competence. In preparation for success in high school and on state mandated tests, students develop study and organizational skills, practice answering and supporting open-ended questions, write often to a variety of prompts, and learn to self-assess and revise their written work.

ENGLISH 1 HONORS

CRS H0001

GR 9

CR 1

Y

Students entering English I Honors comprehend at or above grade level; read and analyze difficult literary and informational texts independently; demonstrate evidence of independent reading above and beyond work assigned for class; discuss model essay samples; create essays with the goal of structural, grammatical and mechanical integrity in the final drafts; maintain writing folders to show depth and development in their writing; and successfully and insightfully participate in class discussions, projects and presentations, demonstrating skill in the utilization of a variety of resources. The Classical Academy version includes the thematic links to all of the Honors program's classes, but offers focus on the Classics courses (Classical Connections and Latin). Works on courage, heroism, and utopia vs. dystopia are included in the course syllabus.

ENGLISH I COLLEGE PREP

CRS H0003

GR 9

CR 1

Y

Students entering English I College Prep develop and reinforce skills of comprehension; encounter literary and informational texts both independently and with teacher assistance; devote appropriate time to homework assignments and stay for after school help when necessary; write clear, well-developed essays which focus on structure, grammar, and mechanics through the drafting process; maintain writing folders to show development and improvement in their writing; and regularly participate in class discussions, projects and presentations, demonstrating skill in applying a variety of resources.

FUNDAMENTALS OF ENGLISH I

CRS H8005

GR 9

CR 1

Y

Instruction is based on the Massachusetts Frameworks and mirrors the general education English Program of Studies. This course stresses competency in reading and effective written expression. Students read from a variety of genres in literature, develop study and organizational skills, and write a variety of open responses and essays. In addition to experiencing the general curriculum, students receive specialized reading instruction in the areas of comprehension and basic reading skills. Process writing instruction is utilized, emphasizing revision, self-editing, proper grammatical structure, and the use of graphic organizers. ***Guidance Approval Required***

ENGLISH LAB

CRS H0007

GR 9-12

CR ½

S

This elective course is for 9-12th graders who need additional support with the foundational reading and writing skills necessary for high school and state testing success. Students reading below grade level will be assigned to English Lab in addition to English College Prep. Students will learn strategies and skills to become better readers and writers. The course goals are to help students to comprehend, discuss, and analyze non-fiction and fiction texts. Specific analysis will include how to classify and reorganize information, to distinguish fact from opinion, to understand literary elements, to determine cause and effect, to understand point of view, and to make inferences and draw conclusions. Students will be taught to write effectively. Additionally, they will practice answering MCAS writing prompts, as well as open response and multiple-choice questions. ***English Lab does not replace the English I, II, III or IV requirement, but it does earn ½ of a graduation credit.***

SOPHOMORE ENGLISH PROGRAM

The Sophomore English Program builds on the foundation of the reading and writing skills developed in the ninth grade curriculum and emphasizes the interrelationship among language, literature, and composition. The study of literature includes short fiction, novels, poetry, and dramas and accentuates the critical thinking process to demonstrate comprehension. Students will work with literature through text-based analytical discussions and will be given opportunities to showcase this through the development of their writing. Students will prepare for standards based testing through the review of test taking, study, and organizational skills while they are learning to self-assess and revise written work.

FUNDAMENTALS OF ENGLISH II

CRS H8007

GR 10

CR 1

Y

Instruction is based on the Massachusetts Frameworks and mirrors the general education English Program of Studies. This course stresses competency in reading and effective written expression. Students read material from a variety of genres in literature, develop study and organizational skills, and write a variety of open responses and essays. In addition to experiencing the general curriculum, students receive specialized reading instruction in the areas of comprehension and basic reading skills. Process writing instruction is utilized, emphasizing the areas of revision, self-editing, proper grammatical structure, and the use of graphic organizers. ***Guidance Approval Required***

ENGLISH II HONORS

CRS H0009

GR 10

CR 1

Y

Students qualifying for entrance into English II Honors will be expected to: demonstrate strong reading skills as well as the ability to recognize and produce directed writings illustrating these terms; analyze classical plays, nonfiction and fiction; write well developed essays and use writing folders to demonstrate writing progress; review reading and writing skills for standardized testing; and devote ample time to their homework assignments. Students will engage in seminar discussion, self-evaluation, and collaboration while centering on critical thinking concepts.

ENGLISH II COLLEGE PREP

CRS H0011

GR 10

CR 1

Y

Students enrolled in English II College Prep will be expected to: demonstrate reading skills; learn and apply analytical literary terms for fiction, nonfiction, and poetry; analyze classical plays, nonfiction, and fiction; write well-developed essays and use writing folders to demonstrate writing progress; review reading and writing skills for standardized testing; and devote ample time to homework assignments. Students will engage in classroom discussions and activities centering on critical thinking concepts in order to display comprehension.

JUNIOR ENGLISH PROGRAM

The Junior English Program focuses on the study of American literature. Students will be guided to read for deep textual understanding. Various genres – including novels, short stories, poetry, drama, and essays – will be used as a basis for developing and improving a student's writing competence.

ENGLISH LITERATURE & COMPOSITION AP

CRS H0031

GR 11-12

CR 1

Y

AP Literature and Composition engages students in the careful reading and critical analysis of imaginative literature in a variety of genres from the 16th to the 21st century. Through close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style and themes as well as the use of figurative language, imagery, symbolism, and tone. Students will read multiple works at a time. In addition, writing is an integral part of the course. Writing assignments focus on the critical analysis of literature and include expository, analytical, and argumentative essays. Students will complete multiple major writing assignments per term, to be composed both in and out of class, and engage in systematic revisions during the drafting process. Students enrolling in this course are required to take the Advanced Placement Examination in Literature and Composition.

ENGLISH III HONORS

CRS H0017

GR 11

CR 1

Y

Students enrolled in English III Honors will be responsible for rigorous independent and assigned readings from classic and contemporary American literature. They will write fully-developed analytical essays containing thesis statements, provide textual evidence, and utilize proper grammar. Peer and self-evaluations will be part of the writing process. Students will develop revision skills through multiple draft writing. Writing folders will be required for the tracking of writing growth. Students will conduct effective research, culminating in the writing of essays focused on argumentation. Students will speak before the class audience using appropriate vocabulary in order to communicate effectively. Students are expected to participate in class cooperatively, devote appropriate time to their homework assignments, and prepare to work at a demanding pace.

ENGLISH III COLLEGE PREP

CRS H0019

GR 11

CR 1

Y

Students qualifying for entrance into English III College Prep will be responsible for independent and assigned class readings from classic and contemporary American literature. They will work on the following writing skills for analytical and research assignments: topic development, textual support of thesis, and the proper use of grammar. Students will use peer and self-evaluation as part of the writing process and develop revision skills through completing multiple drafts. Students will be responsible for compiling folders that track their writing growth. Students will be able to speak before an audience using appropriate vocabulary in order to communicate effectively. They will work cooperatively, complete homework assignments, and proceed at a consistent pace.

FUNDAMENTALS OF ENGLISH III**CRS H8009****GR 11****CR 1****Y**

Instruction is based on the Massachusetts Frameworks and mirrors the general education English Program of Studies. This course stresses competency in reading and effective written expression. Students read from a variety of genres in literature, develop study and organizational skills, and write a variety of open responses and essays. In addition to experiencing the general curriculum, students receive specialized reading instruction in the areas of comprehension and basic reading skills. Process writing instruction is utilized, emphasizing the areas of revision, self-editing, proper grammatical structure, and the use of graphic organizers. *Guidance Approval Required*

**ENGLISH COMPOSITION I
(EARLY COLLEGE NECC)****CRS H0026EC****GR 11****CR 1****S**

This is a required course for juniors in the Early College program that will develop critical thinking and clear, effective writing skills. Students will demonstrate their competence through a variety of writing assignments including essays and a research paper. Successful completion of a research paper is required to pass this course. *Prerequisite: Early College NECC*

SENIOR ENGLISH PROGRAM

The Senior English Program focuses on the study of British literature. Students will be guided to develop the ability to read with deep textual understanding. Novels, short stories, poetry, drama, and essays are studied, with an emphasis on style and the techniques used by authors to gain their effects. Outside reading assignments will be required. Specific writing assignments will be used as a basis for developing and improving a student's writing competence. All seniors are required to demonstrate their mastery of language arts skills by completing an exit portfolio as a final performance assessment and graduation requirement for English.

**ENGLISH LANGUAGE &
COMPOSITION AP****CRS H0023****GR 11-12****CR 1****Y**

The Advanced Placement course in English Language & Composition engages students to aspire to be informed citizens. The course is designed to encourage students to become skilled readers of prose written in a variety of periods, disciplines and rhetorical contexts, and skilled writers who compose for a variety of purposes. Students generate ideas, then develop, revise, and edit their writing in successive drafts. AP Language & Composition students become a community of learners who contribute in meaningful ways to the daily discourse of the classroom. Extensive writing, reading, and speaking opportunities allow students to gain awareness of the interactions between a writer's purpose and audience expectations and to understand how the resources of language contribute to effective communication. Emphasis is placed on non-fiction reading. Students enrolling in this course are required to take the Advanced Placement Examination in English Language and Composition and to create an exit portfolio.

ENGLISH IV HONORS**CRS H0025****GR 12****CR 1****Y**

Students enrolled in English IV Honors will be responsible for rigorous independent and assigned readings from Shakespeare and selected classical and contemporary British works. Students will be expected to make meaningful connections through reflections on their reading. They will write fully-developed analytical essays containing thesis statements, textual evidence, and proper use of grammar. Students will also conduct research, write creatively, and present work before the class. Peer and self-evaluations are a required part of the writing process. Additionally, students are expected to compile their writing and reflect on it in order to produce senior exit portfolios. Students must be prepared to work both cooperatively and independently, devote appropriate time to their homework assignments, and work at a demanding pace.

ENGLISH IV COLLEGE PREP**CRS H0027****GR 12****CR 1****Y**

Students enrolled in English IV College Prep will be responsible for independent and assigned readings from Shakespeare and selected classical and contemporary British works. Students will be expected to make connections with and reflections on their reading. Students will create analytical essays containing thesis statements, textual evidence, and proper use of grammar. Students will also conduct research, write creatively, and present work before the class. Peer and self-evaluations are a required part of the writing process. Additionally, students are expected to compile their writing, and reflect on it in order to produce senior exit portfolios. Students must be prepared to work both cooperatively and independently, complete homework assignments, and work at a consistent pace.

FUNDAMENTALS OF ENGLISH IV**CRS H8004****GR 12****CR 1****Y**

Instruction is based on the Massachusetts Frameworks and mirrors the general education English Program of Studies. This course stresses competency in reading and effective written expression. Students read from a variety of genres in literature, develop study and organizational skills, and write a variety of open responses and essays. In addition to experiencing the general curriculum, students receive specialized reading instruction in the areas of comprehension and basic reading skills. Process writing instruction is utilized, emphasizing the areas of revision, self-editing, proper grammatical structure, and the use of graphic organizers. *Guidance Approval Required*

**ENGLISH COMPOSITION II
(EARLY COLLEGE NECC)****CRS H0030EC****GR 12****CR 1****Y**

This is a required course for seniors in the Early College program with emphasis on analysis and argumentation. Texts and materials, primarily drawn from literature, will vary from section to section and will be employed as the basis for a range of essays. *Prerequisite: Early College NECC*

ENGLISH ELECTIVES

WRITTEN EXPRESSION IN THE 21ST CENTURY

CRS H0033 GR 11-12 CR ½ S

This class is designed as a workshop to provide students with the opportunity to study and write short stories, poetry, creative nonfiction, and scripts. Teacher-student conferences and peer conferences will be held frequently to help students strengthen their writing skills and their confidence. Students will contract to take the course for honors or college prep credit. Additional reading and writing are required for honors credit. *Prerequisite: completion of 10th grade English.*

PUBLIC SPEAKING

CRS H0035 GR 9-12 CR ½ S

This course is designed to develop and strengthen the skills of speaking, listening, and writing. Students will improve these skills by preparing and delivering a variety of speeches for different audiences and purposes, participating in small group and panel discussions, and evaluating professional speeches and those of their peers. *Prerequisite: Completion of 9th grade English. Seniors will be given first priority; juniors will be given second priority; and sophomores third priority*

JOURNALISM

CRS H0037 GR 10-12 CR 1 Y

This course focuses on journalistic writing in its many forms. Students will analyze the structure, point-of-view, and style of writing through exploration of print, radio, television, and Internet sources in order to acquire the skills needed to effectively impact readers. Along with writing informative, explanatory, and persuasive articles for publication, students will develop their reporting, narrative, and research skills while also enhancing their awareness of both local and global issues. Students enrolled in the course will staff and assume all responsibilities of the school newspaper, *The Brown and Gold*, meeting strict publication deadlines. Students will produce print and digital issues during the course of the school year. ✓ *School to Career requirement option.*

WRITERS' EXPRESS: AN APPRENTICESHIP FOR PEER COACHING

CRS H0040 GR 12 CR ½ S

This elective class is for seniors only who have taken AP or Honors English and who embrace the writing process and have a passion to assist students who may need writing support. The course includes a classroom foundational experience devoted to both the learning about and practice with techniques for the coaching of writing, as well as opportunities to apply learned techniques through assisting students in various classrooms.

SPORTS WRITING & LITERATURE

CRS H0049 GR 10-12 CR ½ S

Sports Writing & Literature provides students with an opportunity to read and write about high-interest subject matter from multiple literary genres in order to improve reading and writing skills. Students will read sport-related novels, short stories, non-fiction, poetry, biography, history, news reports, and commentary. They will also produce writing that coincides with the form read. Written assignments may include a piece of fiction or poetry, a report on a sporting event, an opinion/editorial piece about a contemporary sports topic, a persuasive piece that argues one side of a current debate, an analysis that predicts the outcome of a sporting event, or a preview of an upcoming sports season. Students will also examine the influence of sports in their personal lives and the cultural impact of sports on the larger society through class discussion, further reading, and personal reflective essays.

HISTORY

The study of history and the social sciences is vital in a democratic society. All students need to know and understand the European historical tradition, our national heritage, and the cultures and civilizations of the entire globe in order to become informed participants in shaping our nation's future. The history and social science courses are designed to: (1) develop the knowledge and skills of history, geography, civics and economics that enable students to place the people, ideas and events that have shaped our state and our nation in perspective; (2) enable students to understand the basic values, principles and operations of American constitutional democracy; (3) prepare students for informed and responsible citizenship; (4) develop students' skills in debate, discussion and writing; and (5) provide students with a framework for continuing education in history and social sciences.

WORLD HISTORY I HONORS

CRS H1101 GR 9 CR 1 Y

The Origins of Mankind and the impact of the Agrarian Revolution open our survey of World Civilizations. Students will learn the skills of a historian as we examine the rise and fall of great civilizations from across the world, including classical Greece and Rome examined from within a global context. The course includes a comparative study of the great world religions. Students will understand the similarities and differences amongst the great civilizations in Africa, the Middle East, India, and China. Students will learn the basis for the rise of the modern world by studying: the Renaissance, Reformation, Rise of Nation States, the Era of Exploration and Expansion, and the French Revolution with an examination of Enlightenment thought. World History I is offered freshman year as part of a two year World History requirement. *Prerequisite: Grade of B- in 8th grade History and recommendation of teacher.*

WORLD HISTORY I COLLEGE PREP

CRS H1103 GR 9 CR 1 Y

The Origins of Mankind and the impact of the Agrarian Revolution open our survey of World Civilizations. Students will learn the skills of a historian as we examine the rise and fall of great civilizations from across the world including, classical Greece and Rome examined

from within a global context. The course includes a comparative study of the great world religions. Students will understand the similarities and differences amongst the great civilizations in Africa, the Middle East, India, and China. Students will learn the basis for rise of the modern world by studying: the Renaissance, Reformation, Rise of Nation States, the Era of Exploration and Expansion, and the French Revolution with an examination of Enlightenment thought. World History I is offered freshman year as part of a two year World History requirement.

ELD WORLD HISTORY I COLLEGE PREP

CRS H1108 GR 9-12 CR 1 Y

This content/ELD course is designed to parallel the freshman course in the area of world history, from ancient times to the Industrial Revolution. The students will review skills in geography to understand historical, social and economic development. Units will include: the first civilizations of the world, emergence of the modern world, democracy and nationalism in Europe and the Industrial Revolution. The completion of this course satisfies one of the three credits required in the area of social studies. This course is taught with a sheltered language instructional approach to provide maximum comprehension of the content while assisting with the acquisition of academic language skills appropriate to the subject area. Significant emphasis is placed upon acquisition of academic vocabulary, syntax and grammar as well as related reading and writing skills. *(ELD levels I and II only)*

FUNDAMENTALS OF WORLD HISTORY I CRS H8121 GR 9 CR 1 Y

Instruction is based on MA Frameworks and parallels the general education program of studies in History. Students will study the history of the Western and Non-Western world. Students are expected to develop knowledge and skills of history, geography, civics, economics, and responsible citizenship. *Guidance Approval Required*

WORLD HISTORY II HONORS CRS H1109 GR 10 CR 1 Y

This course begins where World History I ends and starts with an analysis of the American and French Revolutions as part of the Era of Atlantic Revolutions. The impact of the Industrial Revolution and Western colonialism is viewed from various perspectives. Students will focus on the impacts of World War I, the Great Depression, and World War II through a global lens. Decolonization, the rise and fall of fascism and communism, and the economic growth of the emerging global economies are studied thematically using specific case studies. The course culminates by giving students a broader view of the modern world in the post-Berlin Wall and post 9-11 era. This course is a required course taken during the sophomore year. *Prerequisite: Grade of B- or better in World History and recommendation of teacher or passing grade in World History I Honors.*

WORLD HISTORY II COLLEGE PREP CRS H1111 GR 10 CR 1 Y

This course begins where World History I ends and starts with an analysis of the American and French Revolutions as part of the Era of Atlantic Revolutions. The impact of the Industrial Revolution and Western colonialism is viewed from various perspectives. Students will focus on the impacts of World War I, the Great Depression, and World War II through a global lens. Decolonization, the rise and fall of fascism and communism, and the economic growth of the emerging global economies are studied thematically using specific case studies. The course culminates by giving students a broader view of the modern world in the post-Berlin Wall and post 9-11 era. This course is a required course taken during the sophomore year.

ELD WORLD HISTORY II CRS H1114 GR 10-12 CR 1 Y

This is a continuation of ELD World History I. The units of the course: imperialism and colonization, war, revolution and efforts for peace in the 20th century, economic, technological and cultural changes in the modern world. The completion of this course satisfies one of the three credits required in the area of social studies. This course is taught with a sheltered language instructional approach to provide maximum comprehension of the content while assisting with the acquisition of academic language skills appropriate to the subject area. Significant emphasis is placed upon acquisition of academic vocabulary, syntax and grammar as well as related reading and writing skills. *(ELD level 1 and 2 only)*

FUNDAMENTALS OF WORLD HISTORY II CRS H8123 GR 10 CR 1 Y

Instruction is based on MA Frameworks and parallels the general education program of studies in History. Students will study the history of the Western and Non-Western world. Students are expected to develop knowledge and skills of history, geography, civics, economics, and responsible citizenship. *Guidance Approval Required*

EUROPEAN HISTORY AP CRS H1110 GR 10-12 CR 1 Y

The course in European History is designed to provide students with the intellectual-cultural, political-diplomatic, and social-economic history of Europe beginning about 1450. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those of full-year introductory college courses. Students selecting AP European History must take the Advance Placement Examination in European History, for which college credit may be awarded. *Prerequisite: Grade of B- or better in World History I Honors or B+ in World History I and recommendation of teacher.*

U.S. HISTORY II HONORS CRS H1117 GR 11 CR 1 Y

This survey course begins with the Reconstruction Era and journeys through the story of 20th century America through the present day. The students will learn about major events that include the Industrial Revolution, the Roaring 20's, the Great Depression, World War I and II, the Civil Rights Movement, the Vietnam and Korean Wars, the Cold War, the 90's and the early 21st century. This course is required for graduation and can be taken during the junior or senior year. *Prerequisite: Grade of B- or better in World History II or passing grade in World History II Honors and receive the recommendation of his/her teacher.*

U. S. HISTORY II COLLEGE PREP CRS H1119 GR 11 CR 1 Y

This survey course begins with the Reconstruction Era and journeys through the story of 20th century America through the present day. The students will learn about major events that include the Industrial Revolution, the Roaring 20's, the Great Depression, World War I and II, the Civil Rights Movement, the Vietnam and Korean Wars, the Cold War, the 90's and the early 21st century. This course is required for graduation and can be taken during the junior or senior year.

ELD U.S. HISTORY II COLLEGE PREP CRS H1122 GR 11-12 CR 1 Y

This course is geared to the student who must take US History to graduate, but has demonstrated a limited English proficiency. A review of major historical issues and social studies skills will be covered. Students qualifying for entrance into College Preparatory Modern U.S. History will be expected to: (1) cover the material contained in the Massachusetts Framework; (2) use many different materials, mostly print; (3) write essays and short papers; (4) write research paper(s); (5) devote adequate time to their homework assignments; (6) make class presentations and; (7) work on those academic skills that will be necessary for success in college. (*ELD levels 1 and 2 only*)

U.S. HISTORY II (EARLY COLLEGE NECC) CRS H1122EC GR. 11 CR 1 Y

This course is a survey of American history from 1865 to the present. It will examine the continuing political, social, cultural and economic development of the United States from reconstruction through the Second World War and the postwar years. Emphasis will be placed on the increasing power of the Presidency, the role of America as a world leader, industrial and technological growth and its impact on the environment. *Prerequisite: Early College NECC*

FUNDAMENTALS OF U.S. HISTORY II CRS H8125 GR 11 CR 1 Y

Instruction is based on MA Frameworks and parallels the general education program of studies in History. Students will study the history of the 20th century to the present of the United States. Students are expected to develop knowledge and skills of history, geography, civics, economics, and responsible citizenship. *Guidance Approval Required*

U.S. HISTORY AP CRS H1115 GR 11 CR 1 Y

The course in United States History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and issues connected with American History. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those of full-year introductory college courses. Students will learn to assess historic materials - their relevance to a given interpretive problem, their reliability and their importance - and to weigh the evidence and interpretations presented in historical scholarship. The American History course will develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. Students selecting AP U.S. History must take the Examination in United States History, for which college credit may be awarded. *Prerequisite: Grade of B- or better in World History II or a passing grade in AP European History or AP World History, and recommendation of teacher.*

HISTORY ELECTIVES

HISTORY OF THE CITY OF HAVERHILL CRS H1125 GR 9-12 CR ½ S

Haverhill was settled in 1640, Bradford in 1639. In 1897, they became one. Students will use a variety of sources to explore the fascinating story of the growth and development of the city of Haverhill. Students may visit sites they study, and will do original research in areas of particular interest. *Prerequisite: Successful completion of, or concurrent registration in a core History class.*

PSYCHOLOGY CRS H1127 GR 11-12 CR ½ S

Major goals of the course include promoting an interest in Psychology and the study of the following topics: personality, intelligence, and theories of development, abnormal behavior, frustration, anger and other areas. The course is designed so that students working at all levels can find success in this class. *Prerequisite: Successful completion of, or concurrent registration in a core History class.*

PSYCHOLOGY (EARLY COLLEGE NECC) CRS H1127EC GR 12 CR 1 S

This course includes a survey of major topics and theorists in the field. The student will focus primarily on normal developmental trends and patterns while exploring the social, emotional, motivational, sensory and cognitive realms of behavior. In particular, the student may read and discuss material pertaining to the theories of Maslow, Freud, Piaget, Erikson, and Skinner among others. *Prerequisite: Early College NECC.*

PSYCHOLOGY HONORS CRS H1130 GR 11-12 CR ½ S

The curriculum of this course is based on a college introductory course. A general knowledge of biology and anatomy is recommended. The course's areas of study will include Personality Theories, Abnormal Psychology, Learning Theories, Violence and Criminal Behavior, Psychobiology and Perception. There will be an emphasis on the analysis of the major theorists in the discipline of Psychology. Enrollment in this course will receive Honors credit. Proficient writing and reading skills are essential to successfully completing this course. *Prerequisite: Students are required to have successfully completed their previous year's English and their core History class with a B- or better.*

U.S. GOVERNMENT AND POLITICS AP CRS H1200 GR 11-12 CR 1 Y

U.S. Government and Politics is designed to give students a critical perspective on politics and government in the United States. This course is an in-depth study of general concepts used to interpret American politics combined with the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that make up the American political reality. Topics will include: the U.S. Constitution, the three branches of government, impact of mass media, impact of special interest groups, the election process, and the impact of polling, civil rights cases and the law-making process. ***Prerequisite: Successful completion of, or concurrent registration in a core History course with a B- or better.***

CONSTITUTIONAL LAW HONORS CRS H1134 GR 11-12 CR 1 Y

Honors Constitutional Law is an in-depth study of all aspects of the United States Constitution from the powers of Congress through the Bill of Rights and other selective Amendments. Various Constitutional powers and protections will be analyzed in intensive detail through the use of primary readings, legal treatises, and landmark Supreme Court rulings. After studying a specific topic, students will be required to use their knowledge and write a three (3) to five (5) page legal brief analyzing a mock fact pattern. Besides the legal briefs, students will be graded on periodic quizzes and oral arguments. Enrollment in this course will receive Honors credit. ***Prerequisite: Students are required to have successfully completed their previous year's English and their core History class with a B- or better.***

CONSTITUTIONAL LAW CRS H1133 GR 11-12 CR 1 Y

The law is an ever-changing phenomenon. The court's systems, through case decisions, are constantly changing and defining the rights that have protected citizens since the Constitution was ratified in 1788. In no one forums have people's basic human rights changed more those of school children. In Constitutional Law, students will examine through Supreme Court case studies, the evolution of individual rights and liberties. In the process, students will get a flavor of the following law-related issues: (1) the adversarial system; (2) the nature and cause of crime; (3) the criminal justice process; (4) consumer law and; (5) family law. Special attention will be given to certain historic and legal events that have been responsible for the evolutionary change in the status of women in our society. ***Prerequisite: Successful completion of, or concurrent registration in a core History course.***

INTERNATIONAL RELATIONS

COLLEGE PREP CRS H1135 GR 10-12 CR ½ S

The International Relations program has been created to reinforce the understanding of both historic and contemporary relations among nations. Understanding each other is the key to world peace, and we feel it is an essential lesson for all students to learn. Key elements of the course include: (1) political, social and economic world issues; (2) training in research methodology; (3) public speaking; (4) persuasively presenting ideas to others; (5) the elements of diplomacy; (6) the inner workings of the United Nations and; (7) having students objectively assess views contrary to their own. By role-playing the part of various world diplomats at the end of the course, students will enter into "controlled competition" with other schools in a format similar to that used at the United Nations. ***Prerequisite: Students must be in or have successfully completed their History requirement and prior discussion with the course instructor.***

INTERNATIONAL RELATIONS HONORS CRS H1139 GR 10-12 CR ½ S

The International Relations course is also offered as an Honors elective. In order to earn Honors credit for the course, the student must fulfill the following additional requirements:

1. Write weekly International Event Summaries.
2. Work as peer editors on Position Papers during our Mock Model UN section.
3. Have homework that will be more substantial.
4. Become leaders in peer group projects. The finals/midterm projects will be student lead by the Honors students.
5. Have an increased responsibility on the final project. The final/midterm projects will be have a written component that will be longer for the Honors student.

PHILOSOPHY CRS H1136 GR 10-12 CR ½ S

In this course, students will learn the specialized vocabulary of Philosophy as well as discuss fundamental questions and some of the answers that have been given over time. They will discover that the same questions which were of interest to ancient peoples are interesting to us: "What is the good life", "What is Virtue", "Is there purpose in life?" "What is Justice?" "To what extent are we responsible for others?" "What is Truth and how do we know it?" As a consequence of questions such as these, students will also apply some of the answers to ethical issues of a contemporary nature. Students who elect this course should have a strong commitment to reading primary sources, engaging in non-argumentative discussion, preparing insightful essays, and an understanding that your conclusions are only as good as your arguments. Enrollment in this course will receive Honors credit.

CONTEMPORARY ISSUES CRS H1141 GR 11-12 CR ½ S

Contemporary Issues will introduce students to topics that influence our life in this global, multicultural society. Students will research current economic, political, social, and cultural problems, and explore how ongoing conflicts affect our world. Students will be encouraged to make interdisciplinary connections between their past curriculum course of studies and the ongoing issues of today. Strong emphasis will be placed on critical thinking, speaking and listening skills, which will be reinforced through class discussions and oral presentations. The use of a variety of technologies and media is integrated throughout the curriculum.

NETWORKING IN THE 21ST CENTURY

CRS H1149 GR 11-12 CR ½ S

Students will learn how to use the major new tools in social media to reach personal and professional goals. The course will focus on past and present use of media in schools, the work force and everyday life. In addition, the course will speak to many forms of networking in society as it pertains to developing contacts, and business and social etiquette. This class will consist of collaborative work, group discussions, explorations and projects designed by the class. Throughout the course, students will learn the legality and future implications of their actions on social media websites and in the social and business world. Upon completion of the course, students should become informed digital citizens of the 21st century.

CHILD PSYCHOLOGY I

CRS H1645 GR 10-12 CR ½ S

In this course, students will explore the development of children from the pre-natal stage through the toddler stage, with emphasis on social/emotional and intellectual development. Students will be expected to read, analyze, discuss, problem solve, think critically, and work in groups to expand their working knowledge of children and how it may be applied to careers or personal life.

CHILD PSYCHOLOGY II

CRS H1647 GR 11-12 CR ½ S

In this course, students will explore the development of children from the pre-school through the adolescence, with emphasis on social/emotional and intellectual development. Students will be expected to read, analyze, discuss, problem solve, think critically, and work in groups to expand their working knowledge of children and how it may be applied to careers or personal life. *Prerequisite: Must successfully complete Child Psychology I.*

INTRODUCTION TO SOCIOLOGY (EARLY COLLEGE NECC)

CRS H1640EC GR 11 CR 1 S

This course provides the student with an understanding of the theories, methods, and approaches to the study of human social and group interactions. It emphasizes the development of sociological thought and the influences of social institutions and cultural factors on human behavior. Among subjects covered are: culture, groups, socialization, methodology, deviance and social inequalities. *Prerequisite: Early College NECC*

SOCIOLOGY

CRS H1641 GR 10-12 CR ½ S

In this course, students will explore the importance of family in terms of their present, future, and career possibilities. They will learn the value of goals and set up a plan to meet these goals. Students will read, listen to lectures and discuss a wide variety of issues, including today's family, family interactions, family crises, money and time management, balancing family and work, and citizenship roles. Students will conduct research and report on their findings.

THE HOLOCAUST AND CRIMES AGAINST HUMANITIES

CRS H1140 GR 10-12 CR ½ S

This course offers a comprehensive examination of the history of the Holocaust and crimes against human civilization. The core focus of the class is the analysis of the history of anti-Semitism, the formation of the National Socialist regime, and the execution of six million European Jews and millions of others by the Nazi's. This investigation includes the Holocaust's relationship to ideals of justice and genocide before and after World War II. To conduct this study, students will investigate records from survivors, nations, institutions, museums, popular culture, media, and historians who have constructed a history of the Holocaust.

CIVICS

CRS H1153 GR 9-12 CR ½ S2

This course will teach and encourage students to become informed, responsible and engaged citizens through instruction on citizenry rights, voting, the legal system, state and local government, and how to actively participate in their local communities.

WOMEN'S AND GENDER STUDIES

CRS H9610 GR 11-12 CR ½ S

Gender studies is an interdisciplinary study that analyzes gender identity and how it manifests in society in media, politics, history etc. It includes women's studies, men's studies, and LGBT studies. It also analyzes how race and class intersect with gender. Women's studies examines gender as a social construct, the contributions of women, and the experiences of women. This course will highlight some major issues that primarily affect women, such as sexual assault and workplace inequality. Students will learn about the history of gender in the United States and issues related to gender in the present day. Class time will be designated to examining media that touches on gender (articles, documentaries, etc.) and discussions on these subjects. (11-12)

THE CONTEMPORARY MIDDLE EAST

CRS H9611 GR 9-12 CR ½ S

This course will focus on the religious, social, geographical, cultural, and political aspects associated with the Middle East region of the world. Emphasis will be put on the sources of conflict, the Islamic religion, and what it means to be an Arab. We will also cover the historical background of the Middle East from its modern creation in the early twentieth century up until present day. The course will also focus on current events in the Middle East and how they affect our lives. (11-12)

A CLASSICAL PERSPECTIVE – LITERATURE

CRS H9600 GR 9 CR ½ S

After an introduction to Hellenistic culture and its influences on the development of western art and thought, students will enter into a detailed study of the *Oresteia* by Aeschylus. The *Oresteia*, a cycle of three tragic plays (*Agamemnon*, *Libation Bearers* and *Eumenides*), explores the human cost of the Trojan War in Argos after the Greeks return. Students will read the plays and reflect on what it means to

be human and engage in human relationships. It is the intent of this reflection to begin to answer the underlying questions of the human experience: What do we know? How do we know what we know? How do we express this knowledge? This course will serve to inform the perspective of Classical Academy students as they progress through the program. ***This course is a graduation requirement for the Classical Academy***

CLASSICAL PHILOSOPHY IN THE 21ST CENTURY CRS H9602 GR 10, 11, 12 CR ½ S

Classical Philosophy in the 21st Century is a semester-long course that focuses on developing critical thinking skills and producing strong, research-based arguments. The course illuminates age-old philosophical problems by broaching contemporary topics and events. Our study begins as a discussion about the origins of society facilitated through readings by Aristotle, Hobbes, Locke, Faulkner, and Martin Luther King, Jr., culminating with David Malouf's *An Imaginary Life*. Then we explore topics as varied as global poverty and philanthropy, animal rights, doctor-assisted suicide, the American criminal justice system, and more. *This course has evolved from the Research Seminar course.*

SENIOR SEMINAR CRS H1145 GR 12 CR ½ S

Seniors design, create, and produce a project about a topic of their choosing. Topic choice is guided by a subject in which the student has an interest, but has not had an opportunity to study during high school. The eighty-hour research project culminates with a presentation to a panel of judges consisting of teachers and members of the community. Whenever possible, students are assigned a mentor to work with them on a weekly basis to insure understanding and share expertise. The course is intended to demonstrate autonomy in the production of original work, provide an opportunity for creative self-expression, encourage independent problem-solving, promote sustainable inquiry, develop time-management skills, report orally and in writing on the results of research and create a tangible product. ***This course is a graduation requirement for the Classical Academy.***

MATHEMATICS

Haverhill High School offers a full array of courses in mathematics and computer programming. Whether a student is planning to attend college or move into the workplace, a sound mathematical background is necessary. All students at Haverhill High School are required to pass a minimum of three non-elective math courses, including a complete course in Algebra I. Most colleges, universities, and applied technology institutions recommend that students successfully complete 4 years of mathematics. Mass Core, the state recommended program of study, recommends 4 years of mathematics in order for high school graduates to be career and college ready. Courses in grades 9 and 10 focuses on the content, skills, and strategies assessed by the Mathematics MCAS test which is administered each year in May. The goal of the mathematics department is to have all students achieve mathematical competence through a strong program that emphasizes reasoning, communication skills, problem solving, making connections, and technological literacy.

All students are encouraged to purchase a TI 83 or TI 84 graphing calculator for use in their mathematics classes. It is important to know that the use of a graphing calculator is permitted on the MCAS, PSAT, SAT, ACT, and AP exams. The mathematics staff at Haverhill High School is committed to maintaining high standards and encouraging all students to participate in academically challenging courses that will better prepare them for college and 21st century careers.

GRADE 9 MATHEMATICS SUPPORT CRS H2200 GR 9 CR ½ S

This is an elective course for 9th grade Algebra I CP students who require additional math support. Students will take a diagnostic test that will allow instructors to target appropriate topics, strategies, and techniques for individual students. The objective of this course is to help students fill gaps in mathematical concepts in order to successfully complete Algebra I and future math courses. Passing students earn graduation credit, but no mathematics credit. *Note: Students enrolled in Foundations of Algebra are not eligible for this course.*

GRADE 10 MATHEMATICS SUPPORT CRS H2201 GR 10 CR ½ S

This is an elective course for 10th grade Geometry CP students who require additional math support. Students will take a diagnostic test that will allow instructors to target appropriate topics, strategies, and techniques for individual students. The objective of this course is to help students fill gaps in mathematical concepts in order to successfully complete Geometry and to prepare for MCAS. Passing students earn graduation credit, but no mathematics credit. *Prerequisite: Passing grade in Algebra I, and recommendation of teacher.*

FOUNDATIONS OF ALGEBRA CRS H2201 GR 9 CR 1 Y

This course is taken concurrently with Algebra I College Prep A, as a double math block, and is intended to provide support in foundational knowledge and skills. Placement in this course will be determined by grade 8 diagnostic testing, warning scores on MCAS, low MAP assessment scores, and overall middle school math achievement. In addition to reviewing necessary pre-algebra skills and concepts, critical instructional areas will include formulating and reasoning about expressions and equations, solving linear equations and systems of linear equations, and grasping the concept of function. Students will work individually and in small groups to fill gaps in mathematical concepts, to prepare for MCAS, and to fully comprehend Algebra I. Passing students earn graduation credit, but no mathematics credit.

ALGEBRA I HONORS CRS H2207 GR 9 CR 1 Y

This in-depth and comprehensive course follows the common core standards for Algebra 1 and integrates the Standards for Mathematical Practice. Topics include solving and graphing linear equations and inequalities, absolute value functions, systems of linear equations, exponential functions and sequences, polynomials, factoring, quadratic functions, operations of exponents and radicals, and data analysis. The course includes a focus on functions and applications. A TI-83 or TI-84 graphing calculator is

recommended. *Prerequisites: Grade of B or better in a grade 8 Algebra I, or A- or better in grade 8 mathematics course, and proficient or above scores on MCAS and MAP testing, and recommendation of mathematics teacher.*

ALGEBRA I COLLEGE PREP

CRS H2209

GR 9

CR 1

Y

This course follows the common core standards for Algebra I and integrates the Standards for Mathematical Practice. Topics include solving and graphing linear equations and inequalities, absolute value functions, systems of linear equations, exponential functions and sequences, polynomials, factoring, quadratic functions, operations of exponents and radicals, and data analysis. The course includes a focus on functions and applications. A TI-83 or TI-84 graphing calculator is recommended. *Prerequisites: Grade of C or better in grade 8 mathematics course, and needs improvement or above scores on MCAS and MAP testing, and recommendation of mathematics teacher.*

ALGEBRA I COLLEGE PREP A

CRS H2210

GR 9

CR 1

Y

This Algebra I College Prep A course is taken concurrently with Foundations of Algebra and is intended for students who have experienced continuing difficulties with mathematics and require a modified pace to acquire necessary skills. Content includes tools of algebra; functions & their graphs; solving, graphing, and writing linear equations; parallel and perpendicular lines; data; real numbers and their properties; simplification of radical expressions; ratio/percent/proportion; probability, and MCAS preparation. A variety of mathematical models, calculators, and real-life contexts are utilized to help develop conceptual understandings of the concepts. A TI 83 or TI 84 graphing calculator is recommended. *Prerequisites: Grade of C or below in grade 8 mathematics course, warning on MCAS and MAP testing, failing grade on grade 8 common benchmarks, and recommendation of mathematics teacher.*

ELD FOUNDATIONS OF ALGEBRA

CRS H2275

GR 9

CR 1

Y

This course is taken concurrently with ELD Algebra I College Prep A, as a double math block, and is intended to provide support in foundational knowledge and skills. It includes the same content noted for CRS H2201. Passing students earn graduation credit, but no mathematics credit. (*ELD levels 1 and 2 only*).

ELD ALGEBRA I COLLEGE PREP A

CRS H2277

GR 9

CR 1

Y

This course is taken concurrently with ELD Foundations of Algebra and is intended for students who have experienced continuing difficulties with mathematics and require a modified pace to acquire necessary skills. It includes the same content noted for CRS H2210. The development of math language and academic terminology consistent with Algebra is a focus. A TI 83 or TI 84 graphing calculator is recommended. (*ELD levels 1 and 2 only*).

GEOMETRY HONORS

CRS H2215

GR 9-11

CR 1

Y

This course formalizes the geometric concepts that students have learned in the middle school, with an emphasis on reasoning and making mathematical arguments. In the measurement unit, students derive formulas for surface area and volume and use these formulas to find the area, volume, and surface area of composite figures. They study fundamental measurement theorems and postulates and apply these rules when solving problems. Formal constructions, an important component of this course, are used to formulate reasoning and understanding of significant concepts. Geometric transformations are used as the foundation for congruence and similarity. The congruence and similarity units provide opportunity for students to sharpen their applied problem solving skills and write formal proofs. Students will also be using formal and coordinate proofs when reasoning with the properties of lines, angles, triangles, quadrilaterals, polygons, and circles. The course also touches upon set theory and probability by challenging students to make decisions based on data analysis. *Prerequisites: Grade greater than or equal to a B in Algebra I H or a grade greater than or equal to an A- in Algebra I CP and recommendation of teacher. For incoming freshmen, prerequisites include a grade of B or higher in Grade 8 Algebra I, teacher recommendation, and 80% or higher on the district end-of-year assessment.*

GEOMETRY COLLEGE PREP

CRS H2217

GR 10-12

CR 1

Y

This course formalizes the geometric concepts that students have learned in the middle school, with an emphasis on reasoning and making mathematical arguments. In the measurement unit, students derive formulas for surface area and volume and use these formulas to find the area, volume, and surface area of composite figures. They study fundamental measurement theorems and postulates and apply these rules when solving problems. Formal constructions, an important component of this course, are used to formulate reasoning and understanding of significant concepts. Geometric transformations are used as the foundation for congruence and similarity. The Congruence and Similarity units provide opportunity for students to sharpen their applied problem solving skills and write formal proofs. Students will also be using formal and coordinate proofs when reasoning with the properties of lines, angles, triangles, quadrilaterals, polygons, and circles. The course also touches upon set theory and probability by challenging students to make decisions based on data analysis. *Prerequisites: Passing grade in Algebra I CP.*

ELD GEOMETRY COLLEGE PREP

CRS H2279

GR 10-12

CR 1

Y

This course includes the same content noted for CRS H2217. The development of math language and academic terminology consistent with geometry is a focus. A TI 83 or TI 84 graphing calculator is required. (*ELD levels 1 and 2 only*).

INTERMEDIATE ALGEBRA

CRS H2212

GR 11-12

CR 1

Y

This course is designed to help students strengthen their Algebra and overall math skills prior to enrolling in a formal Algebra II course. Topics will include the real number system, linear equations, and systems of linear equations, functions, probability, statistics, and an

introduction to quadratic functions, especially in real world contexts. Additional topics may include consumer math and financial management. **Prerequisite:** *Successful completion of Algebra I and Geometry. May take Intermediate Algebra if Geometry is taken concurrently.*

ALGEBRA II HONORS

CRS H2223

GR 10-12

CR 1

Y

This course continues a rigorous presentation of the number system properties begun in Algebra I Honors. Content includes the study of arithmetic and geometric sequences, quadratic functions, polynomials and polynomial functions, rational equations and functions, radical equations and functions, exponential and logarithmic functions, probability, design of statistical studies (including gathering data, making inferences and justifying conclusions), trigonometric functions, and choosing a function. Some of the topics covered within these units of study are solving systems involving both linear and quadratic functions, the fundamental theorem of algebra, complex numbers, and the binomial theorem. A TI 83 or TI 84 graphing calculator is required. **Prerequisites:** *Grade of B or better in both Algebra I H and Geometry Honors. NOTE: A freshman teacher recommendation is required for enrollment of a sophomore. For incoming freshmen, prerequisites include a grade of B or higher in Grade 8 Algebra I, teacher recommendation, and 80% or higher on the district end-of-year assessment, concurrent enrollment in Geometry honors.*

ALGEBRA II COLLEGE PREP

CRS H2225

GR 10-12

CR 1

Y

This course is a continuation of the study of the number system begun in Algebra I. The content includes a brief review of the fundamental concepts of Algebra I followed by the study of arithmetic and geometric sequences, quadratic functions, polynomials and polynomial functions, rational equations and functions, radical equations and functions, exponential and logarithmic functions, probability, design of statistical studies (including gathering data, making inferences and justifying conclusions), trigonometric functions, and choosing a function. Some of the topics covered within these units of study are solving systems involving both linear and quadratic functions, the fundamental theorem of algebra, complex numbers, and the binomial theorem. A TI 83 or TI 84 graphing calculator is required. **Prerequisites:** *Grade of C or better in both Algebra I CP and Geometry CP, and recommendation of mathematics teacher. NOTE: For enrollment by a sophomore, the recommendation of the freshman teacher is necessary. Students not meeting these prerequisites should be placed in Intermediate Algebra.*

PRECALCULUS HONORS

CRS H2229

GR 11-12

CR 1

Y

This is a course in advanced algebra and functional analysis with a graphing approach. Topics covered include mathematical logic, ordered fields, sequences and series, logarithmic and exponential functions, vectors and analytic geometry. In addition, topics include a complete study of circular functions, including all topics covered in trigonometry, along with special topics such as mathematical induction and polar coordinates. A TI 83 or TI 84 graphing calculator is required. **Prerequisite:** *Grade of B or better in Algebra II H and Geometry H, or grade of A in Algebra II CP and Geometry CP, and recommendation of mathematics teacher.*

CALCULUS HONORS

CRS H2232

GR 12

CR 1

Y

Calculus Honors is a survey course dealing with topics from the first and second semesters of a college calculus course. The topics covered include an extensive review of pre-calculus and trigonometry topics, limits, continuity, derivatives and their applications, integrals and their applications. Applications covered include area and volume, optimization problems, and related rate problems. A TI 83 or TI 84 graphing calculator is required. **Prerequisite:** *Grade of C or better in Precalculus and recommendation of mathematics teacher.*

CALCULUS AP—AB

CRS H2234

GR 11-12

CR 1

Y

This course is an introduction to the fundamentals of differential and integral calculus for students planning to take advanced mathematics courses in college. Topics covered include limits, continuity, derivatives, integrals and their applications as well as all other topics in the College Board's topical guide provided for Calculus AB. Calculus AB is the equivalent of one semester of college calculus with supplementary material designed to strengthen the student's background in advanced algebra and trigonometry. Students in this course are required to take the Calculus AB exam. A TI 83 or TI 84 graphing calculator is required. **Prerequisites:** *Grade of B or better in Pre-Calculus Honors, and recommendation of mathematics teacher.*

CALCULUS AP—BC

CRS H2235

GR 12

CR 1

Y

This course is an introduction to the fundamentals of differential and integral calculus for students planning to take advanced mathematics courses in college. Topics covered include limits, continuity, derivatives, integrals and their applications as well as all other topics in the College Board's guide for BC Calculus. Calculus BC is the equivalent of two semesters of college calculus. Students in this course are required to take the exam for Calculus BC. A TI 83 or TI 84 graphing calculator is required. **Prerequisite:** *Successful completion of Calculus AP-AB.*

PROBABILITY AND STATISTICS

CRS H2237

GR 11-12

CR 1

Y

This course will cover topics including random variables, statistical measure of data, and statistical description of data. Computer software (Minitab and Excel) will be used. It is offered as an elective for college preparatory credit and for a mathematics credit. **Prerequisite:** *Grade of B- or better in Algebra II and recommendation of mathematics teacher.*

STATISTICS AP

CRS H2238

GR 11-12

CR 1

Y

This course is equivalent to a college statistics course and covers the entire College Board topic outline for AP Statistics. Students will be introduced to the major tools for collecting, analyzing, and drawing conclusions from data through four major conceptual themes: describing patterns and departures from patterns, planning and conducting a study, exploring random phenomena using probability, and estimating population parameters and testing hypotheses. This course requires strong math, reading, writing, and higher level thinking

skills. Students in this course are required to take the exam for Statistics. A TI 83 or TI 84 graphing calculator is required. **Prerequisite:** *Grade of B or better in Pre-Calculus, or, with the recommendation of the mathematics teacher, an A in Algebra II H if taken concurrently with Pre-Calculus or Algebra & Trigonometry.*

INTRODUCTION TO PROGRAMMING (CTE) CRS H2243 GR 10-12 CR ½ S

Programming uses Python as a basis for learning general programming skills. Students learn programming principles by comparing Python to other programming languages. They use models as a way to quickly solve new problems using knowledge and techniques already learned. Students complete over 60 programs in the course, including both text and graphics/animation programs. In addition to programming, students learn program design, documentation, formal debugging, and testing. Finally, students examine career opportunities in programming. **Prerequisite:** *Enrollment in the NAF IT Academy.*

ROBOTICS CRS H2280 GR 9-12 CR ½ S

Robotics provides students with the opportunity to apply math and engineering to learn how robots are built, move, and “think.” Students get hands on experience with various robotic technologies currently used at U-Mass Lowell and other colleges; building robots, and developing programs to make them move and learning to use sensors. **Prerequisite:** *Completion of a full Algebra I course with a C or better. This course is a requirement for the NAF IT Academy*

COMPUTER SCIENCE –A AP CRS H2246 GR 11-12 CR 1 Y

This is an advanced computer-science programming course with emphasis on Java programming. It provides students with the opportunity to apply mathematical applications using object-oriented programming (OOP) and object-oriented design (OOD) with an emphasis on classes, methods, looping and logic, algorithms and inheritance. This course follows a syllabus approved by the College Board, with a professionally developed case study, and will prepare students for the AP Computer Science exam, which is mandatory. Students also have the opportunity to earn 4 transferable college credits when grant funding is available by using an online eBook developed and used at U-Mass Amherst. **Prerequisites:** *Passing grade in Web Site Design, Multi-media, or Robotics, and a B or better in Algebra II, and/or approval of the teacher. ✓ School to Career requirement option.*

COMPUTER SCIENCE: GAME DESIGN AND DEVELOPMENT CRS H2248 GR 12 CR 1 Y

Game programming is one of the most challenging aspects of Computer Science. It attempts to combine concepts in: math, physics, computer graphics, human computer interaction, artificial intelligence, computer aided instruction, and databases. This course is an introduction to the theory and practice of video game design and programming. Topics include the history of game design and animation, game theory, game genres, game assets, and the Unity 3D game engine. Students are required to develop a game in Unity 3D, demonstrating design principles discussed in the course. **Prerequisite:** *Successful completion of Computer Science-A AP and Teacher recommendation.*

ALGEBRA & TRIGONOMETRY: A FUNCTIONS APPROACH CRS H2258 GR 12 CR 1 Y

This course is a fourth-year math course designed to help students acquire a solid foundation in algebra and trigonometry and prepare them for college math courses. The course provides a functions-based approach to the study of linear, polynomial, rational, exponential and logarithmic functions with an emphasis on multiple representations and real-life applications. It also presents basic concepts in trigonometry, including the definitions of trigonometric functions, graphs, radian measure, trigonometric identities and equations, and solving triangles. Additional topics may include electricity, vectors, complex numbers, matrices and sequences. These topics will be supplemented with practice and preparation for college entrance and placement exams, including the SAT and Accuplacer. Graphing calculators are recommended. Students who have passed Pre-Calculus cannot take this course for credit. **Prerequisite:** *Successful completion of Algebra II.*

ACCOUNTING HONORS CRS H6631 GR 11-12 CR 1 Y

This Accounting Pilot and Bridge Project uses an integrated approach to teach real-world accounting. Students will first learn how businesses plan for and evaluate their operating, financing, and investing decisions and then how accounting systems gather and provide data to internal and external decisions makers. This year-long course covers all the learning objectives of a traditional college level financial accounting course, plus those from a managerial accounting course. Microsoft Excel is taught and integrated into the curriculum throughout the year. Optional: For a fee, students will have the opportunity to take a qualifying exam and an online course to earn 6 fully transferable credits to any college. This course may count as a 4th year credit in mathematics. **Prerequisites:** *Grade of B or better in Algebra II and recommendation of mathematics or business teacher.*

SCIENCE, TECHNOLOGY AND ENGINEERING

The science curriculum is designed to develop science literacy for all students. Globalization of information and economies has made it imperative that students understand scientific processes and content. Students are required to take three (3) college preparatory courses in the sciences (including 2 courses with laboratory work). Semester science courses without a laboratory component typically do not satisfy the science entrance requirement of four-year colleges.

BIOLOGY HONORS**CRS H3313****GR 9-10****CR 1****Y**

Biology Honors is a rigorous course emphasizing biochemistry, cell structure and function including cell transport, respiration, photosynthesis, and protein synthesis. The continuity of life is shown through the structure of the DNA molecule and how it relates to protein synthesis and cell reproduction. The principles of heredity link these topics to the evolution of life. A survey of the six kingdoms shows the diversity of life and the results of evolution over time. A unit on ecology highlights the ways in which these organisms interact with the physical environment, each other, and Homo sapiens. Lab work is an integral part of the Biology Honors. Students will perform laboratory work with confidence and efficiency. Dissection has been a part of this course in past years. Alternatives to dissection are available for any student who objects to dissection and whose parent or guardian sends a written request to the school. Students are expected to apply conceptual knowledge to interpret the biological world. Emphasis will be placed on those topics and types of questions likely to be seen on the Biology MCAS test. With all honors level science classes, evaluation includes challenges beyond the classroom experience.

Prerequisite: *Recommendation of Grade 8 science teacher.*

BIOLOGY COLLEGE PREP**CRS H3315****GR 9-10****CR 1****Y**

Biology College Prep is a rigorous course that involves lab work in addition to coursework and projects both inside and outside of class. After completing this course, students will have a solid understanding of the processes of life, which will allow them to make scientifically informed decisions related to their health and to the health of the planet. Students in Biology College Prep study life through cell biology and genetics (molecular level), vertebrate anatomy and physiology (tissue and organ levels), and ecology (organism and population levels). All students will be expected to take the Biology MCAS test at the conclusion of this course as part of their high school graduation requirement.

BIOLOGICAL SYSTEMS AND ECOLOGY COLLEGE PREP**CRS H3387****GR 10****CR 1****Y**

Biological Systems and Ecology CP-A is a second year course, which builds on the foundation of the Cellular Biology and Genetics course. A survey of the six kingdoms shows the diversity of life and the results of evolution over time. A unit on ecology highlights the ways in which these organisms interact with the physical environment and each other. A strong emphasis is placed on those topics and types of questions likely to be seen on the Biology MCAS test. Lab work is an integral part of the course. Students will perform laboratory work in small cooperative groups with teacher direction. Dissection has been a part of this course in past years. Alternatives to dissection are available for any student who objects to dissection and whose parent or guardian sends a written request to the school. Evaluation may include special projects. **Prerequisite:** *Passing grade in Cellular Biology and Genetics*

ELD BIOLOGY**CRS H7343****GR 9-12****CR 1****Y**

This content/ELD course is designed to parallel the freshman course in the area of biology. This course is taught with a sheltered language instructional approach to provide maximum comprehension of the content while assisting with the acquisition of academic language skills appropriate to the subject area. Significant emphasis is placed upon acquisition of academic vocabulary, syntax and grammar as well as related reading and writing skills. **Only for ELL Students level 1 or 2**

BIOLOGY AP**CRS H3317****GR 11-12****CR 1****Y**

Biology is designed to be the equivalent of a college introductory course usually taken by science majors during their first year. It provides students with the conceptual framework, factual knowledge and analytical skills necessary to deal critically with the dynamics of biological science in today's world. The three general topics are: Molecules and Cells; Heredity and Evolution; Organisms and Populations. This course includes significant lab work. Dissection has been a part of this course in past years. Alternatives to dissection are available for any student who objects to dissection and whose parent or guardian sends a written request to the school. Students take the national AP Biology examination in May. **Co-requisite:** *Biology AP Lab* **Prerequisite:** *Minimum grade of B in Biology; and Chemistry or concurrent enrollment in Chemistry. Recommended: Previous or concurrent enrollment in Physics.*

BIOLOGY AP LAB**CRS H3317L****GR 11-12****CR 1****Y**

This lab course provides students with the lab experience essential in all college introductory Biology courses. The labs are designed to support the content covered in AP Biology and students must be concurrently enrolled in that course. Dissection has been a part of AP Biology in past years. Alternatives to dissection are available for any student who objects to dissection and whose parent or guardian sends a written request to the school. **Co-requisite:** *AP Biology. Non-weighted course.*

CHEMISTRY HONORS**CRS H3319****GR 10-12****CR 1****Y**

Honors Chemistry presents the basic principles of chemistry. This is a rigorous course dealing with the properties, composition and structure of matter, the changes that occur in matter, and the energy relationships involved in these changes. The course focuses on the structure of matter and chemical dynamics. Topics include properties of matter, atomic structure, periodicity, chemical bonding, chemical reactions and stoichiometry, gases and kinetic molecular theory, aqueous solutions, acids and bases, and equilibrium. Lab work is an integral part of the course. As with all Honors level science classes, evaluation includes challenges beyond the classroom experience.

Prerequisite: *Completion or concurrent enrollment in Algebra 2 and recommendation of science teacher. Either a minimum grade of 220 on a high school level Science MCAS Exam; concurrent enrollment in Biology or science MCAS prep/tutoring; or approval of the Dean of the STEM Academy. Recommended: Minimum grade of B in Biology.*

CHEMISTRY COLLEGE PREP**CRS H3321****GR 10-12****CR 1****Y**

College-Prep Chemistry presents the basic principles of chemistry. This course deals with the properties, composition and structure of matter, the changes that occur in matter, and the energy relationships involved in these changes. The course focuses on the structure of matter and chemical dynamics. Topics include properties of matter, atomic structure, periodicity, chemical bonding, chemical reactions and stoichiometry, gases and kinetic molecular theory, aqueous solutions, acids and bases, equilibrium. Lab work is an integral part of the course. *Prerequisite: Completion or concurrent enrollment in Algebra 2 and recommendation of science teacher. Either a minimum grade of 220 on a high school level Science MCAS Exam; concurrent enrollment in science MCAS prep/tutoring; or approval of the Dean of the STEM Academy.*

CHEMISTRY AP**CRS H3343****GR 11-12****CR 1****Y**

Chemistry is designed to meet the objectives of a general chemistry course at the college level. This offering should contribute to the development of the student's ability to think clearly and to express ideas orally and in writing with clarity and logic. The course includes the study of chemical principles, chemical equilibrium, thermodynamics, atomic and molecular structure, and aqueous solution chemistry and includes significant lab work. Students who select AP Chemistry must take the Examination in Chemistry. *Co-requisite: AP Chemistry Lab Prerequisites: Minimum grade of B in Chemistry and recommendation of science teacher. Either a minimum grade of 220 on a high school level Science MCAS Exam; concurrent enrollment in science MCAS prep/tutoring; or approval of the Dean of the STEM Academy.*

CHEMISTRY AP LAB**CRS H3343L****GR 11-12****CR 1****Y**

This lab course provides students with the lab experience required in college level chemistry courses. The labs are designed to support the content covered in AP Chemistry and students must be concurrently enrolled in that course. *Co-requisite: AP Chemistry Non-weighted course.*

BIOLOGY: MCAS PREP**CRS H3410****GR 9-10****CR ½****S**

This MCAS prep course in biology focuses on reviewing the biological concepts found in the state frameworks and preparing the student to take the biology MCAS exam. Areas of focus include biochemistry, cells, genetics, human body systems and ecology. Students will be provided with ample opportunities to take practice MCAS tests and review successful test-taking strategies. Students taking this course will automatically be scheduled for a study hall in the spring semester.

ANATOMY & PHYSIOLOGY HONORS**CRS H3332****GR 11-12****CR 1****Y**

This course is recommended for prospective students of nursing, physical therapy and related medical fields. Areas studied include cell structure and biochemistry, histology, anatomy and physiology of the human systems including skeletal, muscular, digestive, circulatory, respiratory, excretory, nervous, endocrine, and reproductive systems. Dissection has been an integral part of this course in past years. Alternatives to dissection are available for any student who objects to dissection and whose parent or guardian sends a written request to the school. There will be worksheets for independent study, chapter tests, laboratory practical exams, lab reports, assigned class work and homework. *Prerequisite: A minimum grade of B in Biology and Chemistry and recommendation of a science teacher. Either a minimum grade of 220 on a high school level Science MCAS Exam; concurrent enrollment in science MCAS prep/tutoring; or concurrent enrollment in Chemistry or Physics with approval of the Dean of the STEM Academy.*

**ANATOMY & PHYSIOLOGY
COLLEGE PREP****CRS H3331****GR 11-12****CR 1****Y**

This course is recommended for students who are interested in human body anatomy and physiology. Areas studied include cell structure and biochemistry, histology, anatomy and physiology of the human systems including skeletal, muscular, digestive, circulatory, respiratory, excretory, nervous, endocrine, and reproductive systems. Dissection has been an integral part of this course in past years. Alternatives to dissection are available for any student who objects to dissection and whose parent or guardian sends a written request to the school. There will be chapter tests, lab reports, as well as assigned class work and homework. *Prerequisite: A minimum grade of C in Biology and Chemistry and recommendation of a science teacher. Either a minimum grade of 220 on a high school level Science MCAS Exam; concurrent enrollment in science MCAS prep/tutoring; or concurrent enrollment in Chemistry or Physics with approval of the Dean of the STEM Academy.*

INTRODUCTION TO STEM CAREERS**CRS H3310****GR 9-12****CR ½****S**

This career exploration course introduces students to the varied opportunities available in the science, technology, engineering and mathematics fields. Students will leave this course better prepared to enter college and/or the workforce in one of the many STEM careers. Students will engage in project-based learning and laboratory investigations in order to practice the many skills required to succeed in a STEM field. Some of the skills taught in this course include: measurement, designing experiments, creating scale models, using the microscope, and using biotechnology lab techniques.

ZOOLOGY AND LAB COLLEGE PREP**CRS H3352****GR 10-12****CR 1****Y**

Zoology is an introduction to the biology of animal kingdom. The course will provide a survey of both invertebrate and vertebrate biodiversity, anatomy, physiology, ecology, behavior, and evolution. Additionally, this course will contain a laboratory component containing experiments and observations that study the anatomy, physiology, and ecology of selected vertebrates and invertebrates. *Prerequisite: A minimum grade of C in Biology or Life Science and recommendation of a science teacher. Either a minimum grade of 220 on a high school level Science MCAS Exam; or approval of the Dean of the STEM Academy.*

ZOOLOGY AND LAB HONORS**CRS H3353****GR 10-12****CR 1****Y**

Honors zoology is a rigorous investigation into the animal kingdom. The course will provide a broad survey of both invertebrate and vertebrate biodiversity, functional anatomy, physiology, ecology, behavior, and evolution. Additionally, this course will contain a laboratory component focusing on the structure and development of organ systems, and experiments that study the physiological processes of selected vertebrates and invertebrates.

Prerequisite: *A minimum grade of B in Biology or Life Science and recommendation of a science teacher. Either a minimum grade of 220 on a high school level Science MCAS Exam; or approval of the Dean of the STEM Academy.*

**MEDICAL TERMINOLOGY
& HUMAN DISEASES (CTE)****CRS H3425****GR 10-12****CR ½****S**

This course introduces students to medical terminology and the description of diseases. Students will explore the manifestations, terminology, and mechanisms of disease. They will discuss diseases of the body systems including cardiovascular, respiratory, digestive, urinary, reproductive, endocrine, nervous, muscular, skeletal, and skin. This course is designed for students interested in a career in the health care industry

**BIOTECHNOLOGY & FORENSICS
COLLEGE PREP****CRS H3341****GR 10-12****CR ½****S**

Biotechnology and Forensics is a lab intensive science course. This course will incorporate current technology into the application of life science. The first portion of the course will expose students to cutting edge technology like cloning and polymerase chain reaction, current and controversial issues, people, practices and future ideals. The second half of this course covers the principles of forensics, where fingerprinting, ballistics, blood analysis, and much more. This is not a traditional science course, as students will spend almost every day discovering, experimenting and inventing. **Prerequisites:** *A minimum grade of C in Biology, recommendation of a science teacher and a minimum grade of 220 on the Biology MCAS.*

EARTH SCIENCE HONORS**CRS H3308****GR 10-12****CR 1****Y**

This course is designed to give students the opportunity for an in-depth study of Geology, including rocks and minerals, earthquakes, volcanoes, plate tectonics, earth processes, cycles and formation, erosion and weathering, development of soils, renewable and non-renewable resources. Oceanography, meteorology and space science topics will also be included. Lab work is an integral part of the course. Evaluation includes challenges beyond the classroom experiences. **Prerequisites:** *Algebra I and recommendation of science teacher; Either a minimum grade of 220 on a high school level Science MCAS Exam; concurrent enrollment in a Biology course; or concurrent enrollment in Chemistry or Physics with approval of the Dean of the STEM Academy.*

EARTH SCIENCE COLLEGE PREP**CRS H3309****GR 10-12****CR 1****Y**

Earth Science is designed to give the students an opportunity for in-depth study of selected aspects of Geology, Oceanography, Meteorology and Space Science. Topics include matter and energy in the Earth System, the Earth's sources of energy, Earth Process and Cycles, and the Origin and Evolution of the Universe. More specifically, students will study a plethora of topics, including but not limited to earthquakes and volcanoes, Earth's atmosphere, the solar system, glaciers, weather, ocean currents and waves. Participation in small group activities, lab work and field trips are important parts of the course. **Prerequisite:** *Recommendation of Science Teacher. Either a minimum grade of 220 on a high school level Science MCAS Exam; concurrent enrollment in a Biology course or science MCAS prep/tutoring; or concurrent enrollment in Chemistry or Physics with approval of the Dean of the STEM Academy. Recommended: Algebra I.*

**ENVIRONMENTAL SCIENCE
COLLEGE PREP****CRS H3335****GR 10-12****CR ½****S**

Environmental Science is a study of interactions among organisms (including humans) and their environments. These complex relationships result in the survival success of species, the health of biological communities, and the future of our biosphere (the living area of the earth). This course does not meet college lab science requirements. **Prerequisite:** *Recommendation of Science Teacher. Either a minimum grade of 220 on a high school level Science MCAS Exam; concurrent enrollment in a Biology course or science MCAS prep/tutoring; or concurrent enrollment in Chemistry or Physics with approval of the Dean of the STEM Academy.*

ENVIRONMENTAL SCIENCE AP**CRS H3336****GR 11-12****CR 1****Y**

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. **Prerequisites:** *A minimum of B+ in Life Science or Earth Science; recommendation of Science Teacher; a minimum grade of 220 on a high school level MCAS Exam; minimum grade of B in Algebra I and successful completion or current enrollment in Chemistry or Physics.*

METEOROLOGY COLLEGE PREP**CRS H3349****GR 10-12****CR ½****S**

Meteorology is a semester course that explores the factors affecting weather and climate. This course will focus on New England weather, global weather patterns, climate, and climate change. This course does not meet college lab science requirements. **Prerequisite:** *Recommendation of Science Teacher. Either a minimum grade of 220 on a high school level Science MCAS Exam; concurrent*

enrollment in a Biology course or science MCAS prep/tutoring; or concurrent enrollment in Chemistry or Physics with approval of the Dean of the STEM Academy. Recommended: Algebra 1

INTRODUCTION TO OCEANOGRAPHY

COLLEGE PREP

CRS H3357 GR 10-12 CR ½ S

Oceanography is the branch of earth science that studies the oceans and oceanic phenomena. It covers a wide range of topics, including marine organisms and ecosystem dynamics; ocean currents, waves and geophysical fluid dynamics; plate tectonics and the geology of the sea floor. These diverse topics reflect multiple disciplines that oceanographers blend to further knowledge of the world's ocean and understanding of the processes within it. **Prerequisites:** *Recommendation of science teacher. Either a minimum grade of 220 on a high school level Science MCAS Exam; concurrent enrollment in a Biology course or science MCAS prep/tutoring; or concurrent enrollment in Chemistry or Physics with approval of the Dean of the STEM Academy.*

INTRODUCTION TO ASTRONOMY

COLLEGE PREP

CRS H3355 GR 10-12 CR ½ S

This course covers the history of astronomy from Aristotle until today; the development and use of telescopes and other tools of astronomers; the formation and current state of the solar system; basic astrophysics including planetary motion, Newton's Law of Gravitation, and Kepler's Laws; and stellar evolution. Also covered is the electromagnetic spectrum and its use in studying celestial objects. The course will conclude with exciting contemporary topics such as black holes, the expansion of the universe and the search for extraterrestrial life. **Prerequisites:** *Algebra I and recommendation of the science teacher. Either a minimum grade of 220 on a high school level Science MCAS Exam; concurrent enrollment in a Biology course or science MCAS prep/tutoring; or concurrent enrollment in Chemistry or Physics with approval of the Dean of the STEM Academy.*

PHYSICS HONORS

CRS H3325 GR 10-12 CR 1 Y

Honors Physics is a rigorous, fast-paced and in-depth presentation of basic physical principles that requires both a deep understanding of qualitative concepts as well as proficiency in mathematical methods. The course includes kinematics, mechanics, energy, momentum, ~~heat~~, electromagnetism, waves, optics and other topics as time permits. Students are expected to integrate these concepts and apply them to a variety of situations outside of the classroom. Lab work is an integral part of the course. **Prerequisite:** *Minimum grade of B+ in Algebra I and recommendation of science teacher. Either a minimum grade of 220 on a high school level Science MCAS Exam; concurrent enrollment in a Biology course or science MCAS prep/tutoring; or approval of the Dean of the STEM Academy.*

PHYSICS COLLEGE PREP

CRS H3327 GR 10-12 CR 1 Y

Physics is the most fundamental of the sciences, deals with the laws describing the behavior of matter and energy. The course includes kinematics, mechanics, momentum, energy, electromagnetism, waves, optics and other topics as time permits. While the topics covered here are the same as the Honor Physics class, the CP Physics course focuses on qualitative understandings and has less emphasis on rigorous mathematical approaches. Students are expected to integrate these concepts and apply them to a variety of situations outside of the classroom. Laboratory work is an integral part of the course. **Prerequisite:** *Minimum grade of B- in Algebra I and recommendation of science teacher. Either a minimum grade of 220 on a high school level Science MCAS Exam; concurrent enrollment in a Biology course or science MCAS prep/tutoring; or approval of the Dean of the STEM Academy.*

PHYSICS 1 AP

CRS H3345 GR 11-12 CR 1 Y

AP Physics 1 is an algebra-based course equivalent to a first-semester college course in algebra-based physics. The course provides in-depth coverage of Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. Lab investigations, which are a significant component of the course, are designed to foster engagement in the practice of scientific investigations through experimenting, analyzing, making hypotheses, and solving problems in a collaborative setting. Students are expected to take the AP Physics 1 exam in May. **Prerequisites:** *A minimum of B+ in Algebra I, successful completion of Honors or CP Physics and teacher recommendation. Either a minimum grade of 220 on a high school level Science MCAS Exam; concurrent enrollment in a Biology course or science MCAS prep/tutoring; or approval of the Dean of the STEM Academy.*

INTRODUCTION TO ENGINEERING I

CRS H3333 GR 11-12 CR 1 Y

This course is based on the Museum of Science program, *Engineering the Future*. It provides a hands-on introduction to engineering and the engineering design process. Through assignments and projects, students learn how to: identify a problem, develop alternative solutions, select the best alternative, make critical decisions, and work as a team. Students are also introduced to CAD and 3-D printing. **Prerequisites:** *Junior or senior standing with a GPA of 3.0 or better and a passing grade on a high school level science MCAS exam.*

INTRODUCTION TO ENGINEERING II

CRS H3334 GR 11-12 CR 1 Y

This course is a continuation of Introduction to Engineering I and follows the same format. Students will complete the *Engineering the Future* curriculum. There is an increased focus on CAD and 3-D printing in this second course. **Prerequisites:** *Successful completion of Introduction to Engineering I.*

**COMPUTER-AIDED MODELING
IN THE PHYSICAL SCIENCES (CAMPS)****CRS H3320****GR 11-12****CR ½****S**

CAMPS is a hands-on and project-based course that will enable students to develop programming skills using R (or other tools) with particular emphasis on problem-solving and data visualization in the physical sciences. Topics include working in the console, developing algorithms, assigning variables and calling functions. Students will improve their critical thinking skills through the development of correct and efficient coding and increase their understanding of physical laws and concepts by building programs that allow them to run various simulations. *Prerequisites: Successful completion of Physics.*

INTRODUCTION TO PROGRAMMING (NAF IT CTE) CRS H2243 GR 10 CR ½ S1

Introduction to Programming uses Python as a basis for learning general programming skills. Students learn programming principles by comparing Python to other programming languages. They use models as a way to quickly solve new problems using knowledge and techniques already learned. Students complete over 60 programs in the course, including both text and graphics/animation programs. In addition to programming, students learn program design, documentation, formal debugging, and testing. Finally, students examine career opportunities in programming. *Prerequisite: Enrollment in the NAF IT Academy.*

PRINCIPLES OF IT (NAF IT CTE) CRS H6136 GR 9 CR ½ S1

This is the first course students take in the STEM Information Technology pathway. It provides an overview of information technology and introduces students to the basics of hardware and software. Students examine hardware components including peripherals, connectors, and memory. Students explore common operating systems, software applications, and programming languages. Students learn about types of networks and network topology, and they set up an email client/server connection. Students also consider contemporary issues such as security, privacy, and technological inequality. Finally, students explore career opportunities in IT.

Prerequisite: Enrollment in the NAF IT Academy

COMPUTER SYSTEMS (NAF IT CTE) CRS H6137 GR 10-12 CR ½ S2

Computer Systems walks students through the intricacies of setting up hardware, installing software, connecting to a network, and connecting to the Internet. Students get hands-on practice upgrading operating systems. They get practice assembling and disassembling computer hardware including peripherals, motherboards, FRUs, and connectors. Students also learn troubleshooting techniques. Finally, students get a chance to explore careers for computer systems professionals.

ROBOTICS CRS H2280 GR 10-12 CR ½ S1

Robotics provides students with the opportunity to apply math and engineering to learn how robots are built, move, and “think.” Students get hands on experience with various robotic technologies currently used at U-Mass Lowell and other colleges; building robots, and developing programs to make them move and learning to use sensors. *Prerequisite: Completion of a full Algebra I course with a C or better.*

REPLICATING THE FUTURE CRS H6652 GR 11-12 CR ½ S

This class will introduce the concept of 3D modeling, prototyping, replication/construction and design to selected students. In addition to producing real prototype projects for each student, The OBJECTIVE or ‘byproduct’ of this course will be to have students self-replicate additional pieces as ‘Kits’ for additional printers for use here in the High School and elsewhere in the District.

iSCHOOL APPLIED TECHNOLOGY CRS H6648 GR 10-12 CR ½ S

Students will develop a solid understanding of Apple hardware and software systems including, but not limited to, basic hardware and software troubleshooting computer terminology, peripheral setup and management, and digital content creation. Students will learn to engage both peers and teachers alike with a non-directive, collaboration-focused approach to training and technical support with practical ha, hands-on experience in developing workshops, creating training materials, exploring new technology-driven tools, performing in-room technical assistance, and practicing digital content creation in the everyday educational setting.

Prerequisite: Teacher recommendation and interview process. ✓ School to Career requirement option.

CAD COMPUTER AIDED DRAFTING CRS H6651 GR 10-12 CR ½ S

Computer Aided Design. Students will use open source software to create three-dimensional drawings of a multitude of objects. Students will begin the course by designing a simple shed. At the end of the course, students will design more complex structures. In addition, students will learn to combine objects to make a working prototype. Standards of the 21st century engineering/design room will be presented and students will collaborate on developing complex drawings. Students will use Google Sketch extensively as they learn about the evolution of software from AutoCad to today. This class is intended for the student pursuing engineering, architectural design, construction, fashion construction, or three dimensional art programs.

WORLD LANGUAGES

Through the study of a world language, students are able to experience the differences in the way people think, as well as the differences and similarities in the way other people view our world.

In the world languages program, we attempt to prepare our students to be proficient in all four language skill areas: listening/understanding, speaking, reading and writing. In the classical languages, we emphasize vocabulary building, reading / translating, and the great debt our civilization owes to those of Greece and Rome. The proficiency levels referred to in the individual course descriptions in World Languages are derived from the Proficiency Guidelines developed by ACTFL: the American Council of Teachers of Foreign Language. The proficiency hierarchy begins at the Novice level and proceeds through the Intermediate to the Advanced level.

All students, beginning with the Class of 2016, will be encouraged to take at least two years of a world language in order to meet the requirements of Mass Core. Mass Core is a state recommended, rigorous program of study that aligns high school course work with college and workforce expectations.

CLASSICAL GREEK I HONORS CRS H4497 GR 10-12 CR 1 Y

After an introductory study of forms and syntax, students will begin to read connected passages of Ancient Greek prose. In addition, the history and influence of Ancient Greece are explored in the context of mythology, which students read in English translation. Students enrolled in this course will receive Honors credit.

CLASSICAL GREEK II HONORS CRS H4500 GR 10-12 CR 1 Y

This course begins with a review of introductory course work through selected readings from Sophocles and Aeschylus. First year forms and syntax are reinforced through the reading of selected passages. Greek society, social attitudes and philosophical concepts are studied through translations of the tragedies of Aeschylus, Sophocles and Euripides. Students enrolled in this course will receive Honors credit.
Prerequisite: Passing grade in Greek Mythology.

CLASSICAL GREEK III HONORS CRS H4499 GR 11-12 CR 1 Y

The study of Homer begins in the third year through a detailed reading of the Iliad and the Odyssey. Additional forms and syntax are taught. The Greek mind and its effect on our way of thinking are studied through an original analytical academic essay based on themes from the Iliad. Students enrolled in this course will receive Honors credit.

FRENCH I HONORS CRS H4403 GR 9-12 CR 1 Y

French I will teach enough basic vocabulary for students to enjoy taking part in everyday conversation. Students will learn how to talk to other people and tell them about themselves. Short, simple stories are read. Writing skills will be introduced, enabling the student to write paragraphs in French. Studies about French-speaking people in Canada, France and other parts of the world where French is spoken are stressed in the culture component. In the Honors level classes, students must complete one original project. Students will reach a communication proficiency level of Advanced Low. *Prerequisite: Grade of B- or better in previous year's English class for current HHS students; recommendation of a Middle School teacher for entering freshmen.*

FRENCH I COLLEGE PREP CRS H4405 GR 9-12 CR 1 Y

French I, teaches enough basic vocabulary for students to enjoy taking part in everyday conversation. Students will learn how to talk to other people and tell them about themselves. Short, simple stories are read. Writing skills will be introduced, enabling the student to write paragraphs in French. Studies about French-speaking people in Canada, France and other parts of the world where French is spoken are stressed in the culture component. Students will reach a communication proficiency level of Novice Mid.

FRENCH II HONORS CRS H4407 GR 9-12 CR 1 Y

In French II, the student will review and extend the skills of listening, speaking, reading and writing learned in French. There will be readings and discussions of French history and French contributions to art, science and business, as well as comparisons of French life today with our own. In the Honors level course, the student will be required to present an oral project on some aspect of French culture. Students will reach a communication proficiency level of Advanced Mid. *Prerequisite: Grade of B- or better in French I and recommendation of French I teacher.*

FRENCH II COLLEGE PREP CRS H4409 GR 9-12 CR 1 Y

In French II, the student will review the skills of listening, speaking, reading, and writing that were learned in French I, and will extend the knowledge in each of these skill areas. There will be readings and discussions of French history, and French contributions to art, science, and business, as well as comparisons of French life today with our own. Students will reach a communication proficiency level of Advanced Low. *Prerequisite: Passing grade in French I.*

FRENCH III HONORS**CRS H4411****GR 10-12****CR 1****Y**

More extensive reading is used for class discussion and free compositions. Further study of French civilization is offered. A review of grammatical principles is stressed. Students will reach a communication proficiency level of Advanced Mid. *Prerequisite: Grade of B- or better in French II or passing grade in French II Honors and recommendation of French II teacher.*

FRENCH IV HONORS**CRS H4415****GR 11-12****CR 1****Y**

French IV Honors is conducted in French, and emphasis is placed on the attainment of fluency in the use of French, both oral and written. The course includes a study of advanced French grammar, vocabulary building, advanced oral and written composition, and a comprehensive survey of French culture and civilization. Students will participate in dramatic skits to illustrate their communicative competencies. A play and a novel are read. Students will reach a communication proficiency level of Advanced High. *Prerequisite: Passing grade in French III Honors*

GERMAN I HONORS**CRS H4421****GR 9-12****CR 1****Y**

German I Honors concentrates on students using German in real life situations. The basic skills of reading, writing and speaking German are practiced. In the Honors level class, students must complete one original project and write a research paper dealing with the German culture. Students will reach a proficiency level of Advanced Low. *Prerequisite: Grade of B- or better in previous year's English class for current HHS students; recommendation of a Middle School teacher for entering freshmen.*

GERMAN I COLLEGE PREP**CRS H4423****GR 9-12****CR 1****Y**

German I concentrates on preparing students to use the German language in real life situations. The basic skills of speaking, reading and writing German are practiced. Students will reach a communication proficiency level of Novice Mid.

GERMAN II HONORS**CRS H4425****GR 9-12****CR 1****Y**

German II reinforces and reviews the basic skills learned in the first year and carries the student forward in the study of the language. Basic skills expand, and the student is able to use the language in speaking, reading, and writing with more facility. An increasing respect and understanding for German culture will be acquired. In the Honors level, students will be required to present an oral project and write a research paper. Students will reach a communication proficiency level of Advanced Mid. *Prerequisite: Grade of B- or better in German I or passing grade in German I Honors and recommendation of German I teacher.*

GERMAN II COLLEGE PREP**CRS H4427****GR 9-12****CR 1****Y**

German II reinforces and reviews the basic skills learned in the first year and carries the student forward in the study of the language. Basic skills expand, and the student is able to use the language in speaking, reading, and writing with more facility. An increasing respect and understanding for German culture will be acquired. Students will reach a communication proficiency level of Advanced Low. *Prerequisite: Passing grade in German I.*

GERMAN III HONORS**CRS H4429****GR 10-12****CR 1****Y**

Further emphasis is placed on understanding and speaking by means of the systematic preparation of written and oral compositions. A review of the fundamentals of grammar, more extensive reading, and more advanced study of syntax are included. In the Honors level, students will present an oral project and write a research paper. The student will reach a communication proficiency level of Advanced Mid. *Prerequisite: Grade of B- or better in German II or passing grade in German II Honors and recommendation of German II teacher.*

GERMAN IV HONORS**CRS H4431****GR 11-12****CR1****Y**

German IV Honors is conducted in German, accompanied by a more detailed study of syntax and word formation. Written composition in German is assigned regularly. More extensive reading involving selections from authors such as Boll and Brecht are included. Students will reach a communication proficiency level of Advanced High. *Prerequisite: Passing grade in German III Honors.*

ITALIAN I HONORS**CRS H4435****GR 9-12****CR 1****Y**

In Italian I, students learn how to carry on simple conversations. As vocabulary is built, they also develop the ability to converse on a variety of subjects. Class activities such as films, tapes and songs help teach Italian culture. Interesting stories about famous Italians will be read. In the Honors level, students will be required to complete a project and to write a research paper dealing with Italian culture. Students will reach a communication proficiency level of Advanced Low. *Prerequisite: Grade of B- or better in previous year's English class for current HHS students; recommendation of Middle School language teacher for entering freshmen.*

ITALIAN I COLLEGE PREP**CRS H4437****GR 9-12****CR 1****Y**

In Italian I, students learn to carry on simple conversations. As vocabulary is built, students also develop the ability to converse on a variety of subjects. Class activities such as films, tapes and songs help teach Italian culture. Interesting stories about famous Italians will be read. Students will reach a communication proficiency level of Novice Mid.

ITALIAN II HONORS**CRS H4439****GR 9-12****CR 1****Y**

The student will review the basic skills of speaking, writing and reading learned in the first year study of the language. As vocabulary increases, the student will discuss topics in greater detail, and will use acquired knowledge of grammar to write in both the present and past tenses. Several short stories will be read. Geographical study of the different regions of Italy will also be emphasized. In the Honors

level, students will be required to present an oral project and write a research paper. Students will reach a communication proficiency level of Advanced Mid. **Prerequisite:** *Grade of B- or better in Italian I or passing grade in Italian I Honors and recommendation of Italian I teacher.*

ITALIAN II COLLEGE PREP

CRS H4441

GR 9-12

CR 1

Y

The student will review the basic skills of speaking, writing and reading learned in the first year study of the language. As vocabulary increases, the student will discuss topics in greater detail, and will use acquired knowledge of grammar to write in both the present and past tenses. Several short novels, including *Pinocchio*, will be read. Geographical study of the different regions of Italy will also be emphasized. Students will reach a communication proficiency level of Advanced Low. **Prerequisite:** *Passing grade in Italian I.*

ITALIAN III HONORS

CRS H4443

GR 10-12

CR 1

Y

The student will review first and second year grammar, and will be able to give prepared presentations as well as discuss topics in detail. Short stories and novels, including *Pinocchio*, from Italian authors of the past and present will also be read. The student will continue the study of the geographic regions of Italy, as well as be introduced to the history and politics of the country. In the Honors level, the student will present an oral project and write a research paper. The student will reach a communication proficiency level of Advanced Mid. **Prerequisite:** *Grade of B- or better in Italian II or passing grade in Italian II Honors and recommendation of Italian II teacher.*

ITALIAN IV HONORS

CRS H4445

GR 11-12

CR 1

Y

In Italian IV Honors, the course is conducted in Italian and the emphasis is on attaining fluency in Italian, both written and oral. Extensive readings from 19th and 20th century Italian literature are undertaken. Students will give oral presentations as well as participate in discussions of various topics. Vocabulary building is accomplished through conversational readings dealing with contemporary situations. The course will emphasize Italian culture and geography by studying the history, traditions, people and stories of various regions. Students will read "Non Soltanto Un Baule". The student will reach a communication proficiency level of Advanced Low. **Prerequisite:** *Passing grade in Italian III Honors.*

ITALIAN V HONORS

CRS H4446

GR 12

CR 1

Y

The Italian V Course provides students with an opportunity to improve their proficiency by immersing them into a classroom conducted exclusively in the Italian language. Students are given many different opportunities to use their knowledge of the Italian language to communicate with one another. Students will give oral presentations on various topics and participate in many different conversations and skits. They will also read several short stories, a novel, and articles from Italian newspapers and magazines. In addition, they will write compositions and a research paper. Grammar will continue to be reviewed and presented. **Prerequisite:** *Grade of B- or better in Italian IV or passing grade in Italian IV Honors.*

LATIN I HONORS

CRS H4483

GR 9-12

CR 1

Y

Through the study of Latin, students will learn how a language works, and how changing the ending of a word can change its meaning. In a short time, they will read and write short paragraphs. At the same time, students will be taught how to think in an orderly way, and how to expand English vocabulary. In addition, they will be introduced to the life and customs of ancient Rome. A further benefit of Latin I is that students will be prepared to begin the study of a modern world language and Classical Greek. Students will reach a communication proficiency level of Advanced Low. **Prerequisite:** *Grade of B- or better in previous year's English class for current HHS students.*

LATIN II HONORS

CRS H4487

GR 9-12

CR 1

Y

In Latin II Honors, the student will continue the study of how Latin works. After a review of the concepts learned in the first year, the student will begin the reading of continuous prose. English vocabulary will be increased, and the student will learn more about the life and customs of the Roman people. Students will reach a communication proficiency level of Advanced Mid. **Prerequisite:** *Passing grade in Latin I Honors or grade of B- or better in Latin I and recommendation of teacher.*

LATIN III HONORS

CRS H4491

GR 10-12

CR 1

Y

The Latin III honors course is designed for students who have shown exemplary skills in their first two years of study. The course is a prerequisite for students who wish to take AP Latin: Vergil the following year. Students will begin with a rapid review of 1st and 2nd year grammar through Caesar's *Gallic Wars*. They will then move on to an accelerated study of the Orations of Cicero. The second half of the year will focus on an introduction to the *Aeneid* of Vergil. Through a detailed reading of Book I, students will become familiar with the literary techniques and meter of Vergil as well as the cultural, social, and political context of the *Aeneid*. **Prerequisite:** *Passing grade in Latin II Honors or grade of B+ in Latin II and recommendation of teacher.*

LATIN III HONORS ACCELERATED

CRS H4490

GR 11-12

CR 1

Y

The Latin III honors accelerated course is designed for students who have shown exemplary skills in their first two years of study. The course is a prerequisite for students who wish to take AP Latin: Vergil the following year or Latin IV Honors. Students will begin with a rapid review of 1st and 2nd year grammar through Caesar's *Gallic Wars*. They will then move on to an accelerated study of the Orations of Cicero. The second half of the year will focus on an introduction to the *Aeneid* of Vergil. Through a detailed reading of Book I, students will become familiar with the literary techniques and meter of Vergil as well as the cultural, social, and political context of the *Aeneid*. **Prerequisite:** *Passing grade of 85 or better in Latin II and recommendation of Latin teacher.*

LATIN IV HONORS**CRS H4493****GR 11-12****CR 1****Y**

A rapid review of all aspects of Latin grammar is followed by readings from Ovid, Martial, and Catullus. The mechanics of Latin poetry and figures of speech are stressed. Students will reach a communication proficiency level of Advanced High. ***Prerequisite: Passing grade in Latin III Honors and recommendation of teacher.***

LATIN AP: VERGIL**CRS H4496****GR 12****CR 1****Y**

The Latin AP course conforms to fourth through sixth semester college Latin. The content is based primarily on *Caesar's DE Bello Gallico* and Vergil's *Aeneid*. Students will translate portions of these writings from Latin to English and strengthen their knowledge of grammatical structures and vocabulary. The literary techniques of Latin writers and poetic meters, along with stylistic analyses, are an integral part of the course. In addition, Latin AP includes the study of the cultural, social and political context of the literature studied. ***Prerequisite: Grade of B- or better in Latin III Honors or passing grade in Latin IV Honors and recommendation of teacher.***

SPANISH I HONORS**CRS H4461****GR 9-12****CR 1****Y**

In Spanish I, the student will study the basic structure and grammar of the Spanish language, and will acquire skills necessary for practical, everyday conversation. Simple and enjoyable reading material will be introduced. Emphasis will also be placed on the culture of Latin American countries where Spanish is spoken. In the Honors level class the student will be required to complete one project and to write one research paper about Latin American culture. Students will reach a communication proficiency level of Advanced Low. ***Prerequisite: Grade of B- or better in previous year's English class for current HHS students; recommendation of Middle School language teacher for entering freshmen.***

SPANISH I COLLEGE PREP**CRS H4463****GR 9-12****CR 1****Y**

In Spanish I, the student will study the basic structure and grammar of the Spanish language, and will acquire skills necessary for practical, everyday conversation. Simple and enjoyable reading material will be introduced. Emphasis will also be placed on the culture of Latin American countries where Spanish is spoken. Students will reach a communication proficiency level of Novice Mid.

SPANISH II HONORS**CRS H4465****GR 9-12****CR 1****Y**

Honors Spanish II offers the student a classroom environment where Spanish is spoken at all times. Reading and writing skills will be further developed through short stories, narratives and compositions. Oral proficiency will be enhanced through small group work involving such activities as a fashion show, dining in a restaurant, and shopping at a mall. In the Honors level, students will present an oral project and write a research paper. Students will reach a communication proficiency level of Advanced Mid. ***Prerequisite: Grade of B- or better in Spanish I or passing grade in Spanish I Honors, and recommendation of a Spanish I teacher.***

SPANISH II COLLEGE PREP**CRS H4467****GR 9-12****CR 1****Y**

In Spanish II, students will enhance those skills acquired in Spanish I. Audio-lingual skills are expanded, vocabulary is increased, more complex grammar structures are mastered, and oral fluency is developed through the use of the language in the classroom. Writing skills will be further developed through periodic compositions. Students will gain an understanding of the thoughts, beliefs, traditions and values of the people of the Hispanic world. Students will reach a communication proficiency level of Advanced Low. ***Prerequisite: Passing grade in Spanish I.***

SPANISH III HONORS**CRS H4469****GR 10-12****CR 1****Y**

Honors Spanish III offers the student a total immersion in the Spanish language. Grammar from the first and second years will be reviewed, and more complex structures will be learned. The emphasis is on fluency and on the development of vocabulary through the reading of short stories, articles and a novel. The writing of compositions is expanded. Cultural projects in the target language are an integral part of the course. In the Honors level, the student must present an oral project. The student will reach a communication proficiency level of Advanced Mid. ***Prerequisite: Grade of B- or better in Spanish II or passing grade in Spanish II Honors and recommendation of a Spanish II teacher.***

SPANISH IV HONORS**CRS H4473****GR 11-12****CR 1****Y**

Spanish IV Honors continues the development of audio-lingual skills, the expansion of oral and written self-expression, and the reading and appreciation of literature. *The course is conducted exclusively in Spanish.* Students will reach a communication proficiency level of Advanced High level. ***Prerequisite: Passing grade in Spanish III Honors.***

SPANISH LANGUAGE & COMPOSITION AP CRS H4761**GR 11-12****CR 1****Y**

Spanish follows the prescribed curriculum for the Spanish Language Examination. The course is conducted in Spanish, and the student is expected to respond and converse on various topics in Spanish. Students who select AP Spanish must take the Examination in Spanish Language. ***Prerequisite: Grade of B or better in Spanish III Honors or passing grade in Spanish IV Honors or Spanish for Natives III and recommendation from teacher.***

SPANISH FOR NATIVE SPEAKERS I**(SNS 1)****CRS H4755****GR 9-12****CR 1****Y**

This course is open to native Spanish speakers who are interested in learning to read, write and speak academic Spanish. The concentration is on furthering reading, writing and grammar skills with an introduction to literature from Latin America. ***Prerequisite: Basic knowledge of written Spanish grammar and general oral competency.***

SPANISH FOR NATIVE SPEAKERS II

(SNS 2)

CRS H4757

GR 9-12

CR 1

Y

This course continues the grammar, reading and writing skills introduced in Spanish for native speakers. This course will focus on the literature and culture of central and South America. An emphasis is placed on sentence structure and paragraph organization, as well as compositions based on descriptions, narrations and comparison/contrast. Also included is a continued study of literary forms with an introduction to the novel. *Prerequisite: passing grade in Spanish for Native Speakers I.*

SPANISH FOR NATIVE SPEAKERS III

(SNS 3)

CRS H4759

GR 9-12

CR 1

Y

In the third year of Spanish for Native speakers, emphasis is placed on expanding writing skills through the incorporation of more complex grammatical forms. In literature, the focus is on studies of specific Spanish authors using anthologies of their work. *Prerequisite: Passing grade in Spanish for Native Speakers II.*

ENGLISH LANGUAGE DEVELOPMENT

The English Language Development courses offer direct instruction in intensive English Language Development in alignment to the MA State and Common Core State Standards in English Language Arts for all levels of English Learners (ELs) and in Math, History, and Science for Newcomer Levels 1-2 ELs. Grade level academic content is made accessible through cognitively demanding, academic language and literacy development. Instruction is highly production oriented in all linguistic domains. The individual proficiency levels of students classified as English Learners are carefully determined and monitored for proper placement with dually licensed content/ESL teachers for Math, History, Science, and English Language Arts. The students gain access to the State and District curriculum in the respective core areas through focused instruction, and rigorous college and career ready expectations for mastery of language and academic content.

ELD READING COMPREHENSION I

CRS H7330

GR 9-10

CR 1

Y

Newcomer ELs at grade level proficiency in their native countries of origin, and designated as Level 1-2 as per the WIDA Model Placement Assessment at the time of enrollment, engage in intensive academic vocabulary, phrasal, and discourse development through complex text. In alignment with grade level standards-based expectations, Level 1 ELs access meaning in texts through intensive skill development in the analysis of context clues, understanding of elements of text, and in use of multiple resources to retrieve meaning from academic text. ELs study the conveying of meaning through text for different audiences and purposes in literature, media, research, and technology. This is a Double Block with ELD Writing.

ELD READING COMPREHENSION I

CRS H7336

GR 11-12

CR 1

Y

Newcomer ELs at grade level proficiency in their native countries of origin, and designated as Level 1-2 as per the WIDA Model Placement Assessment at the time of enrollment, engage in intensive academic vocabulary, phrasal, and discourse development through complex text. In alignment with grade level standards-based expectations, Level 1 ELs access meaning in texts through intensive skill development in the analysis of context clues, understanding of elements of text, and in use of multiple resources to retrieve meaning from academic text. ELs study the conveying of meaning through text for different audiences and purposes in literature, media, research, and technology. This is a Double Block with ELD Writing.

ELD WRITING I

CRS H7331

GR 9-10

CR 1

Y

The course is paired with the Reading Comprehension I course. It provides intensive instruction in writing as the measurable outcome of experimentation with learned vocabulary and language resulting from understanding of text to text, text to self, and text to world connections. Students must master academic conventions of English in writing for specific purpose and audience. Work products developed throughout the year include narrative, persuasive, comparative, and creative writing in alignment with the CCSS in ELA for language, communication, and literature.

ELD WRITING I

CRS H7339

GR 11-12

CR 1

Y

The course is paired with the Reading Comprehension I course. It provides intensive instruction in writing as the measurable outcome of experimentation with learned vocabulary and language resulting from understanding of text to text, text to self, and text to world connections. Students must master academic conventions of English in writing for specific purpose and audience. Work products developed throughout the year include narrative, persuasive, comparative, and creative writing in alignment with the CCSS in ELA for language, communication, and literature.

ELD READING COMPREHENSION II

CRS H7350

GR 9-10

CR 1

Y

Second year or Level 2 ELs at grade level proficiency in their native countries of origin, engage in intensive academic vocabulary, phrasal, and discourse development through complex text. In alignment with grade level standards-based expectations, Level 2 ELs access meaning in texts through intensive skill development in the analysis of context clues, understanding of elements of text, and in

use of multiple resources to retrieve meaning from academic text. ELs study the conveying of meaning through text for different audiences and purposes in literature, media, research, and technology. This is a Double Block with ELD Writing.

ELD READING COMPREHENSION II CRS H7332 GR 11-12 CR 1 Y

Second year or Level 2 ELs at grade level proficiency in their native countries of origin, engage in intensive academic vocabulary, phrasal, and discourse development through complex text. In alignment with grade level standards-based expectations, Level 2 ELs access meaning in texts through intensive skill development in the analysis of context clues, understanding of elements of text, and in use of multiple resources to retrieve meaning from academic text. ELs study the conveying of meaning through text for different audiences and purposes in literature, media, research, and technology. This is a Double Block with ELD Writing.

ELD WRITING II CRS H7351 GR 9-10 CR I Y

The course is paired with the Reading Comprehension II course. It provides intensive instruction in writing as the measurable outcome of experimentation with learned vocabulary and language resulting from understanding of text to text, text to self, and text to world connections. Students must master academic conventions of English in writing for specific purpose and audience. Work products developed throughout the year include narrative, persuasive, comparative, and creative writing in alignment with the CCSS in ELA for language, communication, and literature.

ELD WRITING II CRS H7340 GR 11-12 CR I Y

The course is paired with the Reading Comprehension II course. It provides intensive instruction in writing as the measurable outcome of experimentation with learned vocabulary and language resulting from understanding of text to text, text to self, and text to world connections. Students must master academic conventions of English in writing for specific purpose and audience. Work products developed throughout the year include narrative, persuasive, comparative, and creative writing in alignment with the CCSS in ELA for language, communication, and literature.

ELD READING COMPREHENSION III CRS H7370 GR 9-10 CR 1 Y

Students determined to meet the established WIDA and District ELE Program criteria for Level 3 classification standards, engage in grade level intensive academic vocabulary, phrasal, and discourse development through complex text. In alignment with grade level standards-based expectations, Level 3 ELs navigate meaning in complex academic texts through intensive skill development in the analysis of theme, plot, setting, point of view, character analysis and understanding of elements of text for different audiences and purposes. Students become independent learners through the use of multiple resources to retrieve meaning from academic text. Students are expected to close read for deep understanding, implications for broader perspectives, and to substantiate claims. This is a Double Block with ELD Writing.

ELD READING COMPREHENSION III CRS H7333 GR 11-12 CR 1 Y

Students determined to meet the established WIDA and District ELE Program criteria for Level 3 classification standards, engage in grade level intensive academic vocabulary, phrasal, and discourse development through complex text. In alignment with grade level standards-based expectations, Level 3 ELs navigate meaning in complex academic texts through intensive skill development in the analysis of theme, plot, setting, point of view, character analysis and understanding of elements of text for different audiences and purposes. Students become independent learners through the use of multiple resources to retrieve meaning from academic text. Students are expected to close read for deep understanding, implications for broader perspectives, and to substantiate claims. This is a Double Block with ELD Writing.

ELD WRITING III CRS H7371 GR 9-10 CR 1 Y

This course provides an increased emphasis upon independent creative and other writing styles resulting from a higher level of reading comprehension and verbal expression. English construction and conventions are emphasized for mastery of grade level MLA style writing for research and literary analysis. Students engage in the writing process to produce multiple drafts, learn to peer edit, revise multiple drafts, respond to, and provide feedback to classmates, and to produce narrative, persuasive, research, and creative writing directed toward meeting SSCC College and Career Ready mastery of academic writing.

ELD WRITING III CRS H7341 GR 11-12 CR 1 Y

This course provides an increased emphasis upon independent creative and other writing styles resulting from a higher level of reading comprehension and verbal expression. English construction and conventions are emphasized for mastery of grade level MLA style writing for research and literary analysis. Students engage in the writing process to produce multiple drafts, learn to peer edit, revise multiple drafts, respond to, and provide feedback to classmates, and to produce narrative, persuasive, research, and creative writing directed toward meeting SSCC College and Career Ready mastery of academic writing.

ELD READING COMPREHENSION IV CRS H7335 GR 9-10 CR 1 Y

Students determined to meet the established WIDA and District ELE Program criteria for Level 4 classification standards, engage in grade level intensive academic vocabulary, phrasal, and discourse development through complex text. In alignment with grade level standards-based expectations, Level 4 ELs navigate meaning in complex academic texts through intensive skill development in the analysis of theme, plot, setting, point of view, character analysis and understanding of elements of text for different audiences and purposes. Students become independent learners through the use of multiple resources to retrieve meaning from academic text. Students close read for deep understanding, implications for broader perspectives, and to substantiate claims. This is a Double Block with ELD Writing.

ELD READING COMPREHENSION IV CRS H7337 GR 11-12 CR 1 Y

Students determined to meet the established WIDA and District ELE Program criteria for Level 4 classification standards, engage in grade level intensive academic vocabulary, phrasal, and discourse development through complex text. In alignment with grade level standards-based expectations, Level 4 ELs navigate meaning in complex academic texts through intensive skill development in the analysis of theme, plot, setting, point of view, character analysis and understanding of elements of text for different audiences and purposes. Students become independent learners through the use of multiple resources to retrieve meaning from academic text. Students close read for deep understanding, implications for broader perspectives, and to substantiate claims. This is a Double Block with ELD Writing.

ELD WRITING IV CRS H7334 GR 9-10 CR 1 Y

This course provides an increased emphasis upon independent creative and other writing styles resulting from a higher level of reading comprehension and verbal expression. English construction and conventions are emphasized for mastery of grade level MLA style writing for research and literary analysis. Students will engage in the writing process to produce multiple drafts, learn to peer edit, revise second drafts, respond to, and provide feedback to classmates on their writing. Level 4 ELs develop writing portfolios including research papers, position papers, daily journal entries and response to literature pieces; analysis of text to text, text to self, and text to world essays; and original creative writing across genres. Students use technological forms of media such as Prezi, Glogster, Power Point, Edmodo, You Tube, Vimeo, and other student generated mediums for expression to showcase their mastery of academic English in meeting SSCC College and Career Ready mastery of academic writing.

ELD WRITING IV CRS H7352 GR 11-12 CR 1 Y

This course provides an increased emphasis upon independent creative and other writing styles resulting from a higher level of reading comprehension and verbal expression. English construction and conventions are emphasized for mastery of grade level MLA style writing for research and literary analysis. Students will engage in the writing process to produce multiple drafts, learn to peer edit, revise second drafts, respond to, and provide feedback to classmates on their writing. Level 4 ELs develop writing portfolios including research papers, position papers, daily journal entries and response to literature pieces; analysis of text to text, text to self, and text to world essays; and original creative writing across genres. Students use technological forms of media such as Prezi, Glogster, Power Point, Edmodo, You Tube, Vimeo, and other student generated mediums for expression to showcase their mastery of academic English in meeting SSCC College and Career Ready mastery of academic writing.

ELD READING AND WRITING V CRS H7353 GR 9-10 CR 1 Y

This course provides a demanding regimen of English speaking, reading and writing for students who have reached grade level English proficiency in Level 5. Through high interest novels, classics, various genres of literature, Tier 2 and 3 vocabulary development, media sources, and active participation, Level 5 students will develop demanding English reasoning skills. Students will read and write independently and practice direct inquiry from readings around socio-political influences on the author, theme, conflict, style, character development, and purpose. They will develop writing portfolios to include a 5-10 page research paper, position papers, selected journal entries, media rich presentations, and original creative pieces. Students will engage in demanding speaking tasks including debating and presenting via the use of media and technology in meeting the expectations of College and Career Ready mastery of English academic writing.

ELD READING AND WRITING V CRS H7338 GR 11-12 CR 1 Y

This course provides a demanding regimen of English speaking, reading and writing for students who have reached grade level English proficiency in Level 5. Through high interest novels, classics, various genres of literature, Tier 2 and 3 vocabulary development, media sources, and active participation, Level 5 students will develop demanding English reasoning skills. Students will read and write independently and practice direct inquiry from readings around socio-political influences on the author, theme, conflict, style, character development, and purpose. They will develop writing portfolios to include a 5-10 page research paper, position papers, selected journal entries, media rich presentations, and original creative pieces. Students will engage in demanding speaking tasks including debating and presenting via the use of media and technology in meeting the expectations of College and Career Ready mastery of English academic writing.

ELD WORLD HISTORY I COLLEGE PREP CRS 1108 GR 9 CR 1 Y

This content/ELD course is designed to parallel the freshman course in the area of world history, from ancient times to the Industrial Revolution. The students will review skills in geography to understand historical, social and economic development. Units will include: the first civilizations of the world, emergence of the modern world, democracy and nationalism in Europe and the Industrial Revolution. The completion of this course satisfies one of the three credits required in the area of social studies. This course is taught with a sheltered language instructional approach to provide maximum comprehension of the content while assisting with the acquisition of academic language skills appropriate to the subject area. Significant emphasis is placed upon acquisition of academic vocabulary, syntax and grammar as well as related reading and writing skills.

ELD WORLD HISTORY II COLLEGE PREP CRS H1114 GR 10-12 CR 1 Y

This is a continuation of ELD World History I. The units of the course: imperialism and colonization, war, revolution and efforts for peace in the 20th century, economic, technological and cultural changes in the modern world. The completion of this course satisfies one of the three credits required in the area of social studies. This course is taught with a sheltered language instructional approach to

provide maximum comprehension of the content while assisting with the acquisition of academic language skills appropriate to the subject area. Significant emphasis is placed upon acquisition of academic vocabulary, syntax and grammar as well as related reading and writing skills. *Prerequisite: Passing grade in ELD World History I.*

ELD U.S. HISTORY II COLLEGE PREP

CRS H1122

GR 11-12

CR 1

Y

This course is geared to the student who must take US History to graduate, but has demonstrated a limited English proficiency in content material. A review of major historical issues and social studies skills will be covered. Students qualifying for entrance into College Preparatory Modern U.S. History will be expected to: (1) cover the material contained in the Massachusetts Framework; (2) use many different materials, mostly print; (3) write essays and short papers; (4) write research paper(s); (5) devote adequate time to their homework assignments; (6) make class presentations and; (7) work on those academic skills that will be necessary for success in college.

Prerequisite: Grade of C or better in History 2 and recommendation of teacher.

ELD ALGEBRA I COLLEGE PREP

CRS H2277

GR 9-11

CR 1

Y

This Algebra I A course is intended for students who have experienced continuing difficulties with mathematics and require a modified pace to acquire necessary skills. While reviewing necessary pre-algebra skills, this course will cover the first half of the Algebra I curriculum. Content includes tools of algebra; functions & their graphs; solving, graphing, and writing linear equations; parallel and perpendicular lines; data; real numbers and their properties; simplification of radical expressions; ratio/percent/proportion; probability, and MCAS preparation. A variety of mathematical models, calculators, and real-life contexts are utilized to help develop conceptual understandings of the concepts. The development of math language and academic terminology consistent with Algebra is a focus. A TI 83 or TI 84 graphing calculator is recommended. In order to achieve all Algebra standards, this course extends into the following year when students are expected to take Part B.

ELD FOUNDATIONS OF ALGEBRA I

CRS H2275

GR 10-12

CR 1

Y

This course is an extension of Algebra I Part A. Students will continue to work at strengthening their prior Algebra skills and learn additional topics covered in a complete Algebra I course. New content will include inequalities, systems of equations and inequalities, exponential functions, radical equations, polynomials, rational expressions and functions, data and scatter plots, completing the square, factoring, solving polynomial equations, and MCAS preparation. The development of math language and academic terminology consistent with Algebra is a focus. A TI 83 or TI 84 graphing calculator is recommended. *Prerequisite: Successful completion of Algebra IA.*

ELD GEOMETRY COLLEGE PREP

CRS H2279

GR 10-12

CR 1

Y

This course is a continuation of the study of the number system begun in Algebra I. The content covered includes a review of the fundamental concepts of Algebra I followed by the study of quadratic equations, complex numbers, exponential and logarithmic functions, polynomial functions, and the binomial theorem, systems of equations and inequalities, and matrices. The development of math language and academic terminology consistent with geometry is a focus. A TI 83 or TI 84 graphing calculator is required.

FINE ARTS/VISUAL ARTS

BASIC FOUNDATIONS IN ART

CRS H5501

GR 9-12

CR ½

S

Basic Foundations in Art is open to all students. The course includes experiences in the use of both two and three dimensional materials and concentrates on elements of design as they relate to painting, drawing, printmaking, ceramics, sculpture and other media. Students are expected to do outside projects as assigned by the instructor. *Basic Foundations in Art is a required course for all Visual Arts electives.*

STUDIO DRAWING

CRS H5505

GR 9-12

CR ½

S

Students will be taught to draw accurately, expressively and creatively. Materials such as pencil, pen and ink, charcoal, Marker's, pastel, conte crayon, silver point and scratchboard will be explored. Students will demonstrate proficiency in a variety of drawing approaches including contour, gesture, and sketch rendering.

STUDIO PAINTING

CRS H5507

GR 9-12

CR ½

S

Students will be exposed to painting as a means of expression and a refinement of the visual sense. Each student will demonstrate technical proficiency in a variety of media, including tempera, acrylic, watercolor and mixed media.

SURVEY ART HISTORY

CRS H5519

GR 10-12

CR ½

S

This half -year course will cover the development of art from ancient times to the present day. Students will learn the historical significance of art as well as the role art has played in the development of society. *Prerequisite: Passing grade in Basic Foundations in Art.*

JEWELRY MAKING

CRS H5511

GR 10-12

CR ½

S

Jewelry Making concentrates on the manipulation of various materials such as metal, paper and clay to create pieces of jewelry. Basic metal fabrication techniques will be employed, including cold connections and soldering. Solder-less wire jewelry and a variety of non-metal construction procedures will be explored. *Prerequisite: Passing grade in Basic Foundations in Art.*

ADVANCED JEWELRY HONORS**CRS H5512****GR 10-12****CR ½****S**

Advanced Jewelry concentrates on more difficult processes involved in jewelry making. Bezel stone setting, fusing, die forming and many more techniques are explored in the construction of these pieces. Advanced Jewelry may be elected three times for credit. **Prerequisite:** *Jewelry I. ✓ School to Career requirement option.*

CERAMICS AND DESIGN I**CRS H5513****GR 10-12****CR ½****S**

Students will be introduced to the use of clay as an art medium. Basic construction techniques such as hand building, wheel throwing, and slab construction will be practiced. Students will also learn finishing techniques for decorating and glazing their work. Sculpture will also be explored. Using alternative materials such as plaster, wire, wood and paper, students will create their own project. **Prerequisite:** *Passing grade in Basic Foundations in Art.*

CERAMICS AND DESIGN II**CRS H5514****GR 10-12****CR ½****S**

Ceramics and Design II focuses on a more advanced study of techniques in ceramic and sculpture design, and production. New techniques for construction and finishing will be explored. In addition, this course emphasizes the creation and development of 3-D design in different media. Ceramics and Design II may be elected four times for credit if a grade of C or better is achieved. **Prerequisite:** *Passing grade in Basic Foundations in Art, Ceramics and Design I.*

PHOTOGRAPHY I**CRS H5515****GR 9-12****CR ½****S**

Students in Photography I will explore the history of photography, the effect of light on various photo-sensitive materials, pinhole photography and photographic composition. Students will learn basic camera operation using adjustable SLR cameras. Basic black and white darkroom procedures and techniques will be stressed.

PHOTOGRAPHY II**CRS H5517****GR 10-12****CR ½****S**

Photography 2 focuses on a more advanced study in black and white and color photography. Students will channel their photography skills into a more intense study of various areas such as architecture, portrait, animals, sport, and computer images, using special photographic techniques. **Prerequisite:** *Passing grade in Photo I.*

ADVANCED PHOTOGRAPHY**CRS H5518****GR 11-12****CR ½****S**

Advanced Photography focuses on the special techniques in black and white, color, and digital imaging used today in photography. Students will intensify their studies and develop techniques in areas such as day and night, portrait, landscape, action and electronic photography. Advanced Photography may be elected four times for credit. **Prerequisite:** *Passing grade in Photo I, II.*

ART HISTORY AP**CRS H5526****GR 11-12****CR 1****Y**

Art History is open to Juniors or Seniors. This course offers a chronological survey of Western art from the dawn of civilization to the present time. This course teaches students to understand works of art within their historical context by examining issues such as politics, religion, patronage, gender, function, and ethnicity. In addition, this course teaches students visual analysis of works of art, and how to understand works of art through both contextual and visual analysis.

ART MAJOR STUDIO AP**CRS H5527****GR 11-12****CR 1****Y**

Art Major is designed for students who have an interest in pursuing the visual arts as a career in art school, college or university. The course includes advanced work in all areas of visual art and involves both instructional and studio classes. Homework is assigned. Preparation and the presentation of a portfolio of student work are required at the completion of the course. **Prerequisite:** *Passing grade in Basic Foundations in Art., one studio class, and recommendation of teacher.*

PRINTMAKING**CRS H5502****GR 9 -12****CR ½****S**

In this introductory course, students will explore the art of printmaking and the production of a series of identical images. Various techniques such as wood block, relief, mono-print, and silk screen will be explored. Specific design problems will enable the student to develop a vehicle for self-expression while learning new methods. **Prerequisite:** *Passing grade in Basic Foundations in Art.*

DIGITAL PHOTOGRAPHY AND IMAGING**CRS H5503****GR 10-12****CR ½****S**

This course explores the use of a digital camera to create images that will be altered and manipulated in the digital darkroom, primarily Adobe Photoshop Elements. Use of the digital camera, settings, composition, and image transfer will be explored. The focus of the course is exploring and working towards proficiency with Photoshop as a tool to edit photographs and create images. From pixel resolution, saving and storing images to using layers and filters, the software will be explored in depth. Focus is on creativity and personal expression through digital imaging.

SCULPTURE & 3-D DESIGN**CRS H5504****GR 10-12****CR ½****S**

Explore 3-D design through the Elements of Art: Shape, Form and Space and the Principles of Design: Balance, Rhythm, Movement, and Proportion. Use additive and subtractive processes to work with a variety of sculptural media: plaster, clay, wire, wood, stone, paper mache, and found objects. Learn construction methods, armature, and techniques for creating a 3 Dimensional work of art. Observe the work of sculptors throughout history, and discover sculpture as a unique form of public and personal art. **Prerequisite:** *Passing grade in Basic Foundations in Art.*

ILLUSTRATION WORKSHOP**CRS H5510****GR 10-12****CR ½****S**

This course is a study of the major aspects of short story and comic book creation, from inception, illustration, administration, to final production. Students will learn the history of illustration and its influences from popular culture. Through lectures and assignments students will become exposed to and experience the multiple facets of illustration today, such as book illustration, editorial, sequential art, concept art, character development and others. Students will focus on storyboarding, implementation of illustration and design skills, and will ultimately create their own original short stories or comic books. *Prerequisite: Passing grade in Basic Foundations in Art.*

THEATER DESIGN AND STAGE CRAFT**CRS H5597****GR 10-12****CR ½****S**

This will be an exploration of theater design. The student will design and create stage sets for plays and musicals. There will be a hands-on approach; learning to build sets, props, and technical aspects such as light design and sound. Costume design will be included in this overarching introduction to the theater. *✓ School to Career requirement option.*

EXPLORING THE ARTS (EARLY COLLEGE NECC)**CRS H5506EC GR 11 CR 1****S**

This course is an interdisciplinary and multi-media approach to the arts. The course will consider criteria that are common to all the arts as well as those that apply to particular arts: music, dance, theater, the visual arts, architecture, and film. This course is designed to give students an overview of all the arts by providing guidelines that will sharpen their appreciation and perception the ways in which the arts are a reflection of particular time periods as well as those timeless issues that are part of the human condition. *Prerequisite: Students in the Early College NECC Program.*

A CLASSICAL PERSPECTIVE – STUDIO**CRS H9601****GR 9****CR ½****S**

This companion class to a Classical Perspective - Literature will continue to answer the underlying questions of the human experience: What do we know? How do we know what we know? How do we express this knowledge? This studio class will allow a hands on, project-based approach for students to continue to explore and express their findings. Students will create original works in the disciplines of fine and performing arts

DIGITAL DESIGN WORKSHOP I**CRS H5596****GR 10****CR½****S**

Students will take their foundational fine arts skills to the 21st century by incorporating digital tools into their artistic workflow. Programs like Adobe's Photoshop and Illustrator, among others, will be used to explore the fundamentals of digital design. Concepts covering color palettes and theming to typography and layouts will be explored as students compare and contrast print vs digital mediums.

DIGITAL DESIGN WORKSHOP II**CRS H5598****GR 11****CR ½****S**

Students will continue to develop their graphic skills in the digital space as they incorporate branding, ad campaigns, and marketing goals into their practical, hands-on projects. Students will dive deeper into Adobe's Photoshop and Illustrator, covering more advanced topics than in the prerequisite course. *Prerequisite: Digital Design Workshop I*

ADVANCED DIGITAL DESIGN WORKSHOP**CRS H5599****GR 12****CR ½****S**

For the 2-D Design Portfolio, students submit digital images of the art works created throughout the program as well as an artist statements. *Prerequisite: Digital Design Workshop II*

MUSIC AND PERFORMING ARTS**CHORUS****CRS H5551****GR 9-12****CR 1****Y**

Mixed Chorus is a Soprano, Alto, Bass (SAB) ensemble, which gives the student an opportunity to learn the fundamentals of participating in a vocal ensemble. This course emphasizes basic vocal technique, ear training and music reading skills. Required after school rehearsals are held periodically, and all students are expected to participate in all performances, including the school musicals. Mixed Chorus may be elected four times for credit if a grade C or better is earned each time.

CHAMBER CHORUS HONORS**CRSH5559****GR 10-12****CR 1****Y**

Chamber Chorus is open by audition or permission of the instructor to active Concert Choir members only. This group offers experiences in small ensemble literature of a demanding nature. Homework is required. Required after-school rehearsals are held periodically, and all students are required to participate in all performances. Chamber Chorus may be elected four times for credit. *Students must audition.*

BAND**CRS H5563****GR 9-12****CR 1****Y**

The band program is open to all students who have previously studied a musical instrument. The program consists of two performing units: Marching and Concert Band. It is expected that students electing band will participate in both performing groups. The band program requires after-school rehearsal time and full participation at football games, parades, and other civic and school events. All band students are encouraged to study privately when possible. Emphasis will be placed on individual skill development to foster musical independence and leadership. The band performs classical, classical, jazz, rock, pop and holiday music, as well as scores from Broadway shows. Band may be elected four times for credit.

JAZZ BAND HONORS**CRS H5565****GR 9-12****CR 1****Y**

Jazz Band is open to all band students through audition. Only the most proficient musicians are allowed in the Jazz Band and it is an honor to be invited to participate. The Jazz Band repertoire will include music in various jazz styles including blues, swing, Latin and jazz/rock "fusion" styles emphasizing improvisation techniques and advanced technical skills. It is expected that students electing jazz band will participate in marching band which requires some after-school rehearsal time and full participation at football games, parades, and other civic and school events. ✓ *School to Career requirement option.*

GUITAR WORKSHOP**CRS H5571****GR 9-12****CR ½****S**

In Guitar Workshop, players from beginning to advanced will develop guitar skills in a variety of styles and techniques. Students will use those skills in various ensemble and solo performance situations. Topics covered include tuning, proper technique, identifying notes on the fingerboard, guitar notation methods including standard staff notation, chord diagrams and tablature, chord and scale vocabulary, soloing, accompanying and much more! Students are encouraged to bring their own electric or acoustic guitar but some instruments are available. Guitar Workshop may be elected four times for credit.

HISTORY OF ROCK AND ROLL**CRS H5572****GR 10-12****CR ½****S**

In Guitar Workshop, players from beginning to advanced will develop guitar skills in a variety of styles and techniques. Students will use those skills in various ensemble and solo performance situations. Topics covered include tuning, proper technique, identifying notes on the fingerboard, guitar notation methods including standard staff notation, chord diagrams and tablature, chord and scale vocabulary, soloing, accompanying and much more! Students are encouraged to bring their own electric or acoustic guitar but some instruments are available. Guitar Workshop may be elected four times for credit.

ELECTRONIC KEYBOARD LAB**CRS H5570****GR 9-12****CR ½****S**

In Keyboard Workshop, students will develop keyboard skills in a variety of styles and techniques. Students will use those skills in various ensemble, solo and accompaniment performance situations. Topics include Proper technique, notes on the keyboard, grand staff notation including treble and bass clefs, basic music notation & symbols, chord and scale vocabulary, improvisation and much more! Keyboard Lab may be elected eight times for credit.

FUNDAMENTALS OF MUSIC**CRS H5577****GR 10-12****CR ½****S**

Music Theory and Notation is a continuation of the Fundamentals of Music, but at a more advanced level. The course will include studies in major and minor scales, key signatures, melody, harmony, simple counterpoint, figured bass, compositional techniques, hand and MIDI computer notation and techniques of MIDI application. Playing a musical instrument or studying voice is helpful, but not required.

INTRODUCTION TO MUSICAL SOFTWARE**CRS H5578****GR 10-12****CR ½****S**

In this course students will learn the basics of three music software programs: Band in a Box, Garage Band, and Sebelius. They will utilize these programs to create musical accompaniments to a variety of songs. In garage band they will learn the basics of combining pre-recorded music loops with live instrumental and vocal tracks that they have recorded using this program. By using Sebelius they will learn how to notate their music using this industry standard program. Students will be expected to complete a final project that combines Sebelius notation along with a final recorded product. The ability to read music and the Fundamentals of Music course would be a great benefit to those students who wish to get the most out of this course. ✓ *School to Career requirement option.*

MUSICAL THEATRE**CRS H5579****GR 9-12****CR ½****S**

Students will study the basic elements of musical theatre, including acting, singing and stage movement. They will be exposed to a variety of stage music and musical theatre, such as opera, operetta, and Broadway musicals. Students will work on the fundamentals of character development through line of action, motivation/goal setting, character biography, and inner monologue. Students will also learn to integrate music into the story-telling process. In addition, the students will be introduced to the basics of technical theatre including lighting, sound, make-up, costuming and set design. The course will culminate in a mandatory performance.

AV STAGE TECH**CRS H5580****GR 9-12****CR½****S**

This course provides background and training in the field of stage audio and lighting technician. The technical elements of musical theater and live concert productions are covered. The course focuses on hands-on, real world scenarios and field experience. Students will participate in the planning and execution of actual Haverhill High School productions in cooperation with the HHS AV Club.

✓ *School to Career requirement option.*

MUSIC EXPLORATION**CRS H5581****GR 9-12****CR½****S**

This is an introductory survey course for those students who aren't quite sure of where their musical interests lie and who would like to explore a variety of options. The course features short exploratory units on keyboard, guitar, music software using GarageBand, singing, and rhythmic composition using a variety of percussion instruments. By taking this course, students will be exposed to a wide variety of options for expressing themselves musically, and will develop a basic understanding of musical notation and theory.

BUSINESS ACADEMY

ACCOUNTING I

CRS H6619

GR 10-12

CR ½

S

Students will use the multi-journal approach to complete the accounting cycle for proprietorship. The activities will include: analyzing and journalizing business transactions, posting journal entries to a general ledger, and preparing and analyzing financial statements. Students will also learn how to write checks and reconcile bank statements.

ACCOUNTING II

CRS H6621

GR 10-12

CR ½

S

This course is a sequel to Accounting I. Students will transfer general accounting concepts acquired in Accounting I to complete the accounting cycle for a partnership using an expanded journal and subsidiary ledger. Students will also prepare payroll records and calculate payroll taxes. A final simulation project will introduce students to automated accounting. **Prerequisite:** *Accounting I; any grade of D or below will require approval by the instructor.*

INTRODUCTION TO PERSONAL FINANCE CRS H9603

GR 9-10

CR ½

S

This course is designed for underclassmen who want to learn how to have a positive relationship with money and cover such topics as being financially responsible, selecting a bank, starting a checking/savings account, how to read a paycheck, and other topics to help the younger students understand the importance of being financially sound. Students will also play financial simulation games where they will be in charge of their finances and spending will be encouraged to take Money Matters for Juniors and Seniors and attend the Credit for Life Fair. **Prerequisite:** *Freshmen and Sophomores only.*

MONEY MATTERS

CRS H6628

GR 11-12

CR ½

S

This course is designed for upperclassmen who want to learn how to manage their money and prepare for a life free from financial difficulties. Students will learn how to have a positive relationship with money and cover such topics as being financially responsible, researching and buying a car, why credit matters, protecting your identity, making a budget, staying out of debt, finding the right career, selecting a bank and more. Students will also play financial simulation games where they will be in charge of their finances and spending and will also participate in a Credit for Life Fair. **Prerequisite:** *Juniors and Seniors only.*

INTRODUCTION TO BUSINESS

CRS H6603

GR 9-12

CR ½

S

Students will examine business topics including general business, business sectors and organization, communication in business, job searching, human resources, business marketing, accounting finance, logistics, and E-Business. Students will become fore aware of business in their lives as well as at the local, national, state, and international levels. Students will understand the fundamental importance of business and develop an ability to make important business/economic related decisions in their own lives.

ENTREPRENEURSHIP (CTE)

CRS H6615

GR 10-12

CR ½

S

Entrepreneurship, or "How to Start Your Own Business," is an introductory course in which students will explore how to create their own business and will experience the hands-on skills necessary to develop and offer a product or service. Students will learn the principles and skills needed to create a business through computer simulations, the Internet, guest speakers, and discussions with various business leaders.

INTRODUCTION TO ECONOMICS

CRS H6625

GR 10-12

CR ½

S

This course will introduce students to the principles of economics, beginning with some of the broad issues and concepts that make up the field of economics. Beginning with some basic definitions, the course builds to introduce economic systems and the concept of scarcity and wants, and how these impact economies.

ECONOMICS AP

CRS H6627

GR 11-12

CR 1

Y

This course will focus on an in-depth understanding of microeconomics. Students will study the concepts in opportunity cost, trade-offs, production possibility curve, and other analytical examples. The course will analyze how different types of economies determine which goods and services to produce, how to produce them and to whom to distribute them. Other basic concepts that are explored include the functions performed by an economic system and the way the tools of supply and demand can be used to analyze a market economy. **Students who select Economics AP must take the AP test in Microeconomics.**

ACCOUNTING ELECTIVES

ACCOUNTING HONORS

CRS H6631

GR 11-12

CR 1

Y

This accounting course uses an integrated approach to teach real-world accounting. Students will first learn how businesses plan for and evaluate their operating, financing, and investing decisions, and then how accounting systems gather and provide data to

internal and external decision makers. This year-long course includes the learning objectives of a traditional college level financial accounting course. **Prerequisite: Minimum B in Algebra II; Counts as Honors Math Credit**

BANKING INTERNSHIP

CRS H6629

GR 11-12

CR ½

S

This course is an in-school internship where students will learn first-hand the tasks and responsibilities of a bank teller. Under the supervision of the HHS branch bank manager of Haverhill Bank, students will interact in a positive and professional manner with bank customers. Students will learn to process customer transactions, such as deposits, withdrawals, transfers, loan payments, bank checks, and money orders. Students taking this course will perform various other banking tasks such as balancing ATM transactions, log in mail to be processed, verifying case, and selling/balancing Traveler Cheque inventory. As a result of taking this course, students will be familiar with banking products and services and will learn ethical behavior concerning safeguarding customer privacy and confidentiality. **Prerequisites: Money Matters, Accounting I, or Earning Learning and Investing for a New Generation.** ✓ **School to Career requirement option.**

BUSINESS ELECTIVES

BUSINESS MARKETING

CRS H6613

GR 11-12

CR ½

S

This course will introduce students to the field of business and will provide a foundation for those who are considering business as a career or those interested in exploring business opportunities. Exploring different kinds of businesses and inventory movement are part of the curriculum. How products are developed, advertised, and promoted will also be considered. ✓ **School to Career requirement option.**

EARNING, LEARNING, AND INVESTING

CRS H6643

GR 11-12

CR ½

S

This course will teach students the basic fundamentals of becoming strategic savers, investors, and responsible financial citizens in the modern economy. As a companion to the textbook students will be using a unique simulation video game to learn the strategies necessary to plan and maintain a balanced household budget as well as to discover effective saving strategies and investing techniques. The Gen I Revolution simulation game will give students the change to learn important finance skills as they play and compete against classmates. Students will also have the opportunity to attend the Credit for Life Fair.

COMPUTER BASICS

CRSH6611

GR 9-12

CR ½

S

Students are placed in Computer Basics in accordance with their IEP. Safe computing and Internet usage; using the Internet to become more knowledgeable citizens; using visually oriented software packages including, but not limited to Sketchup, Westpoint Bridge, PowerPoint, Photoshop would be utilized.

COMPUTER TECHNOLOGY

CRS H6601

GR 9-12

CR ½

S

Google Docs Sheets, and Slides are Google Apps that let you create different online documents similar to Word, Excel, and PowerPoint. You will store them in your Google Drive online. You can then access the documents, spreadsheets, and presentations from any computer in the school, at home, or anywhere! You can also upload any Word documents and convert them to a Google document. Students will also learn other aspects of computer usages such as ethics, etiquettes, and safety. To reinforce their skills, students will work on a number of classroom projects.

INTERNSHIP

CRS H6694

GR 10-12

CR ½

S

The purpose of the Career Internship is to provide students with a meaningful workplace experience working closely with a professional in a chosen field. The students will also participate in classes where they will build a career portfolio, including resumes, cover letters, interviewing skills, and ultimately, letters of recommendation. The students will also learn about labor laws and their rights in the workplace. This course runs during period J or two afternoons a week from 2:15-5:15 p.m. Students will receive ½ credit per semester for satisfactory completion of all requirements. ✓ **School to Career requirement option.**

GAME DEVELOPMENT AND DESIGN ELECTIVES

INTRODUCTION TO PROGRAMMING

CRS H2243

GR 10-12

CR ½

S

Programming uses Python as a basis for learning general programming skills. Students learn programming principles by comparing Python to other programming languages. They use models as a way to quickly solve new problems using knowledge and techniques already learned. Students complete over 60 programs in the course, including both text and graphics/animation programs. In addition to programming, students learn program design, documentation, formal debugging, and testing. Finally, students examine career opportunities in programming. **Found in STEM Academy.**

GAME DESIGN I**CRS H6636****GR 9-12****CR ½****S**

No programming knowledge is required! This is a project-based course that will introduce students to 2D computer game development. Students will be introduced to the GameSalad interface, behaviors, logic, graphics, and sounds. Once you learn a few simple behaviors, you will be ready to start creating your own video games with GameSalad. Students will go through the whole game creation process using GameSalad, teaching exciting steps and tricks in creating platform and RPG games. Students will be required to publish their games(s) to an online Arcade for viewing.

GAME DESIGN II**CRS H6645****GR 10-12****CR ½****S**

There is much more of GameSalad to discover! You will learn more about controlling your game objects, design actions and conditions. Students will practice on Flappy Bird style games and racing games. New behaviors will be introduced as well as advanced tips and tricks. Students will be required to work on a final project during the duration of this class. This will be a professional, publishable game required for graduation from the Academy. If GameSalad certification is available, students will be required to certify to graduate from the Academy. **Prerequisite:** *Game Design I any grade of D or below will require approval by the instructor.* ✓ *School to Career requirement option.*

WEB DEVELOPMENT AND DESIGN ELECTIVES

WEB DEVELOPMENT AND DESIGN I**CRS H6632****GR 9-12****CR ½****S**

This class is an introduction to the design, creation, and maintenance of web pages and websites. Students learn how to critically evaluate website quality, learn how to create and maintain quality web pages, learn about web design standards and why they're important, and learn to create and manipulate images. The course progresses from introductory work on web design to a culminating project in which students design and develop their own websites for local community / high school organizations and groups. Students will be introduced to HTML, HTML5, CSS3 and JavaScript. Hand coding to start leading to the evaluation and selection of the proper content management system for a final project development.

Web I and Web II will run consecutively. Students who choose both semesters will be eligible for possible NECC credit (articulation agreement to be considered).

WEB DEVELOPMENT AND DESIGN II**CRS H6633****GR 10-12****CR ½****S**

This course will continue the students' journey into 21st century Web Design requirements. We will utilize all our resources to research and access cutting edge web design issues. Starting with exploration of Browsers and their impact on webpage SEO, we will also recognize the rapid evolution of web into the mobile device world. We will develop mastery in Content Management Systems and evaluate their effective use. Students will develop JavaScript skills interacting with the computer, the network, recognizing browsers, and responding to client interaction. We will explore the merging of webpage technology and app development. The requirements for a Web oriented career will be explored and continuously evaluated to make our students competitive in this rewarding but challenging environment. **Prerequisite:** *Web Design and Development I; any grade of D or below will require approval by the instructor. Web I and Web II will run consecutively. Students who choose both semesters will be eligible for possible NECC credit (articulation agreement to be considered).* ✓ *School to Career requirement option.*

CARTOONING AND 3D ANIMATION I**CRS H6634****GR 10-12****CR ½****S**

Anime Studio is capable of other styles of animation and not solely for anime. It can export its animations as flash cartoons, create cutout-style animation, and mimic some pencil-drawn animation. Since it features some basic 3D functionality, it can be seen as a 2.5D program. Short films, especially those that tell their story in one scene, can be produced relatively quickly compared to other programs, because of the usage of vector morphing instead of frame-by-frame animation. Students will also learn Poser. Poser is a 3D computer graphics program for creation of 3D modeling of human figures. The program has gained popularity due to allowing beginners to produce basic animations and digital images.

CARTOONING AND 3D ANIMATION II**CRS H6644****GR 10-12****CR ½****S**

Students will continue to learn Anime Studio to create animations and gaming characters. Students will learn to make game characters to use in their video games (GameSalad—Gaming I and II). Students will also continue to learn Poser. They will build on previous animations and learn to use their work in a variety of ways. They will be saving their design for use in a portfolio. **Prerequisite:** *Cartooning and 3D Animation I.* ✓ *School to Career requirement option.*

TELEVISION PRODUCTION ELECTIVES

INTRODUCTION TO TELEVISION PRODUCTION**CRS H6637****GR 9-12****CR ½****S**

Television Production introduces students to the wide spectrum of information and learning available through the use of television production. Students will experience the steps that are required to develop a television production from the basics of camera operation, sound and file editing, and lighting of sets. Each student will understand the five basic areas of television

production that are needed to complete a broadcast segment: producing, directing, recording, scripting, and editing. Students' projects will take place in a studio and on location.

STUDIO TELEVISION PRODUCTION

CRS H6640 GR 10-12

CR ½

S

In this course, students will learn how to effectively produce television programming in the studio. Students will experience the steps that are required to develop a television production, including the basics of camera operation, sound and video editing, and lighting of sets. Students will understand the five basic areas of television production that are needed to complete a television segment: producing, directing, recording, scripting, and editing. *This class may be taken twice for credit (Studio TV2).*

ADVANCED TELEVISION PRODUCTION

CRS H6638 GR 11-12

CR ½

S

Students will explore more advanced technical and creative skills within a studio and on location. This course requires working both in group and individual situations in the production of quality video segments for cable-cast. Show formats will also be explored, as students will be responsible for a long-term production that will be produced solely by Advanced TV students.

Prerequisite: Studio Television Production or Introduction to Television Production; any grade of D or below will require approval by the instructor. This class may be taken multiple times for credit. ✓ School to Career requirement option.

FILM STUDY WORKSHOP

CRS H6639 GR 11-12

CR ½

S

Film Study Workshop is a serious, challenging, and critical investigation of films from different Hollywood eras. Students will learn the basic principles of characterization, dramatic structure, and scene creation through film analysis exercises and develop their own original feature film script from an idea to a first act outline. This class is designed to study the approaches taken by film directors and writers in creating motion pictures. Students will view and analyze films from the silent era to contemporary times. The theme characterization, point of view, and impact on society of each film will be among the topics that students will examine. Research in themes, film genres, production companies, techniques, and classic film figures will also be required.

Prerequisite: Introduction to Television Production, Advanced Television Production; any grade of D or below will require approval by the instructor. This class may be taken multiple times for credit.

SCREENPLAY WRITING AND PRODUCTION

CRS H0055

GR 11-12

CR 1

Y

This year long course is focused on the art of screenplay writing and production.

Screenplay Script: Students will use creative writing skills to create a screenplay. This course focuses on exposure to types of film ideas, story generation, writers' workshop, and the elements of screenplay creation. Students will analyze screenplays, learning the proper format for the creation of structure, dialog, and short composition necessary to complete production.

Screenplay Craft: Building from Screenplay Script, this course will focus on the elements of creating a feature film. Throughout this course, students will use their screenplays to learn the craft of direction, cinematography, production design, and editing. *The two courses—Screenplay Script and Screenplay Craft, are each ½ credit course designed to run together throughout the entire school year. Students will be required to enroll in both classes, which will run in the same period for the entire school year. Screenplay Writing and Production may be taken twice for credit. ✓ School to Career requirement option.*

CULINARY ARTS ELECTIVES

INTRODUCTION TO FOODS AND NUTRITION

CRS H6671

GR 9-12

CR ½

S

This course will introduce students to the role of food in their life, and the effects their daily food choices have on their health. They will discover that what they read or hear about food and nutrition is not always true. Students will learn to make effective use of resources when organizing a kitchen, caring for equipment and appliances, and purchasing and storing food. Students will also develop fundamental skills that are needed to work safely and efficiently in a kitchen or food lab, plan meals, follow recipes and serve them attractively. *Prerequisite for all consumer science courses.*

BAKE SHOP

CRS H6675

GR 10-12

CR ½

S

This course will introduce students to the production of baked goods. Students will learn to make effective use of resources when preparing and producing baked goods, keeping a kitchen organized, and purchasing and storing ingredients. They will also develop the fundamental skills needed to work safely and efficiently in the kitchen, read and follow recipes, and serve baked goods attractively. Students will be actively engaged in learning how to select, store, and prepare a wide variety of breads, pastries and other bakery products. *Prerequisite: Introduction to Foods and Nutrition; any grade of D or below will require approval by the instructor.*

MULTICULTURAL FOODS

CRS H6677

GR 10-12

CR ½

S

This course features the study of foods and customs of many countries. Students will learn how food customs have been influenced by the geography and culture of each country. In this course, students will compare the food traditions of various cultures and regions with respect to food choices and life styles, nutrition, how food is prepared, and ways of service and eating food. *Prerequisite: Intro to Foods and Nutrition; any grade of D or below will require approval by the instructor.*

FOOD FOR HEALTH

CRS H6676

GR 10-12

CR ½

S

This course is designed to explore the areas of nutrition and public health that are increasingly affecting our society. Links between diet and conditions such as obesity, diabetes, and other chronic illnesses will be explored. Students will be encouraged to examine their own nutrition through food journaling, understand food nutrition labels, and consider how lifestyles affect food choices. Other related topics in this course include food fads and fallacies, alternative diets and food products, and nutrition related careers. **Prerequisite:** *Intro to Foods and Nutrition; any grade of D or below will require approval by the instructor.*

CULINARY ARTS

CRS H6673

GR 10-12

CR ½

S

Students in this course will develop competencies to produce meal and dessert specials to be offered in the school's coffee café. Students will explore career issues, food preparation, sanitation, nutrition, and attractive presentations of a variety of meal options. Other topics include customer service; cost control, management and safety issues. **This course may be repeated for credit with permission of the teachers.** **Prerequisite:** *Intro to Foods and Nutrition; any grade of D or below will require approval by the instructor.*

ADVANCED CULINARY ARTS

CRS H6674

GR 10-12

CR ½

S

Students will learn about food management, marketing, sanitation, food costs, and comprehensive methods of food preparation. In addition, students will learn what is involved behind the scenes of the food industry while preparing dishes to be offered as specials in the school's coffee café. Students will also study hospitality and how it relates to food services. Some students may qualify for a separate internship with a local food preparation establishment. **Prerequisite:** *Culinary Arts; any grade of D or below will require approval by the instructor.* ✓ *School to Career requirement option.*

FASHION ELECTIVES

BASIC FOUNDATIONS IN ART

CRS H5501

GR 9-12

CR ½

S

Basic Foundations in Art is open to all students. The course includes experiences in the use of both two and three-dimensional materials and concentrates on elements of design as they relate to painting, drawing, printmaking, ceramics, sculpture and other media. Students are expected to do outside projects as assigned by the instructor. **Basic Foundations in Art is a required course for all Visual Arts electives.** *Found in Fine Arts Academy.*

FASHION I

CRS H6679

GR 10-12

CR ½

S

In this course students will use the sewing machine to create garments influenced by today's fashion styles and trends. Emphasis will be on general construction techniques in the assembling of clothing products. Students will learn basic sewing skills including the correct use of the sewing machine, commercial sewing patterns, fabric selection, proper construction procedures and the use of specialty tools and equipment. **Students will be required to purchase materials on their own based on their projects.**

FASHION II

CRS H6681

GR 10-12

CR ½

S

The content of this course builds on the skills acquired in Fashion I. Greater depth in the study of design principles and sewing techniques is provided. In this course, students interested in a career within the fashion industry can explore the complete field of clothing and textiles. The emphasis will be on more advanced clothing construction techniques. The most up-to-date sewing techniques will be stressed to achieve a professional looking garment. **Prerequisite:** *Fashion I; any grade of D or below will require approval by the instructor.* **Students will be required to purchase materials on their own based on their projects.**

WOODWORKING TECHNOLOGY OR CONSTRUCTION ELECTIVES

INTRODUCTION TO WOODWORKING TECHNOLOGY

CRS H6659

GR 9-12

CR ½

S

This introductory course provides all students, including those who have not had a recent shop class, with the necessary skills to handle hand tools, popular power tools, and machines found in the home. Students will construct projects suited to their individual skill levels. **Students must provide their own lock to secure assigned safety equipment and materials.**

ADVANCED WOODWORKING TECHNOLOGY

CRS H6666

GR 10-12

CR ½

S

Students will continue machine work and will review the safe use of power machines. Instructions will be given on the band saw, jointer, radial saw, and surface planer. Portable electric tools for all types will be used. Wood-finishing techniques will be taught in greater depth, and projects will be finished according to industry standards. **Prerequisite:** *Introduction to Wood Technology; any grade of D or below will require approval by the instructor.* ✓ *School to Career requirement option.*

FINE WOODWORKING TECHNOLOGY

CRS H6669 GR 10-12 CR ½ S

Students will research different styles of furniture, with the opportunity to design and create a finished project related to that particular style. The student will incorporate the use of design and print reading, as well as the highlights that distinguish a particular style. Students in this class will train for the required OSHA Certification. They will be trained and given an opportunity to take the certifications exam. Based on a students' project of choice, a particular need for materials or hardware may be called for. If so, the student will have to provide such items. Students must provide their own lock to secure assigned safety equipment and materials. **Prerequisite:** *Intro to Woodworking Technology, Advanced Woodworking Technology, Have a competent understanding of read the tape measure and able to sue project plans to create a finished product; any grade of D or below will require approval by the instructor. Students may be required to purchase additional materials on their own based on their project.*

HOUSE CONSTRUCTION

CRS 6667 GR 10-12 CR 1 Y

Students will become familiar with the operations of house construction and reading and designing house plans (the course could be interrelated with the CAD program on house design). Students will train and test from the Career Safe Academy and upon successful completion will receive the OSHA: Occupational Safety and Health Administration 10-hour safety card. Students will be introduced to the RRP law: Renovation, Repair, and Painting. Students will understand framing layout and construction. Students will become familiar with house styles as well as the operations related to construction and remodeling. Students will learn to identify and use field related equipment and materials. Students will learn to relate to local and national building codes. Students will become familiar with the associated trades related to house construction. In addition, students will be introduced to such concepts as insulation and drywall, and logical designs of bathrooms and kitchens. Students will learn and apply interior trim applications. Students will be introduced to different options of floor and wall coverings. **Prerequisite:** *Intro to Wood Technology and a competent understanding of reading the tape measure; any grade of D or below will require approval by the instructor. Students must provide their own lock to secure assigned safety equipment and materials. Please note this is a full year class. ✓ School to Career requirement option.*

COSMETOLOGY ELECTIVES

COSMETOLOGY I

CRS H6682 GR 11-12 CR ½ S

Cosmetology I is designed to give students an overview of the profession. This is an introductory exploratory course in which students will gain an understanding of the profession and opportunities within the different aspects of the field. This course includes a brief history of cosmetology, exposure to specialties within the profession, practical knowledge of sanitation, basic sectioning and combing on mannequins, proper shampooing methods, and basic hairstyles including braiding and up dos. The purpose of this course is to allow students an opportunity to determine if this is a career they may be interested in pursuing and is open to all students as an elective. Seniors receive first preference.

COSMETOLOGY II

CRS H6683 GR 11-12 CR ½ S

Students in this course will focus on skincare and make-up. Topics will include basic facials, tanning, hair removal, and techniques of basic facial make-up. Sanitation processes covered in Cosmetology I will be expanded upon and students will have the opportunity to become Barbicide certified (required). The many careers associated with skin care will be covered and students will learn the requirements of a basic salon/spa business while developing necessary communication and client interaction skills. Successful students will be prepared for an entry-level position at a local salon, spa, tanning salon, or retail make-up counter. Seniors receive first preference. **Prerequisite:** *Cosmetology I; any grade of D or below will require approval by the instructor. ✓ School to Career requirement option.*

WELLNESS

All students are required to take and pass two years of physical education (1 credit) and health (1 credit) totaling two credits. In physical education, if students are unable to be physically active, a note from a parent is required. Students who are to be medically excused require a note from a physician and the student must complete an alternative non-physical assignment. Students' are expected to be prepared for physical activity by having proper footwear that permits safe movement, and by wearing no jewelry that interferes with, or is unsafe for activity. Lockers are available, but locks are not provided. Students are strongly encouraged to bring their own lock and secure their belongings to prevent theft.

PHYSICAL EDUCATION I

CRS H7704 GR 9-12 CR ½ S

Successful completion of Physical Education I provides students with the necessary knowledge and skills to improve fitness levels in order to live a healthy lifestyle. Physical fitness is essential for optimal physical wellness. Physical Education I focuses on individual skill development in a variety of physical activities. Students participate in basic aquatics to improve the efficiency of their swim strokes via the American Red Cross Swimming Level program and to teach students responsibility and safety around water. An introductory fitness

unit, utilizing the Fitness Center, will focus on proper and effective use of the weight and aerobic equipment. Students will also participate in a variety of team and individual/dual sports as a means of gaining more opportunity for physical activity throughout their life.

PHYSICAL EDUCATION II

CRS H7708 GR 10-12 CR ½ S

Physical Education II incorporates sport, leisure and lifetime fitness activities in order to foster the development of social competencies and improve personal wellness. Honesty, integrity, leadership and sportsmanship are encouraged in team and lifetime activities, physical fitness is emphasized in all activities. Students will incorporate fitness concepts in order to develop and implement individual fitness programs in the Fitness Center. Red Cross Basic Rescue provides students with the knowledge and skills to be safe in and around water, as well as providing experience in the safe rescue of others during water emergencies.

HEALTH I

CRS H7702 GR 9-12 CR ½ S

A required course of study for that focuses on communication and interpersonal skills, health assessment, risk and protective factors and behavior management. The course promotes lifetime skills and health-enhancing activities. Students participate in an assessment of various areas of wellness: physical, emotional, social, life planning, environmental, spiritual, cultural and intellectual wellness. Students assess personal wellness, identify resources, set goals, and plan strategies and learn how to look at decision-making. Topics include, but are not limited to: Basic nutrition, types of fats, how various nutrients affect the body, BMI, disordered eating and body image, energy drinks, skin cancer, sleep, Internet safety will be explored. Sexuality will focus on basic anatomy and physiology of the male and female reproductive system, STD's, birth control, preventive exams, and basic safety issues in dating will be discussed. Friendships, bullying and harassment will also be addressed within this course. Students will maintain journals and evaluate progress throughout the program.

HEALTH II

CRS H7706 GR 10-12 CR ½ S

A required course of study that focuses on character education, along with the social, emotional, physical and cultural aspects of health. First aid and safety, alcohol and other drug prevention, behavior management, hazing are also addressed. Students will focus on enhancing protective factors to reduce health-compromising behaviors and focus on positive strategies to help students reach their goals. Dating violence and qualities necessary in healthy relationships will be explored. Driving and pedestrian safety will be addressed in this course. This course will also explore various community service organizations and the benefits they offer to our society.

FUNDAMENTALS OF WELLNESS 9

CRS H8766 GR 9-12 CR ½ S

Students are placed in Resource Wellness in accordance with the determination of the IEP Team. Instruction is based on Massachusetts' frameworks and parallels the general education program of studies in Wellness. Concepts covered include communication and interpersonal skills, health assessment, risk and protective factors, behavior management, fitness, decision-making and the inter-relatedness of wellness concepts and healthy lifestyles.

FUNDAMENTALS OF WELLNESS 10

CRS H8767 GR 10-12 CR ½ S

Students are placed in Resource Wellness in accordance with the determination of the IEP Team. Instruction is based on Massachusetts' frameworks and parallels the general education program of studies in Wellness. Concepts covered include communication and interpersonal skills, health assessment, risk and protective factors, behavior management, fitness, decision-making and the inter-relatedness of wellness concepts and healthy lifestyles.

WELLNESS ELECTIVES

TEAM SPORTS

CRS H7707 GR 11-12 CR ½ S

Team Sports is a semester course that gives students a chance to play, coach and officiate various team sports in league and tournament play. The course focuses on sport skill techniques, offense and defense variations, fitness, officiating, rules, drills, and safety procedures. Students will assess their personal fitness level and explore the role of team sports in their lives. **(Team sports credit does not count toward graduation requirement) Prerequisite – Grade 9 and Grade 10 Physical Education.**

INTRODUCTION TO COACHING

CRS H7715 GR 11-12 CR ½ S

This course is designed for students who have a desire to coach youth sports. Students will learn coaching concepts, practices and safety issues as well as goal setting for season and practice planning. Classroom activities will focus on the NFHS Coaching Education Program. Gym activities will give students the opportunity to plan and implement practices and to coach in competitive events.

FIRST AID AND CPR

CRS H7713 GR 11-12 CR ½ S

Students will learn First Aid and CPR. Curriculum will be based on the American Red Cross standards. Fee may apply if students receive official Red Cross certification. **Prerequisite – Health I and Health II**

PERSONAL HEALTH AND FITNESS

CRS H7712 GR 11-12 CR ½ S

Students will learn the principles of exercising independently, weight management, and disease/illness prevention through physical activity. Facilities used will include the new fitness center, pool, gym, track, and classroom. Students will set personal fitness goals, develop a plan, and work toward successfully achieving those goals.

ADDICTIONS

CRS H7716 GR 11-12 CR ½ S

The study of the nature, causes, and intervention of addiction in relationship to a variety of topics. Historical and sociocultural trends are evaluated in view of current addiction theories. Emphasis is placed upon the relation of addiction to family and work environments, as well as the development of alternate lifestyles.

MARINE CORPS JUNIOR ROTC

MCJROTC I

CRS H6696 GR 9-12 CR 1 Y

LE -I is designed to form good habits, self-discipline and sound study skills under the watchful supervision of senior students and the Senior Marine Instructor (SMI) and Marine Instructor (MI). While strengthening character, the student will develop respect for, and an understanding of, the need for constituted authority in a democratic society. It is also designed to instill the value of citizenship, service to the United States, personal responsibility, accountability, authority and a sense of accomplishment. Military organization from the lowest to the highest echelons are studied and how they interact with various segments of government. Military terminology, rank structure, chain of command, military justice, weekly uniform inspections, drill and ceremonies, and physical training are all used in developing citizenship and leadership values. No military requirement is mandated for taking any leadership education course; however, all students are required to wear a military uniform one time per week. This is a graded event and the uniforms are provided by the USMC at no cost to the student. Freshmen through seniors are invited to sign up for this elective course.

MCJROTC II

CRS H6697 GR 10-12 CR1 Y

LE - II continues where LE -I leaves off by developing strong citizenship skills with an emphasis on leadership. The addition of public speaking, confidence building skills, advanced drill techniques and becoming a classroom leader are paramount to leadership development. The student finds themselves as part time instructor as well as full time student. ***Prerequisite: Successful completion of LE-I and SMI approval.***

MCJROTC III

CRS H6698 GR 11-12 CR1 Y

This course is designed for those students interested in going into the military after graduation and those that may want to pursue a military scholarship to college or one of the military academies. Current Events, constitutional law, military ethics, law enforcement and community service are some of the topics covered. The student may find themselves providing leadership instruction to younger students through demonstration and one on one remedial training. Military service is not required after completing this course; however, students that do complete this course may go into the military three pay grades higher than regular enlistees. College ROTC scholarships and acceptance to military academies is greatly enhanced by successful completion of this course. ***Prerequisite: Successful completion of LE I and II and SMI approval.***

MCJROTC IV

CRS H6699 GR 12 CR1 Y

This course is the culmination of the previous three years of Leadership Education. The student finds themselves, under the watchful eyes of the Senior Marine Instructor and Marine Instructor, preparing lesson plans for younger students, teaching that class, developing test materials, grading and evaluating performance. Leadership is enhanced by performing weekly inspections of younger students, training drill movements, leading physical training, and learning how to tactfully correct younger classmates. LE -IV students will become a role model and will be expected to set a positive example at all times. This role is much like that of a mentor and similar to the captain of a varsity sports team. Only the best and most sincere should dare to undertake this responsibility. ***Prerequisite: Successful completion of LE I - III and SMI approval.***



VIRTUAL HIGH SCHOOL

Haverhill High School offers online courses through Virtual High School

Virtual High School is a non-profit organization that collaborates with schools to offer online high school courses to students from across the country and around the world. By joining VHS, Haverhill High School has expanded its course offerings by over 200 per semester and year-long courses, including College Prep, Honors, and classes. VHS boasts a 70% pass rate for AP exams, versus the national pass rate of 60%.

Students taking a VHS course are required to log in five times per week, complete all readings and assignments, submit written assignments digitally online, and participate in class discussions with classmates and the teacher via a forum setup. In addition to gaining knowledge about course material, students will also learn valuable skills that will help them in college, such as multimedia presentation skills and effective online research tactics. Classes are offered at no cost to the student.

The successful VHS student is: self-motivated, self-driven, a hard worker, tech savvy, has effective written communication skills, and the ability to learn independently. HHS students take their VHS course as part of their seven course schedule during the day at the high school. A computer area has been established in the library for students enrolled in online courses.

Virtual High School courses are open to sophomores, juniors and seniors. Students may enroll only in courses that are **NOT** offered at HHS or cannot fit into a student's schedule due to a conflict with another course. VHS courses appear on the student's HHS schedule and transcript. Quality points are awarded to VHS courses, and the grades are figured into rank and G.P.A. Students are limited to one VHS course per semester, and to one full credit per year. Students can only carry seven courses each semester.

Please see your guidance counselor if you are interested in a VHS course. Registration is done on a first-come, first-served basis, and space is limited.

VIRTUAL HIGH SCHOOL COURSE OFFERINGS 2016-2017

Virtual High School offers a catalog of full semester courses in the Arts, Foreign Language, Language Arts, Life Skills, Math, Science, Social Studies, Technology and AP Study to students in VHS member schools. Core courses are NCAA accredited. The courses listed are current at the time of publication. Visit our website at www.goVHS.org for the most recent offerings.

AP Courses

AP Biology
AP Calculus AB
AP Calculus BC
AP Chemistry
AP Computer Science A
AP Economics: Micro And Macro
AP English Language & Composition
AP English Literature & Composition
AP European History
AP French Language
AP Government & Politics: US
AP Human Geography
AP Music Theory
AP Physics I
AP Psychology
AP Spanish Language & Culture
AP Statistics
AP U.S. History
AP World History

Arts

American Popular Music*
Art History:
Renaissance to Present*
Caribbean Art History
Creating Art History
History and Pop Music
History of Photography
Music Composition and Arranging*

Music Listening and Critique*

Business

Business and Personal Law
Entrepreneurs: Business Owners of the 3rd Millennium
Entrepreneurship: Starting your own Business*
International Business: An Exploration
Investing in the Stock Market*
Learning to Invest in the Stock Market
Personal Finances*
Statistics and Business Quality Management

Foreign Language

Latin I
Mandarin: Chinese Lang and Culture
Portuguese I
Russian Language and Culture
Spanish Culture and 20th Century Hispanic Literature

Language Arts

101 Ways to Write a Short Story*
20th Century Women Authors
Academic Writing*
Around the World in 80 Days
Creative Writing
Essay Writing
Fantasy and Science Fiction Short Stories
Folklore and Literature of Myth, Magic, and Ritual
Ghoulies, Ghosties, and Long-Legged Beasts*
Horror Writers

Journalism in the Digital Age
Literature of the World
Mythology
Poetry Writing
Screenwriting Fundamentals*
Shakespeare in Films
To Kill a Mockingbird
Young Adult Literature

Life Skills/Health

Career Awareness*
Digital Citizenship*
Employability Skills*
Kindergarten Apprentice Teacher
Now What Will You Do?
Parenting in the 21st Century
Perspectives in Health*
Physical Education: Personal Fitness
Preparing for College
Study Skills +

Math

Algebra I
Algebra II
Calculus Honors
Geometry
Math and Modern Logic Honors
Mathematics of Electricity
Number Theory
Pre-Calculus
Pre-Calculus: Advanced Trigonometry
Statistics Honors

Science

Anatomy and Physiology
Animal Behavior and Zoology
Biochemistry

Bioethics*
Climate Change
Environmental Science
Epidemics
Evolution and the Nature of Science*
Genes and Diseases
Meteorology
Nuclear Physics
Oceanography
Pre-veterinary Medicine
The Human Body

Social Studies

Constitutional Law
Contemporary Issues in American Law and Justice
Criminology
Democracy in America*
Eastern and Western Thought
Economics Honors
Modern Middle East
Peacemaking
Philosophy I
Practical Law
Psychology of Crime
Sociology
Sports and Society
The Glory of Ancient Rome
The Holocaust
World Religions

Computer Science/Technology

Computational Science & Engineering Using Java
Computer Science Honors
Creating Effective PowerPoint Presentations
Engineering Principles

**Multiple sections offered -Appropriate for both High School and Gifted and Talented Middle School Students
AP is a registered trademark of the College Board, which was not involved in the production of this product.*

COMPUTER BASED LEARNING (CBL)

VIA GradPoint Courseware

Haverhill High School offers CBL options for:

- Dropout Prevention
- Credit Recovery
- Alternative Instruction

With the built-in Basic Achievement Skills Inventory™ (BASI), you can quickly and easily evaluate student mathematics, reading, and language arts skills for initial placement. Two forms of the test allow you to assess student progress over time.

Complete Core Curricula Available

GradPoint Courseware contains the entire core high school curricula with courses to cover all four years of high school in the four main subject areas of Mathematics, English, Social Studies, and Science

GradPoint Courseware delivers proven, rigorous core high school curriculum designed to help every student achieve objective-based mastery and prepare them for graduation and college. The powerful learning management system also gives you the control to prescribe curricula, customize lessons and tests, and monitor student activity and track performance.

Content Development and Structure

The quality lesson content and design have been developed from research-based, proven instructional strategies. Today thousands of respected authors, noted academics and Pearson people contribute to the educational materials developed by our imprints like Scott Foresman, Prentice Hall and Longman.

GradPoint Courseware is developed based on the quality content these professionals create to bring you a quality digital product that delivers positive results for your students and your district.

SCHOOL COUNSELING PROGRAM

School Counselors provide a variety of student and community based services including, academic, career and post-secondary planning, and crisis intervention/resources. The School Counseling Office offers a comprehensive developmental guidance program consisting of individual and group sessions with students, as well as parent/guardian evening informational presentations. The administration, counselors, teachers, and students work together to promote the best interests of the school and the individual student.

Students are assigned a school counselor as freshmen and work individually with their counselor throughout their high school career. This system allows the counselor and student to develop the relationship necessary to work closely in developing both short and long-term goals. Together they develop an individualized four-year plan that helps the student actualize their potential and dreams.

The focus of the school counselor is to work with the students and their parents/guardians in matters pertaining to academic advising, post-secondary planning, and personal/social counseling. This could include adjustment to school, registering for courses, placement in classes, college and career exploration, testing, tutoring, and personal/emotional issues. School counselors have access to a wide variety of community and collegiate resources in order to provide the students with the best possible options for all their needs.

Students can make an appointment with their counselor by visiting the School Counseling Office in the L Wing before or after school, during lunch or during study halls. Parents are encouraged to call or email their child's counselor to make an appointment to discuss any areas of concern. Conferences may be arranged before or after school or at designated times during the school day.

SERVICES

The counseling staff meets with students on an individual and group basis. Some featured group presentations for students and parents include:

- Freshman Orientation Program (students)
- PSAT Presentations (students and parents)
- Junior Class Presentations ~ includes career and college exploration (students and parents)
- Senior Class Presentations ~ college and post-secondary planning (students and parents)
- Course Selection and Registration Meetings (students)
- College Financing Seminars (students and parents)
- College Fair (students and parents)
- ASVAB Career Exploration Exam (students)
- MCAS Presentations

Counselors will maintain regular contact with faculty and staff to ensure progress of each student and will assist the student in selecting an educational program that is appropriate for his/her educational and vocational interests. Counselors will work with the student and their parent/guardian to make any necessary referrals for outside tutoring, remedial work, 504 and special education services.

COLLEGE & POST SECONDARY PLANNING

The college search and application process involve long term planning. Beginning in their freshmen year with the creation of the 4-year plan counselors and students work collaboratively in selecting an appropriate post-secondary path. Counselors assist students in the following ways:

- Course selection
- Guided Naviance Family Connection activities (The Game Plan, Personality and Career Surveys)
- College search process
- College majors and related careers
- PSAT/SAT/SAT Subject/ACT testing
- College application process
- Essay/Resume writing
- Letters of Recommendations
- College visits and interviews
- Financial Aid/Scholarships

Students are encouraged to utilize the resources available in the school counseling office to assist them in this process. The School Counseling Suite has computers available to the students to aid them in obtaining information about colleges and careers.

NAVIANCE & FAMILY CONNECTION

Family Connection from Naviance is a web-based service designed especially for students and parents. It is a comprehensive website that students and parents can use to help make decisions about colleges, careers, and post-secondary plans. Each student has a profile on Family Connection and is linked directly to the counseling office so that the counselors can monitor each student's progress in the college admissions process. It will specifically track and analyze data about college admissions and HHS students so it can provide up-to-date information that is specific to our school.

Family Connection allows students and families to:

- | | |
|---|--|
| 1. Get involved in the planning and advising process | ➤ Build a resume, complete on-line interest, personality and career inventories, and manage your timelines and deadlines for college admissions |
| 2. Research Colleges | ➤ Compare your GPA, standardized test scores, and other statistics to actual historical data from HHS for students who have applied to your college of interest in the past. |
| 3. College Visits | ➤ Keep track of which college admissions representatives are visiting HHS and register yourself right online for these visits |
| 4. Scholarship Information | ➤ See what's available to HHS students for national, state, and local scholarships |
| 5. Stay in Touch | ➤ Counselors can send regular emails and reminders to share information with the student and parent about upcoming meetings, events, deadlines, and scholarship information. |

To access our school's Family Connection site, please visit: <http://connection.naviance.com/haverhill>

Each student and parent will have his or her own access code to this site. Counselors can activate student or parent accounts and/or re-set passwords for anyone needing access to Naviance.

STANDARDIZED TESTING

The following is a summary of the testing programs made available to the students through the School Counseling office. Most of this testing is voluntary; however, students who plan to attend college after high school should take full advantage of all the testing opportunities available. These tests are usually a requirement for college admissions, so students must do their research to see what is required by each school or organization.

Information about testing will be available on the HHS School Counseling website and on Family Connection; however, it is the responsibility of the student to register for these exams, watch their deadlines, and to research which colleges require additional testing (such as the SAT Subject Test). The standardized tests recommended by the school counseling department are:

- **Preliminary Scholastic Aptitude Test and National Merit Scholarship Qualifying Test (PSAT/NMSQT)** ~ This 2 hr., 45 minute version of the SAT is valuable for practice. It is highly recommended that students take this test in October of their sophomore AND junior year. For juniors, the National Merit examination is utilized by scholarship program sponsors for applicants who may qualify for scholarship consideration in their senior year. A detailed individual report is provided to each participant highlighting their weaknesses and strengths, and also offers them information about how to begin their college admissions journey. This test is offered only once per year. Registration information is available in the school counseling office at the beginning of each school year.
- **Standardized Aptitude Test (SAT)** ~ The SAT is a globally recognized college admission test that shows colleges what you know and how well you can apply that knowledge. It tests your knowledge of reading, writing and math — subjects that are taught every day in high school classrooms. Most students take the SAT during their junior or senior year of high school, and almost all colleges and universities use the SAT to make admission decisions. Practice tests, tips, as well as registration information, are available at www.collegeboard.com.
- **SAT Subject Test** ~ Subject Tests are hour-long, content-based tests that allow you to showcase achievement in specific subject areas where you excel. These are the **only** national admission tests where **you** choose the tests that best showcase your achievements and interests. SAT Subject Tests allow you to differentiate yourself in the college admission process or send a strong message regarding your readiness to study specific majors or programs in college. There are 20 SAT Subject Tests in five general subject areas: English, history, languages, mathematics and science. Some of the more competitive colleges REQUIRE 2-3 SAT Subject Tests; it is the responsibility of the student to see if it is necessary for the colleges they are applying to.
- **ACT** ~ The ACT is also a nationally accepted college entrance exam and is looked at interchangeably with the SAT and SAT Subject Tests. It assesses high school students' general education development and their ability to complete college-level work. The multiple choice test covers four skill areas: English, mathematics, reading, and science. The writing test, which is optional, measures skills in planning and writing a short essay. In order for the ACT to be considered in place of the SAT for college admissions, the student MUST take the optional writing section. Visit www.actstudent.org for additional information, practice tests, and registration information.
- **Exams (AP)** ~ AP exams are offered in May to all students who have participated in an AP course throughout the school year, either at the high school or on VHS (Virtual High School). Through AP's college-level courses and exams, you can earn college credit and stand out in the admission process. There are currently 16 AP courses offered at HHS, with the opportunity to take any not offered at HHS online through Virtual High School. See your counselor for more information.

DUAL ENROLLMENT & COLLEGE CREDIT

Students have the option of taking courses at local colleges while enrolled at Haverhill High School. College courses may be used for Haverhill High School graduation requirements **with prior approval**. Students must review dual enrollment courses with their counselor and the Curriculum Supervisor for approval and authorization. Each 3-credit college course is equal to 1 credit at Haverhill High School. College courses are on a self-pay basis; however, opportunities for dual enrollment may be available depending on state funding. Students should make arrangements through their counselor if interested in this option.

CONFERENCES WITH COLLEGE REPRESENTATIVES

In the fall and spring of each school year, admissions representatives of schools and colleges visit the high school to meet with seniors and juniors who may be interested in receiving information about that program. It is to the student's advantage to attend these meetings, specifically for the schools that are their top choices. When representatives of schools or colleges visit the high

school, notification will be made through daily notices and the Naviance program. Students may attend the college representative visits by obtaining passes in the school counseling office one day prior to the event. Study or classroom teachers must sign passes giving a student permission to miss class in order for students to attend these visits.

NCAA – NATIONAL COLLEGIATE ATHLETIC ASSOCIATION

Student-athletes must register with the NCAA Eligibility Center to be eligible to play NCAA Division I or II sports in college. Athletes playing in Division III do not have to register. Students should work closely with their coaches and school counselor to determine if they should complete this process.

What is the NCAA Eligibility Center?

The NCAA Eligibility Center certifies whether prospective college athletes are eligible to play sports at NCAA Division I or II institutions. It does this by reviewing the student-athlete's academic record, SAT or ACT scores, and amateur status to ensure conformity with NCAA rules.

What are NCAA Divisions I, II, and III?

The NCAA is the governing body of many intercollegiate sports. Each college regulated by the NCAA has established rules on eligibility, recruiting and financial aid, and falls into one of the three membership divisions (Divisions I, II and III). Divisions are based on college size and the scope of their athletic programs and scholarships.

When should students register?

The NCAA recommends that student-athletes register at the beginning of their junior year in high school, but many students register after their junior year. There is no registration deadline, but students must be cleared by the Eligibility Center before they receive athletic scholarships or compete at a Division I or II institution.

How do students register?

Students must register online at the NCAA Eligibility Center. The link for this site is accessible through the HHS School Counseling website and on Naviance Family Connection site. Students will have to enter personal information, answer questions about their course work and sports participation outside of high school and pay a registration fee.

Can students have the registration fee waived?

Students who have received a waiver for the SAT or ACT are eligible for a waiver of the registration fee. The student's counselor must submit confirmation of the student's test fee waiver. Please see your counselor for more information.

FINANCIAL AID AND SCHOLARSHIPS

In view of the ever-increasing costs of college, families need to take advantage of all resources available to finance higher education for their children. The school counseling department partners with MEFA (Massachusetts Educational Financing Authority) to bring parents and students the most up to date information and assistance regarding financial aid for college. Parents are able to access this information from the school counseling website or by visiting the following:

- www.mefa.org
- www.fafsa.ed.gov
- www.collegeboard.com

As a service to families, the school counseling department sponsors various Financial Aid Workshops each year with personnel from MEFA and other professional organizations to assist families in the process of securing financial aid and the preparation of the FAFSA (Free Application for Student Aid) and the CSS-Profile.

Scholarships from other sources: Throughout the year, the school counseling department receives notifications from local, state,

and national organizations offering scholarships to our students. These scholarships are primarily from business, industrial, professional, and fraternal organizations. Criteria for these awards are usually based on academic achievement, community service, test scores, essays, and leadership qualities. These scholarships are publicized and updated weekly on HHS Naviance Family Connection and can be accessed by anyone in the HHS community. It is the responsibility of the student to regularly check Naviance Family Connection for updates and deadlines, and to pursue these opportunities. School counselors are ready to offer any assistance with this process in regards to information, recommendation letters, and transcripts.

In addition, it is important for families to inquire about scholarships offered by their own employers, fraternal and veteran organizations, and church groups.

Local Scholarships for HHS students: In addition to the scholarships on Naviance, numerous local scholarships are also available specifically for Haverhill students at the high school. These scholarships are published yearly on our HHS website with instructions for students as to how to pursue each scholarship. Selection for most of these scholarships is based on need and merit, and upon being awarded, will be announced at the various end of the year ceremonies held for the senior class. Please check the website regularly for updates on deadlines and funding.

HAVERHILL HIGH SCHOOL ATHLETICS INFORMATION



Haverhill High School sponsors a broad-based athletics program, offering **35** sports programs and fielding over **55** different teams. All programs are also governed by rules of the Massachusetts Interscholastic Athletic Association (MIAA).

The materials outlined below define some of the policies and procedures for all students participating in our High School Athletic program. Students must meet all academic eligibility requirements as well as the rules and regulations set forth in both the MIAA Handbook and Haverhill Parent/Student-Athlete Guide.

Fall Season

Cheerleading (Football)	Cross-Country, B/G
Crew, B/G	Football, (V/JV/FR)
Field Hockey, (V/JV/FR)	Soccer, B/G, (V/JV)
Golf	Volleyball, G (V/JV/FR)
Swimming, G	

Winter Season

Basketball, B/G (V/JV/FR)	Wrestling (V/JV)
Ice Hockey, B (V/JV), G (V)	Skiing, B/G
Swimming, B	Indoor Track, B/G
Cheerleading (Basketball)	Gymnastics

Spring Season

Baseball, (V/JV/FR)	Softball, (V/JV/FR)
Tennis, B/G	Track and Field, B/G
Volleyball, B (V/JV)	Lacrosse, B/G, (V/JV)
Crew, B/G	

Participation Requirements

Student-athletes and parents must submit the following prior to participation:

- **Participation Packet** – includes HHS Permission Form, Medical History and NRH Consent.
- **Physical Examination** - Student-athletes must present a valid physical on an annual basis. Physicals are valid for 13 months. Any student who has an expired or invalid physical will NOT be permitted to participate under any circumstances. Updated physicals should be submitted online or to the athletic department office through the course of the year. Physical examinations must be performed by a duly registered physician, physician's assistant, or nurse practitioner.
- **User Fee** - \$100 per student, per sport / Fee due prior to start of season
- **Waivers** - Student-athletes qualify for free lunch with have all user fees waived. Student-athletes who qualify for reduced lunch will pay a reduced fee of \$50 per student/per sport. Families must apply through the school's official free/reduced lunch application process. Application material can be found on the www.hillies.org under [Food Services](#). Waiver requests will be completely confidential.
- **Refunds** - Student-athletes who do not make a team will be issued a complete refund. All other refund requests will be reviewed on a case-by-case basis.

Haverhill's student-athletes have enjoyed substantial success, boasting All-New England Champions, MIAA State Champions and Boston Globe All-Scholastic recipients. More importantly, students who participate in Athletics are given the opportunity to broaden their educational experience through team membership, Sportsmanship, competition, hard work, and commitment.

ACADEMIC REQUIREMENTS FOR ELIGIBILITY IN ATHLETICS

A student must secure during the last marking period preceding seasonal tryouts (e.g., second quarter marks and not semester grades determine third quarter eligibility) a passing grade in the equivalent of five major subjects. To be eligible for the fall marking period, students are required to have earned credits for the previous academic year equivalent to five full year courses. A student cannot at any time represent Haverhill High School unless that student is enrolled on a full-time basis. The academic eligibility of all students shall be considered as official and determined only on the date when the report cards for that marking period have been issued to the parents of all students. Incomplete grades will not be counted toward eligibility. The rules below also apply to academic eligibility:

- (1) A student who repeats work for which he or she has once received credit cannot count that subject a second time for eligibility.
- (2) A student cannot count for eligibility any subject taken during summer vacation unless that subject has previously been pursued and failed.
- (3) A student receiving services under Chapter 766 whose individual education plan is a 502.4 or more restrictive prototype, may be declared academically eligible by the Principal provided that all other eligibility requirements are met.

***Please see page 69 for information on: NCAA – NATIONAL COLLEGIATE ATHLETIC ASSOCIATION**



HAVERHILL HIGH SCHOOL DIRECTORY

(978) 374-5700

Position	Name	Extension
Principal	Beth Kitsos	x1101 or 1102
Associate Principal	Kevin McLaughlin	x1101 or 1102
Assistant Principal, Grade 9	Daniel Faircloth	x1140
Assistant Principal, Grade 10	Michael Rossetti	x1121
Assistant Principal, Grades 11 and 12	Matthew Steinberg	x1105
Athletic Director	Thomas O'Brien	x1141
Attendance Supervisor	Lorna Marchant	x1118
English	Julie Kukenberger, Supervisor Carol Quinney, Dean	(978) 374-3400 x4216
English Language Education	Dr. Graciela Trilla, Supervisor	(978) 420-1926
Business Academy	Sue Finn, Dean	x4735
Fine Arts Classical Academy	Ellen Mullane, Dean	x4410/4412
Guidance & Student Support Services	Jami Dion, Director	x1134
Library / Media Services	Henry Toromoreno	x1143
Mathematics	Patricia Juranovits, Supervisor Daniel Tanguay, Dean	(978) 420-1904 X4352
Physical Education and Wellness	Thomas O'Brien	x1141
Science, Technology and Engineering	Kevin Higginbottom, Supervisor Edward Roberts, Dean	(978) 420-1976 x4106
Social Studies	Rashaun Martin, Supervisor Tom Jordan, Dean	(978) 420-1927 x4319
Special Education	Kyle Riley	(978) 374-3435
World Languages	Rashaun Martin, Supervisor	(978) 420-1927

<http://www.haverhill-ps.org> or www.hillies.org

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