# Shelton High School



Please visit our website - www.sheltonpublicschools.org

## SHELTON HIGH SCHOOL

# CORE VALUES, BELIEFS, AND LEARNING EXPECTATIONS

## \*\*\*CORE VALUES AND BELIEFS\*\*\*

The Shelton High School community believes that a safe, respectful atmosphere must be established and maintained for all students to achieve excellence and become responsible citizens. Within this environment, we expect all students to be engaged learners and critical thinkers who demonstrate technological literacy.

## We believe:

- A respectful, safe atmosphere must be established and maintained for successful teaching and learning;
- > Students, staff, and parents, in cooperation with community members, must share responsibility in the teaching and learning process;
- A rigorous curriculum must be provided to accommodate and challenge students in order to prepare them to participate productively in a global society;
- ➤ Instruction must provide opportunities for all students to work independently and collaboratively.

## \*\*\*LEARNING EXPECTATIONS\*\*\*

## Academic, Social and Civic Competencies:

- > Reads and writes effectively
- > Researches effectively to investigate topics
- > Thinks critically to solve problems
- > Presents information and ideas fluently
- > Participates actively in civic life

# SHELTON HIGH SCHOOL

# MISSION AND EXPECTATIONS FOR STUDENT LEARNING

Shelton High School is a learning community where students are expected to meet high academic and behavioral standards while developing to their full potential. We are committed to providing our diverse student body with a safe environment characterized by respect. Our staff, students, parents, and community work collaboratively to encourage life-long learning and responsible citizenship.

# Academic Expectations

## The Shelton High School student:

- Uses information to formulate and support ideas.
- Works independently and cooperatively.
- Writes and speaks fluently.
- Thinks critically and creatively to solve problems.
- Demonstrates technological literacy.
- Appreciates the arts.
- Understands the life-long value of physical wellness.
- Connects material from multiple subjects.

## Civic and Social Expectations

## The Shelton High School student:

- Contributes responsibly to the school and community.
- Values diversity and its importance.
- Understands democratic thought and process.
- Takes responsibility for his/her education.
- Demonstrates respect, integrity, and honesty in all endeavors.

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## INTRODUCTION

Shelton High School offers varied programs that will provide an education best suited to your particular needs, interests, and abilities. An opportunity for growth and fulfillment as a student and as a person is presented in a safe environment characterized by respect. Our staff, students, parents, and community work collaboratively to encourage lifelong learning and responsible citizenship. Selection of courses should be made only after careful consultation with your parents, teachers, and school counselors.

This booklet, which lists all the courses presently offered at Shelton High School with a brief description of each course, is provided for your convenience in making your selection of courses for next year. Courses run based on enrollment. It is suggested that you bring the booklet home and go over it with your parents before completing your course selection sheet. Please keep it in a safe place since you may need to refer to it, even during the next school year. Copies are also available on the school's website at http://www.sheltonpublicschools.org.

Top priorities for every high school student should be education, learning, and developing career choices. Therefore, you should take a course of studies that will challenge your intellect, allow you to explore new interests and learning, and lay the foundation for your career. This will allow you to fulfill your graduation requirements. In selecting your courses, keep in mind your personal goals, career goals, educational goals, and objectives for the future. These are all-important factors in helping you decide which courses will make the best Program of Studies to prepare yourself for the rapidly changing world in which you will be living and working.

No student should feel "locked" into any particular pattern of courses but rather should be encouraged to experience the widest variety of offerings, both for his/her own personal enrichment and also as preparation for advanced education or employment upon graduation. More frequently, however, students in high school are not sufficiently secure in a career decision to enable them to plan courses toward a specific career. Students are urged to choose courses, which will allow them the greatest amount of flexibility and at the same time explore some of the vocational programs, which may make career decision-making easier.

It is imperative that students make careful selection for next year's courses. The entire staff, consisting of counselors, teachers, department chairmen, and administrators, are ready to answer any questions and assist you in selecting those subjects which best fit your capabilities, needs, and career interests. Please select your courses with the utmost care. THE SCHEDULE THAT YOU CHOOSE DURING THIS COURSE SELECTION PROCESS WILL BE TREATED LIKE A CONTRACT. YOU WILL BE EXPECTED TO TAKE AND COMPLETE ALL THE COURSES ON YOUR SCHEDULE FOR THE UPCOMING YEAR. NO COURSE CHANGE WILL BE ALLOWED.

## PROCESS OF COURSE SELECTION

- 1. Read this course selection booklet carefully and thoroughly.
- 2. Review your program of studies with teachers, department heads, and counselors.
- 3. Discuss your choices with parents.
- 4. Complete your course selection sheet.
- 5. Logon to the Infinite Campus student portal to input course requests.
- 6. Submit course selection sheet and printed Request Summary from Infinite Campus to homeroom teacher by the designated date.

## **COURSE LOAD**

All students must select and take a minimum of seven (7) academic subjects. Freshmen and sophomores must also select Physical Education. Students who elect a 1/2-year course as one of their subjects must also elect a second 1/2-year course in order to meet this minimum requirement.

## GRADING PROCEDURES FOR WITHDRAWALS

A great deal of time and effort on the part of the staff is devoted to developing an individual program for each student. It is also essential that students and parents put sufficient time and thought into the process to assure a satisfactory program. When this combined effort is made, there are few legitimate reasons for making program changes during the school year.

Any course selected should be started with the idea of completion in mind. Trying the subject for a while and then dropping it is discouraged. When a student is granted a withdrawal from a course after twenty days from the commencement of a class, one of the following grades will appear on his/her transcript:

- "W" will indicate that the student is in "good standing" in the course at the time of withdrawal. This student has made an attempt to be successful in the class and has attended class regularly, submitted homework, etc. A "W" will appear on the student's transcript.
- "WF" will indicate that the student is not in "good standing" in the course at the time of withdrawal. A "WF" will be recorded on the student's transcript.

A student requesting a course drop or change must continue to attend the class originally assigned until all transfer paperwork is formally completed. A student who stops attending class before the class is officially dropped will be subject to disciplinary action for cutting class.

## **GROUPING PHILOSOPHY**

Shelton High School is a learning community where students are expected to meet high academic and behavioral standards while developing to their full potential. SHS offers courses of instruction to meet the needs of all students and encourages students to strive for academic excellence. A major responsibility of our educators is to offer appropriate level recommendations for each student based on ability, performance, grades and standardized test scores. Current English, Math, Science and Social Studies teachers must recommend students for courses at different levels of difficulty. It is possible for a student to be in one group in a given discipline and a different group in another course. Grouped subjects are indicated on the report card, recorded on transcripts and become a part of the student's permanent record. Summer reading is required at all levels. Groupings are established with the following guidelines:

## **HONORS**

Honors courses are closely aligned with the academic demands of most four-year colleges and require exceptional proficiency in all areas. Honors courses demand in-depth study and significant time out of class for completion of independent reading and research and preparation of comprehensive papers, reports and other assignments. Some courses may require summer homework. Students must be recommended by their teachers for Honors courses.

## Teacher recommendation is based on the following criteria:

- The student is highly self-motivated and capable of extensive independent study.
- The student is willing to extend beyond specific assignments.
- The student shows continual willingness to be challenged intellectually through the use of critical thinking and complex problem solving.
- Standardized test scores may be used to support placement as well.

## **COLLEGE PREPARATORY**

College Preparatory courses reflect the academic demands of many four-year colleges and require proficiency in the skills related to the field of study. Projects, reading and assignments require a significant amount of time out of class to complete. Review and reinforcement of needed skills are ongoing. Students must be recommended by their teachers for College Preparatory courses.

## Teacher recommendation is based on the following criteria:

- The student demonstrates motivation and effort.
- The student demonstrates responsibility and promptly completes independent reading and research.
- The student shows a willingness and ability to use critical thinking and complex problem solving.
- Standardized test scores may be used to support placement as well.

## **ACADEMIC**

Academic courses offer students a solid foundation for a variety of post-secondary options. Students who enroll in these courses are taught strategies to further develop academic proficiency in the subject area. Reinforcement of academic skills and motivation are emphasized. Projects and assignments require time out of class to complete. Students must be recommended by their teachers for Academic courses.

## Teacher recommendation is based on the following criteria:

• The student shows a need to improve subject area proficiency.

- The student demonstrates a need to develop stronger academic skills.
- The student demonstrates a need for reinforcement of problem solving and critical thinking skills.
- Standardized test scores may be used to support placement as well.

## ADVANCED PLACEMENT

Advanced Placement (AP) is a rigorous academic program that provides students with exposure to college-level work during high school. Through these courses AP certified teachers assist students to develop and apply the skills, abilities and content knowledge they will need later in college. Each AP course is modeled on a comparable college course. AP courses allow students to earn college credit, stand out in the admission process and broaden intellectual horizons. Most AP courses require summer work.

AP courses culminate in a college-level assessment developed and scored by college, university, and secondary school faculty. Each AP exam contains a free response section as well as multiple choice questions. Student performance on AP exams is rewarded by colleges and universities worldwide. Students will be required to take the AP exam for each course in which they are enrolled. The current cost of an AP exam is \$89.

AP courses are offered to students in English, Mathematics, Science, Social Studies, and World Languages. Students must apply for admission to each AP course. Consideration for admission includes review of PSAT scores, G.P.A., class rank and current teacher recommendation for the given subject area. Applications are available in each of the house offices, the Career Center, and on the school's website.

## ADVANCED PLACEMENT BIOLOGY #4006445

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Advanced Placement Biology is designed to be the equivalent of a college level introductory biology course for biology majors. The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and to help students gain an appreciation of science as a process. Primary emphasis will be placed on developing and understanding important biological concepts and their practical application in everyday life. Topics include biochemistry, organisms and populations, biotechnology, cell energy transformations, genetics and evolution. Thirteen labs mandated by the College Board will be completed throughout the year. *Additional labs, outside readings and interactive web site activities will be utilized* by instructor to supplement units when necessary. Students are required to take the AP examination in May.

## ADVANCED PLACEMENT CALCULUS AB #3012445

(12<sup>th</sup> grade)

This course is primarily concerned with developing the student's understanding of concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus with concepts, results and problems being expressed geometrically, numerically, analytically, and verbally. The TI 89, 83+ or 84+ graphing calculator is required as part of the AP exam, and ownership is highly encouraged. Students are required to take the AP examination in May. **Prerequisite: Precalculus or HCC Precalculus** 

## **ADVANCED PLACEMENT CHEMISTRY #4016345**

(11<sup>th</sup> & 12<sup>th</sup> grades)

This course involves an in-depth study of chemistry comparable to that offered in a college inorganic chemistry class. Structure and states of matter, thermodynamics, various equilibria, electrochemistry, and precipitation reactions are among the topics covered. Students should have a strong mathematical background to ensure successful preparation for the Advanced Placement Chemistry Exam. This course will meet every other day to conduct labrelated activities. Students are required to take the AP examination in May. **Prerequisite: Chemistry I/Lab** 

## ADVANCED PLACEMENT COMPUTER SCIENCE #3210345

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This is a college level computer science course with major emphasis on programming methodology, algorithms, and data structures. Applications are used to develop awareness of the need for particular algorithms and data structures, as well as to provide topics for programming assignments. The JAVA programming language will be the vehicle for implementing computer based solutions to particular programs. The course content is prescribed by the current College Entrance Examination Board's Advanced Placement Course Description for Advanced Placement Computer Science. Students who enroll in this course should plan on additional computer time outside of class. Participation in the Advanced Placement Computer Science Exam is required. Students are required to take the AP exam in May. Prerequisite: Programming I

## ADVANCED PLACEMENT ENGLISH LANGUAGE & COMPOSITION #1003335

(11<sup>th</sup> grade)

This course prepares students for the AP English Language and Composition exam. Students will write in a variety of forms – narrative, exploratory, expository, and argumentative. The purpose of this course is to enable students to

read complex texts with understanding and to write high-level prose that allows for effective communication with mature readers. Students in this class will also concentrate on an in-depth study of American literature. This course is equivalent to a college composition course. Students are required to take the AP examination in May.

## ADVANCED PLACEMENT ENGLISH LITERATURE & COMPOSITION #1005445 (12<sup>th</sup> grade)

This course prepares students for the AP English Literature and Composition exam. Students enrolled in this course will undertake an intensive study of representative works of recognized literary merit from world literature. Students will concentrate on the elements of structure, style, theme, figurative language, imagery, symbolism, and tone. Attention to textual detail and historical context will provide a foundation for interpretation. Summer reading is required. Students are required to take the AP examination in May.

## ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE #4000345

(11<sup>th</sup> & 12<sup>th</sup> grades)

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 or preventing them. Students are required to take the AP examination in May. Prerequisite: Two years of a lab science or one year of a lab science and General Science, and one year of Algebra is recommended but not required.

## ADVANCED PLACEMENT EUROPEAN HISTORY #2004445

(10<sup>th</sup> & 12<sup>th</sup> grades)

This Advanced Placement course is geared for those students who wish to pursue a college level social science course. Students will learn the basic chronology, concepts, and major historical facts and personalities, and historical analysis of trends from approximately 1450 (the High Renaissance) to the present. Students who pass the AP examination in European History may receive college credit and appropriate placement in their freshman year in college. Students are required to take the AP examination in May.

## ADVANCED PLACEMENT PHYSICS I ALGEBRA-BASED #4010355

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This is an introductory, algebra-based physics course, promoting conceptual physics reasoning and understanding, with a focus on: kinematics; Newton's laws of motion; torque; rotational motion and angular momentum; gravitational and circular motion; work, energy, and power; linear momentum; oscillations; mechanical waves and sound; and an introduction to electric circuits. Students are required to take the AP exam in May. This course is designed to meet the requirements for a first semester, college physics course. This course is a prerequisite for AP Physics 2 Algebra-Based.

## ADVANCED PLACEMENT PHYSICS 2 ALGEBRA-BASED #4010365

(11<sup>th</sup> & 12<sup>th</sup> grades)

This is an introductory, algebra-based physics course, promoting conceptual physics reasoning and understanding, with a focus on: fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics, electric circuits with capacitor; magnetic fields; electromagnetism; physical and geometric optics; and topics in modern physics. Students are required to take the AP exam in May. This course is designed to meet the requirement for a first semester, college physics course.

## ADVANCED PLACEMENT PSYCHOLOGY #2005445

 $(11^{th} & 12^{th} grades)$ 

This full-year psychology course is geared for students who wish to pursue a college level psychology course. This course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to psychological facts, principles, and phenomena associated with each of the major subfields with psychology. Students are required to take the AP exam in May. Individual colleges may grant college credit depending on their acceptance of the scores on the AP exam.

## ADVANCED PLACEMENT SPANISH LANGUAGE #1527445

(11<sup>th</sup> & 12<sup>th</sup> grades)

The AP Spanish course focuses on the mastery of the four skills of listening, speaking, reading, and writing. Aural/oral skills are improved through the use of tapes and daily conversation practice. Intense grammar review is ongoing throughout the year. Students also read literary and journalistic prose, understand lectures and conversational language, participate in class discussion and conversations, and write essays. Students are required to take the AP examination in May.

## ADVANCED PLACEMENT STATISTICS #3011345

(11<sup>th</sup> & 12<sup>th</sup> grades)

The purpose of the Advanced Placement course in Statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, experimental design, anticipating patterns, and statistical inference. The TI 83+ or 84+ graphing calculator is required as part of the AP exam, and ownership is highly encouraged. Students are required to

take the AP examination in May. Prerequisite: Algebra II at the Honors or College Prep level or teacher approval

# ADVANCED PLACEMENT UNITED STATES GOVERNMENT & POLITICS #2010345 (11th and 12th grades)

The AP United States Government and Politics course gives students an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret United States government and politics and the analysis of specific examples. It requires familiarity with the various institutions, groups, beliefs, and ideas that constitute United States government and politics. Students will become acquainted with the variety of theoretical perspectives and explanations for various behaviors and outcomes. All students are required to take the AP exam in May. Individual colleges may grant college credit depending on their acceptance of the scores on the AP exam. This course will also fulfill the State of Connecticut Civics requirement.

## ADVANCED PLACEMENT UNITED STATES HISTORY #2003335

(11<sup>th</sup> grade)

This Advanced Placement course is geared for those who wish to pursue a college level social science course in their junior year. The AP History course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States History. Students will learn to assess historical materials, their relevance to given interpretive problems, reliability and importance, and to weigh the evidence and interpretations presented in historical scholarships. Students who pass the Advanced Placement examination in United States History may receive college credit and appropriate placement in their freshman year in college. This course may be taken in place of the regular required United States History course. Students are required to take the AP examination in May.

## ADVANCED PLACEMENT WORLD HISTORY #2001115

(9<sup>th</sup> grade)

This Advanced Placement course is geared for those students who wish to pursue a college-level social science course. Course content includes the investigation of five course themes and nineteen key concepts in six different chronological periods, from approximately 8000 B.C.E. to the present. Students are required to take the AP exam in May. Individual colleges may grant college credit depending on their acceptance of the scores on the AP exam.

# UNIVERSITY OF CONNECTICUT EARLY COLLEGE EXPERIENCE

UCONN Early College Experience (ECE) provides academically motivated students the opportunity to take university courses while still in high school. These challenging courses allow students to preview college work, build confidence in their readiness for college and earn college credits that provide both an academic and a financial head-start on a college degree. Students who participate in ECE are considered University of Connecticut non-degree students. It is not necessary to attend the University of Connecticut as an undergraduate to benefit from UCONN Early College Experience. Every ECE course is equivalent to the same course at the University of Connecticut. UCONN ECE students must successfully complete the course with a grade of C or above in order to receive university credit. Students receive a UCONN transcript verifying college credit. UCONN course credits are highly transferable to many colleges and universities across the country. Students who are interested in participating in the UCONN ECE PROGRAM must get the recommendation of a current subject area teacher. Students are charged \$25.00 per UCONN credit. There is also a University Resource fee of \$15.00 per course. For additional information visit: www.ece.uconn.edu.

UCONN ECE instructors, who are high school teachers certified as adjunct professors by UCONN faculty, create a classroom environment fostering independent learning, creativity and critical thinking – all pivotal for success in college. To support rigorous learning, University of Connecticut library resources are available to all UCONN ECE students. Shelton High School offers UCONN ECE courses in Engineering 2110; English 1010 – Seminar in Academic Writing; Calculus 1131Q/1132Q; Economics 1202 – Principles of Macroeconomics; Economics 1201 – Principles of Microeconomics; French 3267 – French Language and Culture; French 3268 – Writing in French; Spanish 3179 – Spanish Conversation: Cultural Topics; Spanish 3178 – Intermediate Spanish Composition; Music Appreciation 1001; Fundamentals of Music 1011; Physics 1201Q/1202Q.

## UCONN CALCULUS 11310/11320 (8 UCONN credits) #3010355

(11<sup>th</sup> & 12<sup>th</sup> grades)

This course is designed to provide students with the fundamentals of both differential and integral Calculus. Students will take part in the study of the theory of Calculus and its application to the real world while using appropriate technology. Topics covered include limits, continuity, differentiation, antidifferentiation, definite integrals, transcendental functions, formal integration, polar coordinates, infinite sequences and series, vector algebra, and

geometry. This course is recommended for students pursuing further study in the fields of mathematics, science, business, engineering or other highly technical fields at the college level. Current methods of teaching mathematics indicate that ownership of a graphing calculator is highly recommended for this course. **Prerequisites: Precalculus at the Honors level or HCC Precalculus/UConn application** 

# \*UCONN ECONOMICS 1201 – Principles of Microeconomics (3 UCONN credits) #2069345 (11<sup>th</sup> & 12<sup>th</sup> grades)

This course covers how the invisible hand of the market functions through the economic decisions of firms and individuals. Course content includes how prices, wages and profits are determined, resources are allocated, and income is distributed. Topical subjects, such as, energy policy and health care are also covered. **Prerequisites: UCONN Macroeconomics 1202/UCONN application** 

# \*UCONN ECONOMICS 1202 - Principles of Macroeconomics (3 UCONN credits) #2007345 (11<sup>th</sup> & 12<sup>th</sup> grades)

This course will cover the organization and function of the economic system as a total unit. Economic decisions, institutions, and policies that determine levels and rates of growth of production, employment and prices will be studied as well as government budget deficits and current interest rate policy. **Prerequisites: Teacher approval/UCONN application** 

## UCONN ENGINEERING 2110 (3 UCONN credits) #5500005

(11<sup>th</sup> and 12<sup>th</sup> grades)

The function of this course is twofold. First, it aims to teach the fundamental concepts and techniques of engineering mechanics (statics and dynamics). Second, it aims to show the implementation of these methods in engineering design. Building on advanced mathematical skills, basic concepts of statics and dynamics are introduced, practiced, and applied to simple engineering problems. Students will obtain modeling knowledge, tools, and experience appropriate for a first-year engineering course, providing the foundation for higher-level engineering courses. **Prerequisite: Successful completion of Precalculus/UCONN application** 

\*UCONN ENGLISH 1010 – Seminar in Academic Writing (4 UCONN credits) #1051345 (11<sup>th</sup> & 12<sup>th</sup> grades)
This college course will include instruction in academic writing through interdisciplinary reading. Assignments emphasize interpretation, argumentation, and reflection. Revision of formal assignments and instruction on grammar, mechanics, and style will also be included. Conferences with instructors are required. Prerequisites: Teacher approval/UCONN application

UCONN FRENCH 3267 – French Language and Culture (3 UCONN credits) #1516345 (11<sup>th</sup> & 12<sup>th</sup> grades) This college course will cover the study of French and Francophone culture through fiction, nonfiction, journalism, and film. Emphasis will be placed on perfecting both oral and written expression through discussions, presentations, and composition of assigned topics. Students must enroll in the UCONN course. Prerequisites: French III/teacher approval/UCONN application

## UCONN FRENCH 3268 – Writing in French (3 UCONN credits) #1517345

(11<sup>th</sup> & 12<sup>th</sup> grades)

This college course places emphasis on perfecting both oral and written French expression through discussion, presentations, and compositions. Course curriculum includes an advanced study of French texts and films as well as extensive practice in a variety of forms: essays, poetry, film review, and compositions. **Prerequisites: French III/teacher approval/UCONN application** 

# UCONN FUNDAMENTALS OF MUSIC 1011 WITH MUSIC THEORY I (6 UCONN credits) #7504255 ( $11^{th}$ & $12^{th}$ grades)

Music Theory I is taken in conjunction with this UCONN Fundamentals of Music/Ear Training I (1011) class. This course reviews in detail the language of music through the elements of rhythm, pitch, intervals, notation, and modality. Students will acquire knowledge of sight-reading and aural dictation. Introduction and construction of four-part harmony including modulation and analysis of classical and contemporary music are covered. Students must have permission of instructor. **Prerequisite: Teacher approval/UCONN application** 

## \*UCONN MUSIC APPRECIATION 1001 (3 UCONN credits) #7552345

(11<sup>th</sup> & 12<sup>th</sup> grades)

This college course will cover how music reflects and affects culture, society, and individuals. Musical selections range from medieval through contemporary. Listening skills and appropriate vocabulary are developed and stressed through a series of musical examples. **Prerequisites: Teacher approval/UCONN application** 

## UCONN PHYSICS 1201Q/1202Q (8 UCONN credits) #4021345

(11<sup>th</sup> & 12<sup>th</sup> grades)

This course is designed to provide a foundation for more advanced courses in physics. The topics covered include

classical dynamics, rigid-body motion, harmonic motion, waves, fluids, thermodynamics, electricity, magnetism, and optics. Laboratory work is a key component of the course and offers fundamental training in precise measurements. Students should have a strong mathematical background to ensure successful comprehension and completion of this course. Students are required to take the final exam provided by the UCONN Department of Physics. Prerequisites: Successful completion of Algebra II/Algebra II and current science teacher approval/UCONN application

# UCONN SPANISH 3178 – Intermediate Spanish Composition (3 UCONN credits) #1528345 (11<sup>th</sup> & 12<sup>th</sup> grades)

This college course provides a thorough review of grammar and methodical practice in composition leading to a command of practical idioms and vocabulary. Students will analyze different literary texts to improve their grammar and vocabulary. **Prerequisites: Spanish III/teacher approval/UCONN application** 

# UCONN SPANISH 3179 – Spanish Conversation: Cultural Topics (3 UCONN credits) #1529345 (11<sup>th</sup> & 12<sup>th</sup> grades)

This college course provides an in-depth development of speaking skills through cultural readings, group discussions and oral presentations on selected topics concerning the Spanish-speaking world. **Prerequisites: Spanish III/teacher approval/UCONN application** 

## HOUSATONIC COMMUNITY COLLEGE COLLEGE CAREER PATHWAYS

Housatonic Community College (HCC) participates in the College Career Pathways (CCP) 2+2 Associate Degree Program. The College Career Pathways program is a high school-based and college-based experience that combines academic and occupational learning.

College Career Pathways (formerly Tech Prep) serves as a link between secondary and post-secondary education and offers up to four years of a sequential program of study that includes mathematics, science, communication and a career course at the secondary and post-secondary levels to prepare students for career fields. Courses begin in the 10th grade and may result in an award of an associate degree or certificate after two years of post-secondary training. The College Career Pathways program is designed to build student competency in academic subjects and provide academic preparation in a career area. A grade of "C" or better must be earned by the student to be awarded college credit for the articulated course(s), as defined and approved by HCC faculty.

High school students interested in this program should speak with their guidance counselor or the Housatonic Coordinator for High School Outreach Programs. The following HCC CCP program courses are offered at your high school.

Students should refer to the course selection booklet (see p. 51) and speak to their school counselor or the appropriate department chairperson for information about the Career Pathways program.

# SHELTON HIGH SCHOOL 2014-2015 Articulated Courses

<u>CCP Career & Technical Education (CTE) Courses</u>

Principles of Financial Accounting – ACC\* E113 – 3 credits

Principles of Marketing – BMK\* E201 – 3 credits

CCP Academic Courses

Pre-Calculus – MAT\* E186 – 4 credits

Chemistry – CHE\* E111 – 4 credits

Composition – ENG\* E101 – 3 credits\*\*

\*\* Articulation under review

## HCC ALGEBRA II #3023141 H

(10<sup>th</sup> & 11<sup>th</sup> grades)

This college-level course is designed, in cooperation with Housatonic Community College, for students interested in acquiring math competency skills equal to those expected in a college algebra course. Topics include linear equations and inequalities, graphs of functions, polynomials, factoring, rational expressions and equations, roots, radical and quadratic functions. **Prerequisite: Geometry or Geometry for Engineers at the Honors or College Prep level or teacher approval** 

## HCC CHEMISTRY/LAB #4024341 H

(11<sup>th</sup> & 12<sup>th</sup> grades)

This four-credit college level class will provide students with an introduction to the fundamental principles and the concepts of inorganic chemistry. Atomic structure, periodic relationships, chemical bonding, kinetics, and equilibria are examined in sufficient detail to permit their use in understanding of chemical reactions. The laboratory component will stress the acquisition of skills in data gathering and in manipulation of apparatus and materials. Students will be required to meet the expectations and requirements set forth by Housatonic Community College. **Prerequisite: Successful completion of 2 years of science and mathematics, along with application process** 

## HCC ENGLISH IV COMPOSITION #1055551 H

(12<sup>th</sup> grade)

This full-year English course stresses college-level reading and writing proficiency and provides seniors the opportunity to earn three credits for English 101 from Housatonic Community College. Students will study composition skills necessary for effective written communication. The course includes analyses of non-fiction prose works. Descriptive, narrative, persuasive, expository, and research essays are required for a final portfolio assessed by both high school and HCC instructors. To be eligible for the course, students must receive a C or better in English III and have current English teacher approval.

## HCC FINANCIAL ACCOUNTING I #6004241 H

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This college-level course is designed, in cooperation with Housatonic Community College, for the student interested in acquiring accounting competency skills equal to those expected in a college financial accounting course. The course is a study of the accounting process as it relates to the recording, measurement, and communication of the business entity's financial data and is recommended for all students pursuing a career in business.

## HCC MARKETING #6004341 H

(11th & 12th grades)

This full-year course is designed for juniors and seniors who are interested in furthering their education in the field of marketing. Students will utilize the Housatonic Community College curriculum to study the scope and significance of marketing, management, and entrepreneurial principles; to make rational economic decisions; and to exhibit social responsibilities in a global economy. Specific emphasis is placed on marketing consumer goods while developing the essential elements of the "marketing mix."

## HCC PRECALCULUS #3028341 H

(11<sup>th</sup> & 12<sup>th</sup> grades)

This college-level course is designed, in cooperation with Housatonic Community College, for students interested in acquiring math competency skills equal to those expected in a college precalculus course. Topics include functions and their graphs, polynomial, exponential and logarithmetic functions, trigonometry, and analytic trigonometry. **Prerequisite: HCC Algebra II or HCC approval** 

## CAREER AND TECHNICAL EDUCATION WORKSITE EXPERIENCE

The following courses are focused toward senior students wishing to gain knowledge and experience related to developing career goals and post high school education or employment opportunities. Each course offers 2 credits toward graduation and requires the approval of the instructor before acceptance into the program. Only one of these courses may be selected during the senior year. Final acceptance into the program is dependent on the student's overall academic and behavioral record. Students, parents, teachers, counselors, program coordinators, and employers work together to develop a detailed plan to connect school-based and work-based learning. Interested students can learn more about the program by speaking to their school counselor or to the individual worksite learning instructors.

## **Art Department**

\*\*Art Career Internship (12<sup>th</sup> grade)

## **Career & Technical Education Department**

\*\*Cooperative Work Experience Internship (12<sup>th</sup> grade)

- \*\*Marketing II Internship (12<sup>th</sup> grade)
- \*\*Hospitality/Food Service Careers (12<sup>th</sup> grade)
- \*\*Technology Occupations Internship (12<sup>th</sup> grade)

## **REGIONAL PROGRAMS**

Parents and students are encouraged to explore other educational opportunities that are offered in the school district locally and regionally. These options include magnet, charter, lighthouse and vocational-technical schools; Open Choice and inter-district programs; and vocational agriculture centers. Contact the School Counseling Department for further information on these School Choice options.

Bridgeport Regional Aquaculture Science and Technology Education Center, Grades 9–12 (#4030140): Located in Bridgeport this program provides students with the opportunity to investigate engine repair, marine electronics, boat design, vessel construction techniques, marine restoration, commercial fishing, and vessel operations. Instruction is offered in marine sciences such as marine pathology, marine chemistry, meteorology, and aquaculture finfish and shellfish production. The program of studies assists students to become environmentally informed citizens, and prepares them to work in marine related areas or to pursue higher education opportunities in marine studies. Regular academic classes are taken at Shelton High School in the morning and Aquaculture classes are taken in Bridgeport from 12:00 to 1:30 p.m. Interested students should contact their school counselor for an application and additional information.

Bridgeport Regional Aquaculture Science and Technology Education Center—BACA, Grade 12 (#4030150): The goal of the BACA Program is to offer students the practical knowledge and skills necessary to pursue either employment in the marine environment or a smooth transition to the many post-secondary educational opportunities available. The BACA Program is designed primarily for 12<sup>th</sup> grade students who have expressed a desire for a concentrated, interdisciplinary approach to aquaculture education. Students will be responsible for the practical application of principles and concepts of biology, chemistry, physics, math, history, earth science, and astronomy as it relates to aquaculture. Students enrolled in the BACA program are awarded up to 5 credits. The integrated course of studies offers an in-depth study of aquaculture to include the origins of aquaculture, aquatic ecosystems, aquaculture engineering, and survey and analysis. The activities of the program are enhanced by the use of the research vessel M/V Catherine Moore.

Regional Center for the Arts, Grades 9–12 (#7060140): Located in Trumbull, RCA is a performing arts magnet high school. Students attend Shelton High School in the morning and attend RCA Monday through Thursday from 1:30-4:30 p.m. Courses in dance, theatre, musical theatre, film/video production, and some creative script writing are offered. Interested students should contact their school counselor for additional information and an application.

## INDEPENDENT STUDY

Independent Study is designed for the student who is broadly and deeply curious about a particular subject and who can best fulfill their needs through an in-depth examination of a specific topic or subject which is not provided in the regular course offerings. It may involve research in the library, construction in a shop, investigation in a laboratory or a community project. It will be a self-directed learning activity completely divorced from any course requirement and will place emphasis on self-responsibility and self-regulation for learning. It is possible to earn up to one full credit in this manner. Any student interested in enrolling in an Independent Study course should first consult with his/her counselor and then obtain the Independent Study application. The Headmaster will give final approval. Deadline for submitting Independent Study Applications is ten days from the commencement of the semester. This program is only possible when a course offering the same material is not offered.

## ONLINE COURSE CREDIT POLICY

Shelton High School will only accept online learning requests from an approved accredited institution. A student requesting to take an online course for credit must complete the appropriate application, secure all required signatures, and submit the application by the defined deadline. A maximum of two credits per year, including summer school online credit, will be allowed for online learning. Online courses will not be tracked, with the exception of advanced placement online coursework. Online courses will be calculated into a student's GPA as

untracked courses, with the exception of advanced placement online coursework. The student/parent/guardian is responsible for all financial expenses or fees for online learning. The high school administration reserves the right to deny applications for online coursework and acceptance of online credits.

## VIRTUAL HIGH SCHOOL

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Virtual High School is an accredited provider of "for-credit Net Courses." VHS is a nonprofit, worldwide collaboration of schools, teachers and students founded in 1996 by industry leaders including Apple, Cisco, Dell and Microsoft in partnership with the National Education Association. VHS offers over 200 courses in Arts, Business, English, Language Arts, World Language, Life Skills, Mathematics, Science, Social Studies and Technology. VHS Net Courses are either one semester or a full year in duration. Courses are delivered to students around the United States and the world via the internet. Using a private password, each student accesses his or her Net Course from any computer with an internet connection. VHS offers full year Advanced Placement courses. Virtual High School courses using the AP designation have been approved by the College Board's AP audit. All AP VHS students must take the AP exam. Most VHS AP courses require summer work. VHS AP students must be accepted into the SHS AP program. Financial support for fall and spring semester VHS courses is provided by the Shelton Board of Education.

## **VOLUNTEER COURSE FOR CREDIT**

## SCHOOL AND COMMUNITY #2016140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Volunteering allows students to work actively in our community by helping others. Students may volunteer after school, weekends, and during the summer at community organizations, elderly housing facilities, schools or programs working with children, libraries, and other nonprofit agencies. Excluded from the list of work sites are those that students are involved in through clubs offered at Shelton High School such as Interact, Make a Difference, or Habitat for Humanity. Participation in these groups is encouraged as part of the regular program of extracurricular activities. Students who volunteer may not receive any monetary remuneration. Volunteer hours marked for Scout badges, court-ordered community service, etc. cannot be counted for School and Community. Students must turn in a contract signed by themselves and the supervisor responsible for monitoring their hours. This contract must be approved by the volunteer coordinator, Mrs. Riddle, in the Career Center, before volunteer work for credit can begin. Students must regularly hand in time sheets with hours verified to the volunteer coordinator. One credit will be awarded when a student completes 150 hours of volunteering. Seniors must complete all hours for credit by May of their senior year. Interested students should see their counselor or Mrs. Riddle in the Career Center. The 150 hours of volunteering is in addition to the 40 hours (10 hours per year) that a student must complete as part of their graduation requirements. A student will be required to show documentation of all hours completed.

## STUDENT SUCCESS PLANS

The Student Success Plan (SSP) is an individualized plan that is student-driven and supports growth in three areas:

- Academic Development
- College/Career Development
- Social/Emotional/Physical Development

The SSP started in the 2012-2103 school year; the SSP begins in the 5th grade and continues through high school to provide every student the opportunity to set and monitor personal goals related to their own future planning.

Every student at Shelton High School will be assigned an SSP activity period. These activities will either be completed independently by the student, in advisory or with their school counselor. The purpose of these activities is to help students learn more about themselves, their strengths, and areas of interest. Students will document SSP work in an electronic portfolio in Infinite Campus.

## GRADUATION REQUIREMENTS FOR THE CLASSES OF 2015 AND 2016

1. A total of 24.7 credits is required for graduation. Required credits are as follows:

**English** 4.0 credits **Mathematics** 3.0 credits 3.0 credits **Social Studies** (including 1.0 in United States History and .5 in Civics) Science 3.0 credits

(including at least 1.0 in General Science/General Technical Science, 1.0 in

Biology, plus 1additional lab science course)

Fine Arts or Career & Technical Education 1.0 credit

(Courses may be chosen from Art, Music, Career & Technical

Education or by taking Acting I or Acting II)

**Physical Education** 1.0 credit **Health Education** .5 credit .5 credit +Computer Literacy **Electives** 7.0 credits **Reading/Writing Assessment** .1 credit **Mathematics Assessment** .1 credit **Science Assessment** .1 credit **Community Service** .4 credit

(including .1 credit for 10 hours of service each year)

**CAPSTONE** (Senior Project) 1.0 credit **Total for graduation** 24.7 credits

2. HCC Financial Accounting I and Principles of Managerial Accounting and Computer Science courses taught by the Math Department do not fulfill the mathematics graduation requirement.

- 3. Honors level students who have been allowed to take Biology in their freshman year must take Chemistry/Lab, Physics/Lab and/or any other AP science course to fulfill the three-credit requirement.
- 4. +Computer Literacy is a requirement for graduation (at least .5 credits). Each course listed below will fulfill this requirement; however, these courses cannot simultaneously fulfill a Career and Technical Education requirement.

Advanced Placement Computer Science \*Intermediate CAD

Creative Advertising/Desktop Publishing \*Basic CAD

\*Architecture \*Graphic Arts Technology **Computer Applications Engineering Principles** \*Computer Applications I \*3D Animation II Programming I Journalism I

\*Introduction to 3D Animation \*Personal Keyboarding Video Production \*Computer Applications II

\*Introduction to Engineering Design/Production Yearbook Journalism

\*Video & Photography \*Digital Art Using Photoshop \*Computer Aided Architectural Design & Modeling Fine Art Photography

**UCONN** Engineering \*Introduction to Microelectronics

- 5. The Reading/Writing Assessment, Mathematics Assessment, and Science Assessment are achieved by scoring at the proficiency level or better on the Connecticut Academic Performance Test (CAPT), on alternate assessments offered by SHS or by completing prescribed coursework during a student's senior year
- 6. Students are required to complete 10 hours of community service per year, a total of 40 hours prior to graduation. Students will receive .1 credits for 10 hours of service each year. Students may not earn more than .1 credits per year for service. Students must submit a signed contract for themselves and their supervisor responsible for monitoring their hours. This contract must be approved by the Headmaster or his/her designee prior to beginning service hours.
- 7. The minimum course load per semester is 7.0 credits. Exceptions to this regulation must be approved by the Headmaster and student's Housemaster.
- 8. A student will earn his/her diploma and may participate in the graduation ceremony only if all academic requirements and obligations are met.

## GRADUATION REQUIREMENTS FOR THE CLASSES OF 2017 AND 2018

1. A total of 25.7 credits is required for graduation. Required credits are as follows:

4.0 credits English **Mathematics** 3.0 credits **Social Studies** 3.0 credits (including 1.0 in United States History and .5 in Civics) Science 4.0 credits (including at least 1.0 in General Science, 1.5 in Biology, plus an additional lab science course) Fine Arts or Career & Technical Education 1.0 credit (Courses may be chosen from Art, Music, Career & Technical Education or by taking Acting I or Acting II) 1.0 credit **Physical Education Health Education** .5 credit 7.5 credits **Electives** Reading/Writing Assessment .1 credit **Mathematics Assessment** .1 credit **Science Assessment** .1 credit **Community Service** .4 credit (including .1 credit for 10 hours of service each year) **CAPSTONE** (Senior Project) 1.0 credit **Total for graduation** 25.7 credits

- 2. Students who pass Algebra I in eighth grade at Shelton Intermediate School will be given high school credit.
- 3. Students who pass a World Languages course in Eighth Grade (Class of 2018) at Shelton Intermediate School will be given high school credit.
- 4. HCC Financial Accounting I and Principles of Managerial Accounting and Computer Science courses taught by the Math Department do not fulfill the mathematics graduation requirement.
- 5. Honors level students who have been allowed to take Biology in their freshman year must take 2 additional lab science courses to fulfill the four-credit requirement.
- 6. The Reading/Writing Assessment, Mathematics Assessment, and Science Assessment are achieved by scoring at the proficiency level or better on a state assessment.
- 7. Students are required to complete 10 hours of community service per year, a total of 40 hours prior to graduation. Students will receive .1 credits for 10 hours of service each year. Students may not earn more than .1 credits per year for service. Students must submit a signed contract for themselves and their supervisor responsible for monitoring their hours. This contract must be approved by the Headmaster or his/her designee prior to beginning service hours.
- 8. The minimum course load per semester is 7.0 credits. Exceptions to this regulation must be approved by the Headmaster and student's Housemaster.
- 9. A student will earn his/her diploma and may participate in the graduation ceremony only if all academic requirements and obligations are met.

## WEIGHTED AND UNWEIGHTED GRADE POINT VALUES

A student's weighted and unweighted grade point average will be calculated through the use of the following chart beginning in the 2013-2014 school year:

## Classes of 2015, 2016, 2017, and 2018

	A+	Α	Α-	B+	В	B-	C+	С	C-	D+	D	F
АР	107	104	101	97	94	91	88	84	81	78	74	50
Honors	101	97	94	91	88	84	81	78	74	71	68	50
College Prep	98	95	91	88	85	81	78	75	71	68	66	50
Academic	94	91	88	84	81	78	74	71	68	65	61	50

(Set as Base Value)

## **CLASS RANK**

Class rank is determined by utilizing the number of quality points for each subject, which is assigned an academic level. This is computed by adding all the quality points earned and dividing by the number of courses assigned quality points. This is done for each school year.

## PROMOTION REQUIREMENTS FOR THE CLASSES OF 2015, 2016, 2017, AND 2018

- For promotion to Grade 10 students must earn **4.6** credits through coursework. Students must pass **English** I and earn the required **.1** credit for community service.
- For promotion to Grade 11 students must earn **11.2** credits through coursework. Students must pass **English II** and earn the required **.1 credit for community service**.
- For promotion to Grade 12 students must earn 17.3 credits through coursework. Students must pass English III and earn the required .1 credit for community service. In addition, students promoted to Grade 12 must have fulfilled enough of the graduation requirements to allow the student to graduate in June.

## **COLLEGE ADMISSION REQUIREMENTS**

Admission requirements for colleges vary greatly so it is advisable for students to begin an early study of college catalogues in order to assure their having the required subjects for entrance to the college of their choice. Students are advised to take the most challenging courses that they can handle and consult with their school counselor when planning a high school course of study.

## **Revised College Admission Requirements**

The Connecticut State University System has revised their requirements for admission. These schools include Central Connecticut State University, Eastern Connecticut State University, Western Connecticut State University, and Southern Connecticut State University. The new requirements will take effect in 2015. The coursework that will now be required for admission is listed below.

**English:** 4 years

**Math:** 4 years including Algebra I and II, Geometry, and a fourth year of an algebra-intensive

course such as Probability or Trigonometry

**Science:** 3 years including Biology, Chemistry, and/or Physics; two must be a lab course

**Social Studies:** 3 years including at least 1 year in U.S. History and the equivalent of a half-year of Civics

or American Government

World Language: 2 years in a single world language required; 3 recommended **STEM Elective:** 1 year of science, technology, engineering, or math elective

**Humanities:** 1 year of an elective in the humanities **Arts:** 1 year of coursework in the arts

Phys. Ed/Life Skills: 1 year of physical education and 2 years of life skills elective courses such as

career/technical education, English as a Second Language, personal finance, or foods and

nutrition

## **Minimum Course Requirements**

**FRESHMAN SOPHOMORE JUNIOR SENIOR** English IV English I English II English III Physical Education Physical Education Elective Elective Mathematics Mathematics Mathematics Elective Social Studies Modern World History **United States History** Elective General Science Biology I Science Elective Elective Elective Elective Elective

Elective Elective

## **Recommended College Program**

**FRESHMAN** SOPHOMORE JUNIOR **SENIOR** English III English I English II English IV World History Modern World History United States History Social Studies General Science Biology/Lab Science (Chem./Lab) Science (Physics/Lab) Math (Geometry) Math Elective Math (Algebra I) Math (Algebra II)

Language Elective Elective Elective Elective Elective

Physical Education Physical Education

## NCAA ELIGIBILITY CENTER QUICK REFERENCE GUIDE

## **Divisions I and II Initial-Eligibility Requirements**

## **Core Courses**

- NCAA Divisions I and II require 16 core courses. See the charts below.
- Beginning August 1, 2016, NCAA Division I will require 10 core courses to be completed prior to the seventh semester (7 of the 10 must be a combination of English, math or natural or physical science that meet the distribution requirements below). These 10 courses become "locked in" at the start of the 7<sup>th</sup> semester and cannot be retaken for grade improvement.
- Beginning August 1, 2016, it will be possible for a Division I college-bound student-athlete to still receive athletics aid and the ability to practice with the team if he or she fails to meet the 10-course requirement, but would not be able to compete.

## **Test Scores**

- **Division I** uses a sliding scale to match test scores and core grade-point averages (GPA). The sliding scale for those requirements may be found at <a href="https://www.eligibilitycenter.org">www.eligibilitycenter.org</a>.
- **Division II** requires a minimum SAT score of 820 or an ACT sum score of 68.
- The SAT scores used for NCAA purposes include <u>only</u> the critical reading and math sections. The writing section of the SAT is not used.
- The ACT scores used for NCAA purposes is a <u>sum</u> of the following four sections: English, math, reading and science.
- When you register for the SAT or ACT, use the NCAA Eligibility Center code of 9999 to ensure all SAT and ACT scores are reported directly to the NCAA Eligibility Center from the testing agency. Test scores that appear on transcripts will not be used.

## **Grade-Point Average**

- **Be sure** to look at your high school's List of NCAA Courses on the NCAA Eligibility Center's website (<a href="www.elibibilitycenter.org">www.elibibilitycenter.org</a>.) Only courses that appear on your school's List of NCAA Courses will be used in the calculation of the core GPA. Use the list as a guide.
- For more information, visit the NCAA Eligibility Center website at www.eligibilitycenter.org.

The table below indicates the minimum core course requirements:

*NCAA Eligibility	Division I	Division II			
Core Course Requirements	<ul> <li>16 core courses</li> <li>4 years English</li> <li>3 years of Math (Algebra I or higher)</li> <li>2 years of Natural/Physical Science</li> <li>1 year of additional English, Math, or Natural/Physical Science</li> <li>2 years of Social Science</li> <li>4 years of additional courses</li> </ul>	<ul> <li>16 core courses</li> <li>3 years English</li> <li>2 years of Math (Algebra I or higher)</li> <li>2 years of Natural/Physical Science</li> <li>3 years of additional English, Math, or Natural/Physical Science</li> <li>2 years of Social Science</li> <li>4 years of additional courses</li> </ul>			
SAT/ACT	Sliding Scale SAT/ACT commensurate with	Minimum 820 SAT (reading and math			
Requirements	GPA	combined)			
	*see – www.elgibilitycenter.org	Minimum 68 ACT (sum score)			
Minimum GPA	Sliding Scale SAT/ACT commensurate with	2.0 on a 4. Scale in NCAA approved			
	GPA	courses			

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<sup>\*</sup> Source: www.eligibilitycenter.org

# CAREER AND TECHNICAL EDUCATION COURSES

## **BUSINESS AND FINANCE EDUCATION**

## \*BUSINESS MANAGEMENT #6053340

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course focuses on the role of management in business. Management is the process of using organizational resources effectively and efficiently to achieve organizational goals through planning, organizing, leading and directing, and evaluating and controlling. We will study management functions and theories, business organizations, personal management skills, ethics and social responsibility, human resources management, technology and information systems, financial decision making, and the importance of teamwork and leadership.

## **COMPUTER APPLICATIONS #6016340**

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

In this full-year course, students will explore Microsoft Office, an integrated software program consisting of Microsoft Word, Excel, Access, and PowerPoint. Upon completion of the course, students will have gained knowledge and proficiency in word processing, spreadsheet, database, and presentation applications, which will benefit students in their personal, academic, and business environments.

\*COMPUTER APPLICATIONS I #6066240 (9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)
In this half-year course, students will explore Microsoft Word and Excel. Upon completion of the course, students will have gained knowledge and experience working with word processing and spreadsheet software applications, which are beneficial in today's technological world. This course is strongly recommended for students who may wish to pursue a career in accounting or finance.

## \* COMPUTER APPLICATIONS II #6068240

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

In this half-year course, students will explore Microsoft Access and PowerPoint. Upon completion of the course, students will have gained knowledge and experience working with database and presentation software applications, which can benefit them in their personal, academic, and business environments. Prerequisite: Proficiency in Microsoft Word

## \*\*COOPERATIVE WORK EXPERIENCE INTERNSHIP #6030440 (2 credits)

(12<sup>th</sup> grade)

This internship course enables seniors to investigate professional careers in a field in which they might have an interest. In addition to maintaining a weekly journal and participating in a school-to-career class, students will spend at least six hours a week at a paid job site, observing and working with experts in their chosen field. These positions will take place after school hours. Seniors with "Senior Privilege" may leave early from school to attend his/her job site. Students may earn a Connecticut Career Certificate. Students must abide by the terms and conditions of the Cooperative Work Experience contract.

## \*ENTREPRENEURSHIP #6054140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This half year course takes students through the process of owning and operating a business. Entrepreneurship integrates the functional areas of business which include accounting, finance, marketing, management as well as the legalities involved in business ownership. Throughout the course students will work on various components of a business plan. By course end students will have a complete business plan.

## \*GLOBAL BUSINESS STUDIES #6058350

 $(9^{th}, 10^{th}, 11^{th}, \& 12^{th} \text{ grades})$ 

Students will explore various facets of our global economy and will gain a basic understanding of the role of international business. Through various projects and activities, students will analyze how the global economy impacts business at all levels, including the local, state, national, and international levels. Students will gain exposure to the interrelatedness of social, cultural, political, legal, and economic factors that shape and impact the global business environment. They will explore factors that define what is considered ethical and socially responsible business behavior in the global business environment. Students will develop an awareness and appreciation for differences in various cultures.

HCC FINANCIAL ACCOUNTING I #6004241 H (9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)
This college-level course is designed, in cooperation with Housatonic Community College, for the student interested in acquiring accounting competency skills equal to those expected in a college financial accounting course. The course is a study of the accounting process as it relates to the recording, measurement, and communication of the

business entity's financial data and is recommended for all students pursuing a career in business. Students successfully completing this program may earn 3 college credits from Housatonic Community College.

## HCC MARKETING #6004341 H

(11<sup>th</sup> & 12<sup>th</sup> grades)

This full-year course is designed for juniors and seniors who are interested in furthering their education in the field of marketing. Students will utilize the Housatonic Community College curriculum to study the scope and significance of marketing, management, and entrepreneurial principles; to make rational economic decisions; and to exhibit social responsibilities in a global economy. Specific emphasis is placed on marketing consumer goods while developing the essential elements of the "marketing mix."

## INTRODUCTION TO BUSINESS #6001140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This full year course introduces students to the real world of business and enables students to relate key business concepts to their own lives as citizens, wage earners, and consumers. Students will develop critical thinking and problem solving skills as applied to economic, technological, ethical, and social issues. Areas of study include career exploration and planning; resume writing, successful job interviewing, business economic systems, forms of organizational structure, business ownership and general operations, planning and control, human resources and leadership styles, and personal finance and budgeting. This course is strongly recommended for students who desire to operate their own business or who will be pursuing a career in business.

## \*INTRODUCTION TO ECONOMICS #6066340

(11<sup>th</sup> & 12<sup>th</sup> grades)

This class gives an overview to both Macro and Micro Economics. Topics covered include world economic systems, supply and demand, the stock market, and managing a business. This is an excellent class for anyone interested in business or politics.

## \*INVESTING AND THE STOCK MARKET #6051140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Students will be given the opportunity to explore various vehicles for investing, including stocks, bonds, and mutual funds. Students will learn the fundamentals of these investment options and will explore associated risks and rewards of investing. This course will explore the Stock Market and publicly traded companies and their stock performance. Students will participate in a stock market investing simulation where they will be given the opportunity to select and track a stock portfolio over a period of time.

## \*LAW STUDIES #6058340

(11<sup>th</sup> & 12<sup>th</sup> grades)

How law affects the student now and in his/her future life and business career is covered in this half-year course. Legal terms, concepts, and principles are explained and court cases are studied. Topics covered include history of law, our legal system, contracts, sales, real estate, and torts.

## MARKETING I (DECA) #6021240

(11<sup>th</sup> & 12<sup>th</sup> grades)

Marketing I is designed to prepare students interested in employment or in further study of careers dealing with management, merchandising, and marketing. It comprises fields in Finance, Selling, Marketing, and Store Management. Students will have the opportunity to join Distributive Education Clubs of America.

## \*\*MARKETING II INTERNSHIP #6022440 (2 credits)

(12<sup>th</sup> grade)

Marketing II is a continuation of Marketing I, preparing those students interested in immediate employment or in further study of careers dealing with management, merchandising, and marketing. Topics studied include Distribution, Pricing, Marketing Information Management, Product and Service Management, Entrepreneurship and Finance, a Sports and Entertainment Marketing Mini-Simulation, Virtual Business Internet Marketing Simulation, and Career/Profession Development. Marketing II will include a supervised internship program. This program will enable the student to gain on-the-job, practical experience in the field of his/her interest. This course is academically aligned with Housatonic Community College. Students may earn up to 3 College Career Pathways credits upon successful completion as well as a Connecticut Career Certificate. Contact the Marketing Education Coordinator for details before selecting this course. Prerequisite: Marketing I, or Marketing Style AND Sports & Entertainment Marketing or the discretion of the Marketing Coordinator. Seniors must be employed and will be scheduled for early dismissal to enable them to attend their job training station promptly each day.

## \*MARKETING STYLE #6023140

(9<sup>th</sup> & 10<sup>th</sup> grades)

Marketing Style is designed for students interested in the field of Fashion Marketing; the retailing area that specializes in the buying, displaying, promoting, and selling of fashion-related goods and services. Careers in Fashion Marketing, Selling, Case Studies, Fashion Promotion Plans, and Displays are examined, while students create original presentations designed to market fashions to the class. Guest speakers along with optional involvement in DECA's annual Fashion Show will allow the student to apply textbook and case study based learning

to practical, hands-on applications.

## \*MARKETING YOURSELF #6026140

(11th & 12th grades)

Marketing Yourself instructs students how to "put their best foot forward" when first seeking employment. The Marketing concepts are presented in a way that focuses upon the student as being the product which needs to be sold. Students will develop a personal portfolio, a personal resume, and learn to write effective letters of application and follow-ups. Students will be encouraged to join the DECA club (a national organization of Marketing Education students).

## \*PERSONAL FINANCIAL PLANNING #6064240

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

The financial planning course acquaints students with basic financial planning concepts and illustrates how these concepts apply to everyday life. The goal is to teach fiscal responsibility and increasing the financial literacy of teenagers. Students will study topics such as earning an income, managing income and credit, owning and protecting assets, establishing and prioritizing financial goals, developing spending, savings, and investment plans. Through the course work students will gain the necessary skills to help them establish and work toward the achievement of their financial goals.

### \*PERSONAL KEYBOARDING #6050140

(9th, 10th, 11th, & 12th grades)

Personal keyboarding is a half-year course designed for students to learn basic methods of word processing for use on a computer. Students will learn how to format personal and business letters, academic reports, tables, memos, and composing at the keyboard.

## \*PRINCIPLES OF ACCOUNTING #6004350

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This half-year course is for those students who wish to enroll in an introductory accounting class. Emphasis is placed on the general accounting concepts and the use of journals, general and subsidiary ledgers, and financial statements. Upon completion of this course, students may sign up for HCC Financial Accounting I.

## PRINCIPLES OF MANAGERIAL ACCOUNTING #6004340

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

As a continuation of HCC Financial Accounting I, this course deals with an understanding of the managerial accounting concepts as they relate to the planning, implementation, control and evaluation of the business entity's financial performance. Emphasis is based on cost behavior and control and the preparation and use of budgets as a management tool. **Prerequisite: HCC Financial Accounting I** 

## \*SPORTS AND ENTERTAINMENT MARKETING #6024140

(9<sup>th</sup> & 10<sup>th</sup> grades)

Fundamental principles and concepts identified with Sports and Entertainment Marketing will be presented along with critical thinking and decision-making skills through the application of retail marketing principles in these industries. Students will gain a fundamental knowledge of Retail Marketing along with the career opportunities in the Sports and Entertainment Marketing field.

## **FAMILY AND CONSUMER SCIENCES**

All students are strongly encouraged to enroll in the courses offered in Family and Consumer Sciences. All courses offered in Family and Consumer Sciences will fulfill the Career & Technical Education requirement for graduation. It is the belief that success in the future is tied to learning in the present and that the basic skills of everyday living must accompany the basic skills of general education in order for students to live well-rounded and personally responsible lives. It is the aim of the Family and Consumer Sciences to develop those skills, attitudes, and values that must be achieved in order to attain a useful and rewarding life. Students who are college bound, seeking vocational skills, or who wish to develop skills for personal growth will find a wide variety of courses to meet their needs and fulfill graduation requirements.

## \*BAKING AND PASTRY ARTS #5055240

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course is designed to give the student a hands-on experience in quantity baking and pastry arts principles and production. Emphasis will be placed on the mastery of marketable skills for entry-level positions in the baking industry. The course covers an introduction to occupational baking skills, to include the selection, purchase, and preparation of a wide variety of baked goods and specialty desserts. The course also builds on sanitation and safety skills learned in \*Foods and Nutrition I and \*Culinary Arts I. \*Baking and Pastry Arts introduces the student to the "front-of-the-bakeshop" operations, which includes practice in basic customer service, packaging techniques, and marketing of products. Two lab sessions weekly will reinforce the styles and techniques learned in class. **Prerequisites: \*Culinary Arts I and teacher approval** 

## \*CULINARY ARTS I #5006250

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course is designed to give the student a hands-on experience in quantity food production. Emphasis will be placed on the mastery of marketable skills for entry-level positions in the food service industry. The course covers an introduction to occupational food service skills, including the selection, purchase, and preparation of a wide variety of foods. The course also builds on nutrition, sanitation, and safety skills learned in Foods and Nutrition I and II. Culinary Arts I introduces the student to the "front-of-the-house" operations, which include practice in basic dining service, formal table settings, centerpieces, and napkin-folding techniques. **Prerequisites: \*Foods and Nutrition I and teacher approval** 

## \*CULINARY ARTS II #5006260

(10<sup>th</sup>, 11<sup>th</sup> & 12<sup>th</sup> grades)

This course is intended for students who wish to further explore the field of food service and culinary arts as a career and who wish to continue their formal education in this area. Students will develop basic employment skills, including, but not limited to, learning about specific techniques used in operating a food-related business. Special emphasis will be placed on learning about food costs and menu development, eventually leading to operating a "mini food-service operation" within the school. Students will be given the opportunity to explore careers related to the food service industry. **Prerequisites: \*Culinary Arts I and teacher approval** 

## \*FOODS AND NUTRITION I #5050140

(9<sup>th</sup>, 10<sup>th</sup>, & 11<sup>th</sup> grades)

This course is open to students who wish to develop kitchen skills and acquire knowledge of the basics of cooking and baking. This entry-level course is a prerequisite to taking other Foods and Nutrition courses, as well as Culinary Arts. Topics include nutrition, kitchen safety, safe food handling, equipment identification and use, cooking terminology, and interpreting recipes. Cooking labs to reinforce classroom learning will occur 1-2 times per week.

## \*FOODS AND NUTRITION II #5052140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This half-year course is designed for students to build on skills introduced in Foods I. Students will explore nutrition and healthful lifestyles to maintain and enhance health and wellness across the lifespan. Recipe preparations will introduce more complicated techniques and preparations, including working with yeast, preparing full meals, and financial management of the family food budget. Cooking labs to reinforce classroom learning will occur 1-2 times per week. **Prerequisite: \*Foods & Nutrition I** 

## \*\*HOSPITALITY/FOOD SERVICE CAREERS #5010440 (2 credits)

(12<sup>th</sup> grade)

This is a career and technical education work experience course designed for seniors who are *seriously interested in a career in the hospitality industry*, either in the "back of the house," working in the kitchen (prep work, food production, sanitation, inventory control, purchasing and receiving, etc.) or in the "front of the house," working in the dining room with wait staff and customers (sales, customer relations, front-office management, etc.). Students will spend one full day each week observing and working with experts at a local restaurant, hotel, convalescent home, or other food-related job site. **Prerequisites: \*Foods and Nutrition I/\*Culinary Arts I/\*Culinary Arts II/** teacher approval. Students must abide by the Work Experience Contract (see p. 50) in order to remain in the **program.** 

## \*REGIONAL AND ETHNIC CUISINE #5055340

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This half-year course studies the roots of American regional cooking and their worldwide ethnic origins. This course will also explore the diverse culinary traditions of cultures around the globe. Similarities and differences of each regional culinary tradition will be explored. A study of cultures associated with each area will be included. Cooking labs to reinforce classroom learning will occur 1-2 times per week. **Prerequisites: \*Foods and Nutrition I** 

## TECHNOLOGY EDUCATION

## \*ARCHITECTURE # 5565240

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup>grades)

Students will explore various residential and commercial architectural designs and construction principles currently being used. Auto Cad® software will be used to design a structure and produce a detailed set of plans. A model of the student designs will then be made using proper construction principles.

## \*BASIC CAD #5551140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

The basic CAD (Computer Aided Design) class will provide students with an introductory level course in the use of AutoCAD design software. This will include a two-dimensional drafting section. The students will learn basic drawing techniques as well as blueprint reading skills useful in all engineering, architecture, and construction management professions.

### \*CAREER AWARENESS #5558120

(9<sup>th</sup> & 10<sup>th</sup> grades)

Through projects, research, presentations, and reports, students will develop an individual success plan from high school through post-secondary activities. The student will utilize an individual success plan for course selection, internship work, and post-secondary school selections. Students will be involved in authentic activities that will prepare them for employment skills, team work skills, character education, and post-secondary planning. Students completing this course will develop many skills required to gain employment.

## \*CONSTRUCTION TECHNOLOGY #5552130

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Students will explore various design principles and material properties to gain an understanding of what gives a structure its strength. Utilizing hand tools, machinery, CAD and test equipment, structures such as bridges, towers, and commercial or residential buildings will be designed, constructed, and tested.

## \*DESIGNER'S WORKSHOP #7074340

(11<sup>th</sup> & 12<sup>th</sup> grades)

In a collaborative class between art and technology, students will acquire the basic skills of fashion illustration and presentation, textile surface design and ornamentation, and develop promotional skills to communicate information about product or ideas. A variety of art techniques as well as computer design programs will be explored.

## \*DIGITAL ART USING PHOTOSHOP #5554250

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Students will have the opportunity to participate in activities that will include advanced digital photography and digital art techniques using Adobe Photoshop and Adobe Illustrator. A variety of advanced software skills will be learned. Activities will include poster design, logo design, photo editing, photo retouching, and more. Basic or introductory Photoshop knowledge is helpful but not necessary before taking this course.

## **ENGINEERING PRINCIPLES #5504350**

(10<sup>th</sup>, 11<sup>th</sup> & 12<sup>th</sup> grades)

Students will be introduced to the concepts and principles used in designing and fabricating a product. Through the use of basic drawing equipment and CAD (computer aided drafting) programs such as Auto Cad®, students will produce detailed plans for their design projects. Much of the emphasis of this course will be on the proper drawing techniques. Creativeness of design and soundness of construction will also be stressed.

## \*GRAPHIC ARTS #5556140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Students will use a variety of computer programs, such as Adobe InDesign and Adobe Illustrator, to create exciting graphic designs. Using the elements and principles of design, students will use PowerPoint to create professional presentation movies. Students will also learn the basics of website creation using Adobe Dreamweaver. By the end of the course students will have learned many graphic arts techniques and presentation methods.

## \*INTERMEDIATE CAD #5557240

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course will build on pre-engineering design concepts discussed in Basic CAD. This course will explore technology related subject matter utilizing CAD software. Students will develop drafting abilities related to real life problems in the following subject areas; structural engineering, mechanical engineering, electrical engineering and architectural design. This course is designed for students interested in careers in engineering and technology related subjects. Prerequisite: Students must have completed one of the following courses: \*Introduction to Engineering Design/Production, \*Introduction to Communication Technology or \*Basic CAD.

# \*INTRODUCTION TO ENGINEERING AND DESIGN/PRODUCTION #5553140 (9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

After an introduction to CAD and the technology education laboratory students will design and build products both individually and as a group. Students will also design and construct a scale model home. This course will culminate with the class working as a team to design, prototype, and mass produce a product. This introductory course cannot be selected by General Technical Science students.

# \*INTRODUCTION TO MICROELECTRONICS: THE SCIENCE AND ENGINEERING OF ELECTRONIC DEVICES #4064440 (10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Microelectronics is a STEM course that studies the basis of all modern electronics devices such as cellular phones, MP3 players, laptop computers, digital camera, and high definition televisions. Students will analyze, design, and build digital electronic circuits to solve various real-world problems using microelectronic components, binary number systems, Boolean algebra, and the engineering design process. **Prerequisite: Successful completion of Algebra II or concurrent** 

## \*INTRODUCTION TO 3D ANIMATION #5553240

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course is an introduction to computer animation and is suitable for learners interested in 3D modeling and rendering. Students completing this course will be introduced to the basics of animating an individual 3D object. Students will learn the different methods of animating motion. From there, students are exposed to semiautomated methods for generating motion through various procedural techniques. Students will create animations that blend different techniques as needed and apply these to their models. It is recommended for students who wish to gain the technical skills to complement their creative flair.

## \*MANUFACTURING TECHNOLOGY #5550130

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Students will be given real life design problems and specifications. The class will be expected to work in a team situation to brainstorm solutions, design, prototype and mass produce products based on a set of design parameters. Students are expected to demonstrate sound design ideas/abilities. This course is a second level course building on mass production activity in the Introduction to Engineering Design/Production course.

## \*ROBOTICS #5570140

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This half-year course will allow students to study the main technical systems of Industrial Robotics. Primary focus will be on the physical, mechanical, pneumatic, and electrical systems and how they connect with industrial manufacturing robots. Students will be given an opportunity to apply robotic theory by constructing and testing several types of robotic machines. Students will be taught safety procedures, design techniques, and an approach to problem solving. Students will also have the opportunity to work directly with the FIRST Robotics Team through application, design, and prototyping.

# \*TECHNICAL LITERACY FOR THE 21<sup>ST</sup> CENTURY #6053240

(9<sup>th</sup> & 10<sup>th</sup> grades)

This course will teach students what is required to be academically successful in the 21<sup>st</sup> Century. Students will use technology, including Microsoft Office and Google Apps for Education, to analyze and evaluate information, explore, draw conclusions, test theories, and acquire knowledge. Digital literacy skills, such as creativity, innovation, problem-solving, communication, and collaboration, will be emphasized.

## \*\*TECHNOLOGY OCCUPATIONS INTERNSHIP #5520440 (2 credits)

(12<sup>th</sup> grade)

Students will attend a work experience, one full day a week, to explore various Technological Occupations with work site experiences. Students will also receive school based learning and related employability skills, workplace readiness knowledge, and career exploration and guidance. Students successfully completing this program may earn a Connecticut Career Certificate. Prerequisites: Students must have completed at least 2 Technology Education courses and instructor approval is also required. Students must abide by the Work Experience Contract (p. 50) to remain in this program. Final acceptance into program is dependent on student's overall academic record.

## \*3D ANIMATION II #5553250

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Expanding on \*Introduction to 3D Animation, this course will further explore three-dimensional modeling and animation, enhancing the students' basic animation skills. Instruction covers computer graphic theories and methods while continuing to develop a thorough understanding of the 3D software interface and basic project production methods. Students will develop further competence in the use of modeling, texturing, lighting, and simple animation tools, as well as rendering. **Prerequisite: \*Introduction to 3D Animation** 

## UCONN ENGINEERING 2110 (3 UCONN credits) #5500005

(11th and 12th grades)

The function of this course is twofold. First, it aims to teach the fundamental concepts and techniques of engineering mechanics (statics and dynamics). Second, it aims to show the implementation of these methods in engineering design. Building on advanced mathematical skills, basic concepts of statics and dynamics are introduced, practiced, and applied to simple engineering problems. Students will obtain modeling knowledge, tools, and experience appropriate for a first-year engineering course, providing the foundation for higher-level engineering courses. **Prerequisite: Successful completion of Precalculus/UCONN application** 

## \*VIDEO AND PHOTOGRAPHY #5554140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Students will have the opportunity to participate in activities that will include digital photography and digital photo editing techniques using Adobe Photoshop. Students will also learn about basic video production, including storyboarding, editing, and producing videos. Basic computer animating skills will be learned by using Adobe Flash.

## **VIDEO PRODUCTION #5506130**

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Students will learn advanced video programming and production technique, enhanced by classroom activities and fieldwork. Video editing programs may include Adobe Premiere, Adobe AfterEffects, and others. Responsibilities

will include planning, writing, reporting, producing, and editing videos. Students will gain a working knowledge of audio and video equipment, lighting, and graphic techniques. Meeting production deadlines by using problem solving skills and activities will be emphasized. Students will get an opportunity to work in a television studio and learn jobs associated with television production.

# **ENGLISH COURSES**

English is a four-year requirement at Shelton High School. Students must successfully complete English I, II, III, and IV in succession as a requisite for graduation. Under no circumstances will a student be allowed to take these courses concurrently within a single academic year. Pre-approved accelerated English courses taken during the summer may be acceptable for those students who do not successfully complete English I, II, III, or IV during the school year. Students are advised to consult with their school counselor prior to enrolling in such a course to ensure acceptance. Students may enroll in multiple English elective courses in a given year.

\*ACTING I #1052240 (10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course in acting will include an in-depth study of and practice in the art of stage performance. Students will be introduced to acting fundamentals, including stage movement and voice projection. The course will begin with theatre games and improvisations and lead to the presentation of scripted monologues and scenes.

\*ACTING II #1054240 (11<sup>th</sup> & 12<sup>th</sup> grades)

This course is an expansion of Acting I. Students will be faced with advanced situations for improvisation and also with advanced scripted scene work. By the end of the course, students will be expected to demonstrate a working knowledge of acting techniques and theories. **Prerequisites:** \*Acting I/teacher approval

## ADVANCED PLACEMENT ENGLISH LANGUAGE & COMPOSITION #1003335 (11th grade)

This course prepares students for the AP English Language and Composition exam. Students will write in a variety of forms – narrative, exploratory, expository, and argumentative. The purpose of this course is to enable students to read complex texts with understanding and to write high-level prose that allows for effective communication with mature readers. Students in this class will also concentrate on an in-depth study of American literature. This course is equivalent to a college composition course. Students are required to take the AP examination in May. **Refer to page 7 for the selection process.** 

## ADVANCED PLACEMENT ENGLISH LITERATURE & COMPOSITION #1005445 (12<sup>th</sup> grade)

This course prepares students for the AP English Literature and Composition exam. Students enrolled in this course will undertake an intensive study of representative works of recognized literary merit from world literature. Students will concentrate on the elements of structure, style, theme, figurative language, imagery, symbolism, and tone. Attention to textual detail and historical context will provide a foundation for interpretation. Summer reading is required. Students are required to take the AP examination in May. **Refer to page 7 for the selection process.** 

## \*CLASSICAL MYTHOLOGY #1050240

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course focuses primarily on the Greek myths and their Roman counterparts and will give students a thorough background in the religion, society, and politics of ancient Greece. Students will also be introduced to and do research on the mythologies of other countries. **Academic level students need teacher approval.** 

## \*CREATIVE WRITING I #1060340

 $(9^{th}, 10^{th}, 11^{th}, \& 12^{th} grades)$ 

The objectives of this course are to guide the student in writing creatively. Students will be encouraged to develop abilities and master the basics of creative writing while progressing individually in writing ability and in the desire to write. **Enrollment in the course is based upon the recommendation of the student's present English teacher.** 

## \*CREATIVE WRITING II # 1061340

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course will provide students with a forum to further explore writing styles and genres through class readings and writing opportunities. Students will examine a variety of motifs while being encouraged to develop their individual writing styles. Each student will produce a portfolio for assessment. **Prerequisites: \*Creative Writing I/teacher recommendation** 

## ENGLISH I #100111 H, C, A

(9<sup>th</sup> grade required)

The main objective of ninth-grade English is to introduce students to literature as an art form and to develop the

ability to think abstractly and to evaluate critically. Literature-based writing and grammar instruction accompany each unit. Through the use of an anthology and various novels, short stories, plays, poetry, and articles, students prepare for the State of Connecticut's academic assessments..

## ENGLISH II #100222 H, C, A

(10<sup>th</sup> grade required)

Units will be covered through the use of an anthology, various novels, short stories, plays, poetry, and articles to prepare for the State of Connecticut's academic assessments. In addition, students are guided and encouraged to use their language correctly and effectively both in speaking and writing. Reinforcement of grammar may accompany each unit.

## **ENGLISH III #100333 H, C, A**

(11<sup>th</sup> grade required)

The focus of the eleventh-grade curriculum is American literature from its beginnings to modern day. Emphasis is on the structure and subject matter of the American novel. Drama, poetry, short stories, essays, and articles will be studied to prepare students for the State of Connecticut's academic assessments. Reinforcement of grammar may accompany each unit. Literary analysis and critical papers are requirements.

## ENGLISH IV #100444 H, C, A

(12<sup>th</sup> grade required)

The general objectives of the twelfth-grade program are to acquaint and foster enjoyment of various types of literature, to develop critical and selective reasoning when choosing literary works, and to cultivate a sense of chronological development in literary traditions. Each quarter is devoted to the study of novels, plays, and poetry. A part of each quarter also is devoted to the study and practice of composition. Literary analysis and critical papers are requirements.

# ENGLISH FOR SPEAKERS OF OTHER LANGUAGES (ESOL) #1030140, 1031140, 1032140, 1033140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course is designed to assist those students who recently have arrived from other countries and do not have full working comprehension of English. It is designed to aid the student in developing proficiency in listening, speaking, reading, and writing to function better in the mainstream of school academics. The program includes special guidance to fit each student's unique situation. Student will be placed in the appropriate level based on skills and recommendation by ESOL teacher and/or guidance counselor. This course fulfills the English requirement.

## **HCC ENGLISH IV COMPOSITION 1055551 H**

(12<sup>th</sup> grade)

This full-year English course stresses college-level reading and writing proficiency and provides seniors the opportunity to earn three credits for English 101 from Housatonic Community College. Students will study composition skills necessary for effective written communication. The course includes analyses of non-fiction prose works. Descriptive, narrative, persuasive, expository, and research essays are required for a final portfolio assessed by both high school and HCC instructors. To be eligible for the course, students must receive a C or better in English III and have current English teacher approval.

## \*INTRODUCTION TO THEATRE #1056240

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course is designed for students who have a strong interest in theatre. The student will explore the various aspects of theatre, including an historical perspective and the technical aspects of production. Students will read plays, design sets, and study costuming, lighting, special effects, and performance.

## **JOURNALISM I #1020340**

(11<sup>th</sup> & 12<sup>th</sup> grades)

This full-year journalism course is open to grade 11 and 12 students who show a special interest and/or talent in the area of English and communications. In this course, aimed primarily at an analysis of journalistic techniques ranging from the technical aspects of newspaper production to the responsibilities of a reporter, students will gain first-hand experience in all aspects of newspaper production. Additional work beyond the classroom on the school newspaper is required. Students who elect this course must have a well-developed sense of responsibility, be able to work under pressure, and meet deadlines. This class has a limited enrollment; it is based upon teacher recommendation.

## **JOURNALISM II #1022440**

(12<sup>th</sup> grade)

This full-year course is designed only for students who have completed Journalism I and who wish to continue work in this field. Students will continue to produce the school newspaper and be eligible for editorial positions. The student must have a recommendation from the Journalism I teacher.

## \*PLAYWRITING #1058240

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This half-year course is designed for students who have a strong interest in drama as a literary form and wish to do

an in-depth study of drama. This is primarily a writing course. Students will write monologues, dialogues, scenes and one-act plays. They will also read and analyze the works of major traditional and modern playwrights.

## \*READING AND WRITING FOR PROFICIENCY #1054140

(11<sup>th</sup> & 12<sup>th</sup> grades)

This half-year course is designed for students who need to improve their reasoning and organizational skills in relation to analytical reading and writing in preparation for the reading component of the CAPT alternative assessment and CAPT test. This course is a requirement for seniors who have not met proficiency level on either the CAPT reading or writing tests.

## \*READING STRATEGIES #1066110

(9<sup>th</sup> grade)

This course is designed for students who evidence the need for additional basic reading instruction. Such need may be determined by performance on the CT Mastery and teacher recommendation. Class size will be limited.

## \*SAT PREPARATION (VERBAL) #1070230

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

The purpose of this course is to provide students with skills that will be beneficial to them in taking the SAT exam. Students will work extensively in areas of critical reading, vocabulary, writing, and sentence completion. There will be a strong emphasis on test taking strategies. Upon entering the class, students must purchase the new workbook they will be using which contains lessons, exercises, and practice tests for both Verbal and Math sections. (Cost of the workbook is \$30.)

## \*SHAKESPEARE'S COMEDIES #1073240

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This half-year literature elective will focus on the study of Shakespeare's comedies. Students who enjoy Shakespeare will explore his lighter side as they study his wit and humor. Shakespeare's life and times will be studied as well as the following plays: All's Well That Ends Well, As You Like It, The Comedy of Errors, Two Gentlemen of Verona, The Tempest, and A Midsummer Night's Dream.

## \*SPEECH & COMMUNICATION #1072240

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course is designed primarily to give the student instruction in the fundamentals of speech making so that the student may develop confidence and competency in communicating ideas to an audience. The course covers a variety of speeches, short presentations, group discussions, and debate. Students will be required to read textbook materials, research information, and make presentations. While the course is designed primarily for juniors and seniors, sophomores approved by the Department Chair are accepted if space permits.

\*UCONN ENGLISH 1010 – Seminar in Academic Writing (4 UCONN credits) #1051345 (11<sup>th</sup> & 12<sup>th</sup> grades)
This college course will include instruction in academic writing through interdisciplinary reading. Assignments emphasize interpretation, argumentation, and reflection. Revision of formal assignments and instruction on grammar, mechanics, and style will also be included. Conferences with instructor are required. Prerequisites: teacher approval/UCONN application

## \*WORLD MYTHOLOGY #1050440

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This elective will explore Norse, Celtic, and Chinese mythologies. The course will focus on creation, hero, and afterlife motifs and will relate the concepts to Western civilizations. **Academic level students need teacher approval.** 

## YEARBOOK JOURNALISM #1024340

(11th & 12th grades)

This course will provide the student with a working knowledge of the skills necessary in compiling a yearbook. Students will learn concepts of yearbook journalism such as financial planning, advertising, theme development, layout and design, copywriting and photography. Students will apply their knowledge to the production of the school yearbook, Argus. Additional after-school work will also be expected. Students who elect this course must have a well-developed sense of responsibility, be able to work under pressure, and meet deadlines. This class has limited enrollment; consideration for enrollment is based upon recommendations of the student's current teachers.

# FINE AND PERFORMING ARTS COURSES

## **ART**

## \*ADVANCED POTTERY #7054340

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This class expands students' knowledge and expertise in hand-built pottery as well as providing an introduction to the potter's wheel and clay extruder. Glazing and decorating techniques will also be explored. **Prerequisite:** \*Pottery

## \*ADVANCED 2D ART TECHNIQUES #7030140

 $(11^{th}\ \&\ 12^{th}\ grades)$ 

Advanced Art Techniques will build on the philosophy, theory, and technical skills presented in drawing and painting classes. Students will develop greater technical skills using a variety of drawing media and will continue development of painting techniques with an emphasis on more complex observational skill development and personal expression. This class will also help students create and refine college art portfolios for those who are interested in art school. **Prerequisites:** \*Art Foundations and one of the following: \*Drawing, \*Painting, or \*Studio Art

## \*ART APPRECIATION #7002140

(11<sup>th</sup> & 12<sup>th</sup> grades)

This half-year course is designed for students who are interested in learning about different art periods, cultures and genres. Students will create works of art based upon the period of art history studied. This course will cover a wide variety of art history topics such as Ancient Art, the Renaissance, Cubism, Impressionism and Modern Art. Students will create artworks using drawing, painting, three-dimensional sculpture and digital media.

## \*\*ART CAREER INTERNSHIP #7010440 (2 credits)

(12<sup>th</sup> grade)

This applied education work experience course is designed for seniors to investigate careers in arts such as advertising, architecture, art education/art therapy, crafts, design (display, environmental, fashion, graphic, interior, industrial, landscape), fine arts/museum/gallery, illustration, photography/film/video/recording, and theatre (costume, lighting, set design, and special effects). Students will spend one day a week at an art placement, explore college options, and participate in class presentations and projects. Students may earn a Connecticut Career Certificate. Prerequisites: Conference with teacher and completion of ACS Assessment Form. Final acceptance into this program is dependent on student's overall academic record. Students must abide by the Work Experience Contract (p. 50) in order to remain in the program.

## \*ART FOUNDATIONS #7001140

(9th & 10th grades)

This half-year course focuses on developing the student's artistic skills as a means for creative self-expression and art appreciation. Students will explore a variety of media such as charcoal, oil pastel, tempera, watercolor, and colored pencils. Projects will be based on the elements of art and principles of design. This course plus another half-year art course will fulfill the Career & Technical Education requirement for graduation.

## \*ART JOURNALING #7001240

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course is for the student who wants to investigate new and unique forms of making art. Participants will produce one-of-a-kind artist's books and journals. A variety of book structures such as the accordion, pop-up, flag and tunnel book will be created and decorated with mixed media. Paper making, paper marbling, calligraphy and book binding will be explored. Art books as an ancient craft and as a contemporary art form will be discussed.

## \* CRAFTS #7055240

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course will introduce students to the field of crafts. Students will examine art history and explore cultures from around the world while making crafts that are indicative of that culture. Students will use basic tools while learning the techniques of fiber art, basketmaking, papier mache, and others.

## \*DESIGNER'S WORKSHOP #7074340

(11th & 12th grades)

In a collaborative class between art and technology, students will acquire the basic skills of fashion illustration and presentation, textile surface design and ornamentation, and develop promotional skills to communicate information about product or ideas. A variety of art techniques as well as computer design programs will be explored.

## \*DESIGNING SPACES #7002340

(11th & 12th grades)

Within this professional design-oriented program the student will learn to create landscape plans, design interiors, and build architectural models. Historical reference will be studied.

\*DRAWING #7050240 (10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course is designed for students who are interested in exploring a wide range of drawing techniques and materials. References include the human figure, studio environments, landscape, still life, and fantasy illustrations. **Prerequisite: \*Art Foundations or teacher approval** 

# FINE ART PHOTOGRAPHY #7060250

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This full-year course in photography will focus on the use and functions of the camera and photo editing. Student photos will be based upon the elements and principles of art to create interesting and unique compositions. To move students forward in the ever-changing world of art and technology, the focus will be on creating digital pieces using Photoshop. Outdoor shots and indoor studio shoots will take place. Students are involved in the photographic process from conceptualization to the final print. It is recommended that students have a digital camera that they can use during class and outside of the classroom.

\*PAINTING #7052240 (10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This half-year course is an introduction to the fundamental techniques of painting. Students will explore composition, color mixing, color combinations, depth perspective, painting methods and styles. Subject content will include interpretive and representational forms and themes. **Prerequisite: \*Art Foundations** 

\*POTTERY #7054240 (10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course enables students to make hand-built clay forms that are useful and creative. Basic and advanced techniques such as coil, slab, tile making, and press molding are taught. Emphasis is placed on design of forms, originality, decorative techniques, and craftsmanship.

## \* STUDIO ART #7058240

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course will further develop and expand the skills and knowledge acquired in the Art Foundations course. Students will create projects in two-dimensional design, drawing, painting, printmaking, crafts, and ceramics. Emphasis will be on original imagery and self-expression. References to art history and contemporary art will be included within the framework of a studio environment. **Prerequisite:** \*Art Foundations

## **MUSIC**

CHORALE #7512140

(9<sup>th</sup>, 10<sup>th</sup>, & 11<sup>th</sup> grades)

This ensemble is designed to help students become independent musicians. Music of many styles is studied and performed at evening concerts at school and at other venues as well as during the school day. Focus for this course includes learning the fundamentals of singing, intonation, sight-singing and presentation. This class prepares students for future membership in the Concert Choir. Additional rehearsals and concerts are required.

## CONCERT & MARCHING BAND #7501140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Students are given the opportunity to share in the band program. Members of this group learn the techniques of ensemble playing and sharing in musical and social experiences. Responsibilities to the group and working together as a unit are important obligations of the individual players. Top quality performances are constantly emphasized. Additional rehearsals, after school, evening or weekends, are required during marching season, which occurs from September through Thanksgiving. **Prerequisite: Students must have the approval of the instructor.** 

## CONCERT CHOIR #7507140

(9th, 10th, 11th, & 12th grades)

This advanced auditioned group studies a variety of choral literature representing all musical periods, including classical, popular, jazz, and American musical theatre. Voice production, balance, blend, dynamics, phrasing, and rhythm are specifically emphasized. This group presents evening concerts in four-part harmony for the public. Students interested may audition for Western Regional and All-State Music Festivals. Additional rehearsals and concerts are required. *Audition is required for entrance*.

## \*FUNDAMENTALS OF MUSIC #7553140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

General music literacy and ear training are taught through written, aural, and performance exercises in rhythm and pitch. Because this class is directed towards both instrumentalists (including guitarists previously unused to staff

notation) and vocalists, quality in vocal production is not assessed, but all students must participate fully in oral pitch-matching and basic sight-singing.

## \*HISTORY OF JAZZ AND ROCK #7552140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course surveys the history of Jazz and Rock music with particular emphasis on the musical exchanges between African-Americans and European Americans. Listening skills and the ability to communicate musical understanding using appropriate vocabulary are developed through a series of musical examples. Music reading is not required.

## \*INTRODUCTION TO PIANO KEYBOARDING #7554140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This half-year course will give students the opportunity to learn to play the piano keyboard as well as basic music fundamentals. This class is for students with little or no previous piano experience. Others should enroll in Piano Keyboarding II. This class is offered first semester.

\*MUSIC APPRECIATION I #7550140  $(9^{th}, 10^{th}, 11^{th}, \& 12^{th} \text{ grades})$  This course explores how music reflects and affects culture, society, and individuals. The topic is "Light and Dark in Music and Culture." Musical selections range from early times to contemporary, Gregorian Chant to AC/DC. Listening skills and the ability to communicate musical understanding using appropriate vocabulary are developed through a series of musical examples. Reading music is not required.

## \*MUSIC APPRECIATION II #7551140

 $(9^{th}, 10^{th}, 11^{th}, \&\ 12^{th}\ grades)$ 

This course explores further how music reflects and affects culture, society, and individuals. The topic is "Humor and Comedy in Music and Culture". Musical selections range from early times to contemporary, satiric medieval songs to American Musical Comedy. Listening skills and the ability to communicate understanding using appropriate vocabulary are developed through a series of musical examples. Music reading is not required. Due to the slightly more complex musical repertory examined, prior enrollment in Music Appreciation I is recommended, though not required.

## **MUSIC THEORY I #7504240**

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course reviews in detail the language of music through the elements of rhythm, pitch, intervals, notation and modality. Students will acquire knowledge of sight-reading and aural dictation. Introduction and construction of four-part harmony including modulation, analysis of classical and contemporary music is covered. Reading music is a requirement, which may be met through prior participation in the Chorale, Concert Choir, Band, Piano I and II, or Fundamentals of Music classes. Other students must have the prior approval of the instructor.

## \*MUSIC THEORY II #7504250

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course is a study of chromatic harmony and analysis. It is an advanced study of compositions relating to their form and harmonic structure. It will also include melody writing and arranging. Students must have the approval of the instructor. Prerequisites: Music Theory I/teacher approval

## \*PIANO KEYBOARDING II # 7564140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This class is for students with previous piano experience wishing to work on more challenging music. Students who have completed the Level I course have the opportunity to continue building their skills. This class is offered second semester. Students who have not completed \*Introduction to Piano Keyboarding need the approval of the instructor.

### \*PIANO KEYBOARDING III #7565240

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Students who have completed \*Piano Keyboarding II can enhance their fluency and technical skills in this third level of piano instruction. Prerequisite: \*Piano Keyboarding II

## UCONN FUNDAMENTALS OF MUSIC 1011 WITH MUSIC THEORY I (6 UCONN credits) #7504255 (11<sup>th</sup> & 12<sup>th</sup> grades)

Music Theory I is taken in conjunction with this UCONN Fundamentals of Music/Ear Training I (1011) class. This course reviews in detail the language of music through the elements of rhythm, pitch, intervals, notation, and modality. Students will acquire knowledge of sight-reading and aural dictation. Introduction and construction of four-part harmony including modulation and analysis of classical and contemporary music are covered. Students must have permission of instructor. Prerequisites: Teacher approval/UCONN application

## \*UCONN MUSIC APPRECIATION 1001 (3 UCONN credits) #7552345

(11<sup>th</sup> & 12<sup>th</sup> grades)

This college course will cover how music reflects and affects culture, society, and individuals. Musical selections

range from medieval through contemporary. Listening skills and appropriate vocabulary are developed and stressed through a series of musical examples. This course may be taken in conjunction with either \*Music Appreciation I or \*Music Appreciation II. **Prerequisites: Teacher approval/UCONN application** 

# LIBRARY/MEDIA COURSES

# \*RESEARCH, DESIGN, AND CAREER DEVELOPMENT IN THE DIGITAL AGE #6052240 (9<sup>th</sup> and 10th grades)

This half-year course is designed to give students a hands-on experience that will increase their knowledge while developing invaluable study, research, and technology skills. Students will investigate a career topic of their own interest while simultaneously learning strategies that will allow them to use a variety of traditional and digital information tools. Students will be introduced to Web 2.0 Tools, including wikis, blogs, and podcasts. This course will also give students an important introduction to a vast array of credible and questionable sources that they will evaluate while creating a final paper.

# **MATHEMATICS COURSES (including Computer Science)**

Students who have successfully completed Algebra I in 8<sup>th</sup> grade should follow the sequence of Geometry or Geometry for Engineers in 9<sup>th</sup> grade, Algebra II or HCC Algebra II in 10<sup>th</sup> grade, and Precalculus or HCC Precalculus in 11<sup>th</sup> grade. Following Precalculus or HCC Precalculus, students may select Finite Mathematics, Probability and Statistics, Calculus, AP Statistics, AP Calculus AB, UConn Calculus, or \*SAT Preparation (Math).

Students who have not taken Algebra I in 8<sup>th</sup> grade should follow the sequence of Algebra I in 9<sup>th</sup> grade, Geometry or Geometry for Engineers in 10<sup>th</sup> grade, and Algebra II or HCC Algebra II in 11<sup>th</sup> grade. Following Algebra II or HCC Algebra II, students may select Algebraic Topics for Seniors, Math with Business Applications, Discrete Mathematics, Finite Mathematics, Trigonometry with SAT Preparation, Probability and Statistics, Precalculus, HCC Precalculus, AP Statistics, or \*SAT Preparation (Math).

Students who require reinforcement of basic skills and need help grasping the basic concepts of Algebra should take the sequence of Algebra I in 9<sup>th</sup> grade, Geometry in 10<sup>th</sup> grade, and Algebra II in 11<sup>th</sup> grade. Algebraic Topics for Seniors, Math with Business Applications, or Discrete Mathematics may be selected as an elective in grade 12.

Calculator Use: All of the mathematics courses at Shelton High School incorporate the use of scientific and graphing calculators. The TI-83+ or 84+ graphing calculators are used extensively in Algebra I, Algebra II, Algebraic Topics for Seniors, Trigonometry, Finite Math, Precalculus, SAT Preparation, Statistics, and Calculus. Additionally, the TI-89 graphing calculators are often used in Calculus. Classroom sets are provided for use in class. However, students are encouraged to purchase their own calculators for use in class and at home.

## ADVANCED PLACEMENT CALCULUS AB #3012445

(12<sup>th</sup> grade)

This course is primarily concerned with developing the student's understanding of concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus with concepts, results and problems being expressed geometrically, numerically, analytically, and verbally. The TI 89, 83+ or 84+ graphing calculator is required as part of the AP exam, and ownership is highly encouraged. Students are required to take the AP examination in May. **Prerequisite: Precalculus or HCC Precalculus. Refer to page 7 for the selection process.** 

## ADVANCED PLACEMENT COMPUTER SCIENCE #3210345

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This is a college level computer science course with major emphasis on programming methodology, algorithms, and data structures. Applications are used to develop awareness of the need for particular algorithms and data structures, as well as to provide topics for programming assignments. The JAVA programming language will be the vehicle for implementing computer based solutions to particular programs. The course content is prescribed by the current College Entrance Examination Board's Advanced Placement Course Description for Advanced Placement Computer Science. Students who enroll in this course should plan on additional computer time outside of class. Participation in the Advanced Placement Computer Science Exam is required. **Prerequisite: Programming I. Refer to page 7 for the selection process.** 

## **ADVANCED PLACEMENT STATISTICS #3011345**

(11th & 12th grades)

The purpose of the Advanced Placement course in Statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, experimental design, anticipating patterns, and statistical inference. The TI 83+ or 84+ graphing calculator is required as part of the AP exam, and ownership is highly encouraged. Students are required to take the AP examination in May. **Prerequisite:** Algebra II at the Honors or College Prep level or teacher approval. Refer to page 7 for the selection process.

## ALGEBRA I #300314 H. C. A

(9th &10th grades)

In this course students will engage in the formal study of algebraic concepts with a focus on problem solving, real-world applications, modeling, and the appropriate use of technology. Course content includes the study of real numbers, variables, equations, inequalities, linear and quadratic functions and their graphs, systems of equations, polynomials, and data analysis. Current methods of teaching mathematics indicate that ownership of a graphing calculator is highly recommended for this course.

## ALGEBRA II #300524 H, C, A

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course is a further study of topics from Algebra with a focus on problem solving, real-world applications, modeling, and the appropriate use of technology. Course content includes the following: study of equations and inequalities; systems of equations and inequalities; polynomials, matrices using a graphing calculator, powers and roots; linear, quadratic, polynomial, and exponential functions; and the complex number system. Logarithmic and rational functions are addressed in the Honors level only. Current methods of teaching mathematics indicate that ownership of a graphing calculator is highly recommended for this course. Students may be enrolled in Geometry or Geometry for Engineers and Algebra II concurrently with curriculum leader approval. Prerequisite: Geometry or Geometry for Engineers

## **ALGEBRAIC TOPICS FOR SENIORS #3006440**

(12<sup>th</sup> grade)

This course is designed to better prepare students in the area of algebraic understanding before moving on to an undergraduate program. It will focus on problem solving, real-world applications, modeling, and the appropriate use of technology while reinforcing skills learned in Algebra I and II. Course content will include an in-depth look at equations and inequalities, systems of equations and inequalities, functions, data analysis, measurement, basic trigonometry, and SAT test-taking strategies. Current methods of teaching mathematics indicate that ownership of a graphing calculator is highly recommended for this course. **Students who have taken Precalculus or Trigonometry with SAT Preparation are not eligible for this course. Prerequisite: Algebra II** 

CALCULUS #3010340 (11<sup>th</sup> & 12<sup>th</sup> grades)

This course begins with a study of some pre-calculus topics and then moves to a study of introductory calculus. Students study elementary functions, limits, differential and integral calculus and its applications. **Prerequisite: Precalculus or HCC Precalculus** 

## **DISCRETE MATH #3006540**

(11th & 12th grades)

Discrete Math involves the study of objects and ideas that can be divided into separate parts. This STEM course presents strategies used by computer scientists, computer programmers, electrical engineers, computer engineers, and scientists in the physical, natural and social sciences. Among possible topics to be studied are decision making, matrix algebra, graph theory, set theory, Boolean algebra, combinatorics, circuits, discrete probability, recursion, modular arithmetic, network models, sequences and series, mathematical induction, vectors, relations, functions, algorithms, logic and codes. Students who have taken Precalculus or Trigonometry with SAT Preparation are not eligible for this course

## FINITE MATHEMATICS #3007340

(11<sup>th</sup> & 12<sup>th</sup> grades)

The Finite Mathematics course is a survey of topics generally seen in the first year of college mathematics. The course content includes linear functions, matrices and their applications to linear programming, financial mathematics, set theory, as well as elementary probability and statistics. Many applications in business, psychology, sociology, and political sciences will be explored through the use of technology, spreadsheets, and online programs. Current methods of teaching mathematics indicate that ownership of a graphing calculator is highly recommended for this course. **Prerequisite:** Algebra II at the Honors or College Prep level or teacher approval

## GEOMETRY #300414 H. C. A

(9<sup>th</sup>, 10<sup>th</sup>, & 11<sup>th</sup> grades)

In this course students will engage in the process of deductive and inductive reasoning while exploring in depth the characteristics and relationships of geometric shapes and structures. Students will develop their spatial visualization and problem solving skills through real-world applications, the use of a variety of geometric tools, and appropriate

technology. Topics stressed include properties of planar figures, congruent and similar figures, area, perimeter, volume, and properties and measurements of solid figures. Current methods of teaching mathematics indicate that ownership of a graphing calculator is highly recommended for this course. **Prerequisite: Algebra I** 

GEOMETRY FOR ENGINEERS (1.5 credits) #3004151(H), #3004152(C), #3004153(A) (9<sup>th</sup> & 10<sup>th</sup> grades)

This course is designed for academically motivated math students with an interest in technology, science, architecture, and engineering. In this course a full year of Geometry will be completed, coupled with a half-year of engineering and architectural studies. This interdisciplinary class will utilize technology education labs and standards-based Geometry instruction in order for students to gain a higher understanding of geometric concepts and apply those concepts to real-world problems. This course will provide students with 1 Geometry credit and 0.5 Career and Technical Education elective credit. Students will be given many real-world problems to solve and will be expected to utilize Geometry to solve the problems. **Prerequisites: Algebra I/teacher recommendation** 

## HCC ALGEBRA II #3023141 H

(10<sup>th</sup> & 11<sup>th</sup> grades)

This college-level course is designed, in cooperation with Housatonic Community College, for students interested in acquiring math competency skills equal to those expected in a college algebra course. Topics include linear equations and inequalities, graphs of functions, polynomials, factoring, rational expressions and equations, roots, and radical and quadratic functions. Students successfully completing this program may earn 3 college credits from Housatonic Community College. Prerequisite: Geometry or Geometry for Engineers at the Honors or College Prep level or teacher approval

## HCC PRECALCULUS #3028341 H

(11<sup>th</sup> & 12<sup>th</sup> grades)

This college-level course is designed, in cooperation with Housatonic Community College, for students interested in acquiring math competency skills equal to those expected in a college precalculus course. Topics include functions and their graphs, polynomial, exponential and logarithmetic functions, trigonometry, and analytic trigonometry. Students successfully completing this program may earn 3 college credits from Housatonic Community College. Prerequisite: HCC Algebra II or HCC approval

## \*MATH FOR PROFICIENCY #3051440

(12<sup>th</sup> grade)

This half-year collaborative course is designed for students in grade 12 who need to improve their skills in preparation for the Math Alternative CAPT Assessment. Students will be presented with various instructional and test-taking strategies and will be actively engaged in problem solving. Topics covered will include the areas of Number and Quantity, Algebra and Functions, Measurement and Geometry, Probability, Statistics, and Discrete Mathematics. This course is a requirement for seniors who have not met the Proficiency Level on the CAPT Mathematics Assessment.

## \*MATH STRATEGIES FOR SUCCESS #3061440

 $(10^{th} \, grade)$ 

This course is designed for students who evidence the need for additional basic mathematic instruction. Such need may be determined by performance on the Connecticut Mastery Test (CMT) and teacher recommendation. Class size will be limited.

## MATH WITH BUSINESS APPLICATIONS #3018244

(11<sup>th</sup> & 12<sup>th</sup> grades)

This course is intended to provide students with the skills to maintain their personal finances related to income, taxes, banking, investing and insurance through the study of relevant problems from everyday life. The mathematics of credit cards, car and home ownership, and travel will also be covered. The areas of number and quantity, measurement and geometry, statistics and probability, and introductory algebraic concepts will be covered as applied to the consumer. Students who have taken Precalculus or Trigonometry with SAT Preparation are not eligible for this course.

## PRECALCULUS #300834 H, C

 $(11^{th}\ \&\ 12^{th}\ grades)$ 

This course is designed to provide students with the prerequisite mathematical concepts necessary to study calculus in the following year. The course content includes an in-depth study of linear, polynomial, rational, exponential, logarithmic, and trigonometric functions, as well as analytic geometry. It also incorporates extensive use of related technology and real-world applications and is essential for students contemplating further study in the fields of mathematics, science, engineering, or other highly technical fields. Current methods of teaching mathematics indicate that ownership of a graphing calculator is highly recommended for this course. **Prerequisite: Algebra II at the Honors or College Prep level, HCC Algebra II, or teacher approval** 

## PROBABILITY AND STATISTICS #3013340

(11<sup>th</sup> & 12<sup>th</sup> grades)

This course is a mathematical study pertaining to the collection, analysis, interpretation, explanation, and

presentation of data. Probability theory will be studied in conjunction with statistics to draw conclusions about the likelihood of potential events. Emphasis will be on critical thinking and real-life applications using real data. The statistical methods and approaches used will focus on areas such as life and health sciences, industry, business, economics, engineering, agriculture, politics, and education. These will be explored through the use of technology, spreadsheets, and upper-level mathematical formulas and notation. Students will be provided with the tools to detect statistical errors, expose misrepresentations and exaggerated claims from statistical inference, draw intelligent and accurate conclusions, and make informed decisions. A serious interest in mathematics is recommended for students enrolling in this course. Current methods of teaching mathematics indicate that ownership of a graphing calculator is highly recommended for this course. **Prerequisites: Successful completion of Algebra II at the Honors or College Prep level and teacher approval** 

## PROGRAMMING I #3206140

(9th, 10th, 11th, & 12th grades)

This course is the initial computer programming course in JAVA, the computer language designated for testing by the College Board as a preparation for taking the Advanced Placement Computer Science course the following year. Emphasis will be on standard programming and algorithms, with the individual student developing, coding, testing, and debugging programs as well as developing algorithms to solve problems. Students who elect this course should have a strong foundation in mathematics. Additional programming topics such as sorting, searching, arrays, and matrices will be studied. A final programming project is required. **Prerequisite: Students must have successfully completed Algebra I at the Honors or College Prep level or be enrolled in Algebra I at the Honors or College Prep level at the same time as Programming I or teacher approval.** 

## \*SAT PREPARATION (MATH) #3050340

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

The primary aim of this course is to provide preparation for the mathematics section of the SAT exam. The focus is on a review of topics covered in Algebra I, Geometry, and Algebra II with opportunities for students to take practice exams. Test taking strategies and the scoring process of the test will be addressed. Also included are topics that will provide students with a better understanding of the fundamental ideas seen in a college mathematics program. Upon entering the class, students must purchase the new consumable workbook they will be using in the course. This workbook contains lessons, exercises, and practice tests and will be used in both Math and Verbal SAT Prep courses. The cost of the workbook is \$30.00. This course is primarily offered during semester 2. **Prerequisite: Algebra II or concurrently enrolled in Algebra II** 

## TRIGONOMETRY WITH SAT PREPARATION #3006340

(11<sup>th</sup> & 12<sup>th</sup> grades)

Trigonometry is the study of how the sides and angles of triangles are related to each other. This course will focus on the concepts of trigonometric functions, relations among these functions, and solutions of triangles and their applications to real-world problems. Appropriate technology will be used throughout the course. During the first quarter students will prepare for the mathematics section of the SAT. This preparation will include a review of topics covered in Algebra I, Geometry, and Algebra II. Current methods of teaching mathematics indicate that ownership of a graphing calculator is highly recommended for this course. *Students who have taken Precalculus are not eligible for this course.* Prerequisite: Algebra II at the Honors or College Prep level or teacher approval.

## UCONN CALCULUS 1131Q/1132Q (8 UCONN credits) #3010355

(11<sup>th</sup> & 12<sup>th</sup> grades)

This course is designed to provide students with the fundamentals of both differential and integral Calculus. Students will take part in the study of the theory of Calculus and its application to the real world while using appropriate technology. Topics covered include limits, continuity, differentiation, antidifferentiation, definite integrals, transcendental functions, formal integration, polar coordinates, infinite sequences and series, vector algebra, and geometry. This course is recommended for students pursuing further study in the fields of mathematics, science, business, engineering or other highly technical fields at the college level. Current methods of teaching mathematics indicate that ownership of a graphing calculator is highly recommended for this course. **Prerequisites: Precalculus at the Honors level or HCC Precalculus/UConn application** 

# PHYSICAL/HEALTH EDUCATION COURSES

An effective physical/health education program is an integral part of every student's formal educational experience. Opportunities to develop basic physical skills as well as a positive attitude towards exercise, as it relates to good health, are provided. All students are required to pass physical education for two years. In addition, all students must pass at least one health elective prior to graduation.

## PHYSICAL EDUCATION #8005150

 $(9^{th}, 10^{th}, 11^{th}, \& 12^{th} grades)$ 

The Physical Education program includes activities such as basketball, conditioning, flag football, floor hockey, volleyball, tennis, aerobics, soccer and other low organizational games, which may be scheduled as coed classes. The program focuses on improving skills and fitness. This class will meet every other day for a full year.

## **HEALTH EDUCATION**

Any of the following electives will fulfill the health graduation requirement:

## \*CURRENT HEALTH ISSUES #8054140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This interactive course will enable students to explore the most current topics in health education. Areas of discussion will include: relationship and dating issues, teen pregnancy, eating disorders, substance abuse, and other health related topics. This class will include the health curriculum mandated by the State of Connecticut and will also meet the SHS graduation requirement.

## \*NUTRITION FOR HEALTH #8055140

 $(9^{th}, 10^{th}, 11^{th}, \& 12^{th} grades)$ 

Nutrition for health will examine the components of nutrition as they relate to lifelong wellness. Topics include overview of the nutrients, food selection, eating disorders, and exercise nutrition.

## \*PERSONAL HEALTH AND FITNESS # 8064140

 $(9^{th}, 10^{th}, 11^{th}, \& 12^{th} \text{ grades})$ 

This course will combine fun and exciting physical activity, healthy eating practices, and knowledge of fitness concepts to help students develop an optimum level of physical fitness. Physically active participation is a requirement for successful completion. At the conclusion of this class students will understand the significance of a healthy lifestyle. Participants will become advocates in the pursuit of optimal health and fitness. This class will include the health curriculum mandated by the State of Connecticut and will also meet the SHS graduation requirement.

## \*STANDARD FIRST AID/CPR #8060440

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course will give fundamental principles and knowledge of and skills in first aid and accident prevention. It prepares persons to care for most injuries and to meet most emergencies when medical assistance is delayed. Cardiopulmonary Resuscitation (CPR) instruction will be provided for all students enrolled in the first aid course. CPR teaches a rescue method used to aid a victim who has experienced heart failure and has ceased to breathe. This class will also include the health curriculum mandated by the State of Connecticut and will also meet the SHS graduation requirement.

# **SCIENCE COURSES**

Note: Honors-level students taking Biology/Lab as freshmen must take Chemistry/Lab, Physics/Lab, Anatomy and Physiology/Lab, Forensic Science/Lab, and/or any other AP science course to meet their three-year science requirement. Honors, College Prep, and Academic Studies students should take General Science or General Technical Science as freshmen, Biology as sophomores, and either Chemistry, Physics, or Anatomy and Physiology/Lab, Forensic Science/Lab, or any other AP science course to meet their three-year requirement. Electives do not fulfill the science requirement for graduation. Students taking any laboratory science class will meet eight periods one week and seven periods the following week.

## ADVANCED PLACEMENT BIOLOGY #4006445

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Advanced Placement Biology is designed to be the equivalent of a college level introductory biology course for biology majors. The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and to help students gain an appreciation of science as a process. Primary emphasis will be placed on developing and understanding important biological concepts and their practical application in everyday life. Topics

include biochemistry, organisms and populations, biotechnology, cell energy transformations, genetics and evolution. Thirteen labs mandated by the College Board will be completed throughout the year. *Additional labs, outside readings and interactive web site activities will be utilized* by instructor to supplement units when necessary. Students are required to take the AP examination in May. **Refer to page 7 for the selection process.** 

#### ADVANCED PLACEMENT CHEMISTRY #4016345

(11<sup>th</sup> & 12<sup>th</sup> grades)

This course involves an in-depth study of chemistry comparable to that offered in a college inorganic chemistry class. Structure and states of matter, thermodynamics, various equilibria, electrochemistry, and precipitation reactions are among the topics covered. Students should have a strong mathematical background to ensure successful preparation for the Advanced Placement Chemistry Exam. This course will meet every other day to conduct labrelated activities. Students are required to take the AP examination in May. **Prerequisite: Chemistry I/Lab. Refer to page 7 for the selection process.** 

#### ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE #4000345

(11th & 12th grades)

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 or preventing them. Students are required to take the AP examination in May. Prerequisite: Two years of a lab science or one year of a lab science and General Science, and one year of Algebra is recommended but not required. Refer to page 7 for the selection process.

#### ADVANCED PLACEMENT PHYSICS I ALGEBRA-BASED #4010355

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This is an introductory, algebra-based physics course, promoting conceptual physics reasoning and understanding, with a focus on: kinematics; Newton's laws of motion; torque; rotational motion and angular momentum; gravitational and circular motion; work, energy, and power; linear momentum; oscillations; mechanical waves and sound; and an introduction to electric circuits. Students are required to take the AP exam in May. This course is designed to meet the requirements for a first semester, college physics course. This course is a prerequisite for AP Physics 2 Algebra-Based.

#### \*ANALYSIS OF CURRENT SCIENTIFIC TOPICS #4064140

(11<sup>th</sup> & 12<sup>th</sup> grades)

Students will investigate current topics across a wide range of scientific fields (physical, biological, engineering, and mathematical) through both selected and guided reading in the popular scientific literature (periodicals, books, papers) and via viewing scientific film/video productions. They will reflect upon those topics through writing, discussion, and formal presentation and complete a required culminating project on a scientific topic of their choice.

#### \*ANATOMY AND PHYSIOLOGY I #4054340

(11<sup>th</sup> & 12<sup>th</sup> grades)

This course is designed to meet the needs of students who wish to learn the essentials of human anatomy and physiology. It provides a comprehensive summary for students of the biological sciences, nursing, and occupational therapy. It should be most helpful to all students interested in dentistry, medicine, medical technology, hygiene, and physical therapy. Anatomy and Physiology is designed to study the structure and function of the human organism. **Prerequisite:** Successful completion of Biology I/Lab

#### ANATOMY AND PHYSIOLOGY/LAB #4054540

(11<sup>th</sup> & 12<sup>th</sup> grades)

This course will include a rigorous year-long program of in-depth human anatomy and physiology studies. The areas covered will include medical terminology, basic chemistry, cell and tissue structure, and the eleven systems of the human body (integumentary, skeletal, muscular, nervous, endocrine, circulatory, lymphatic/immune, digestive, respiratory, urinary, and reproductive). Laboratory work will be required and involve dissections. The content will be most helpful to students interested in a variety of medical fields including medicine, dentistry, nursing, athletic training, and physical therapy. **Prerequisite: Above average grade in Biology I/Lab or teacher recommendation** 

#### **BIOLOGY I/LAB #400322 H, C, A**

(9<sup>th</sup> & 10<sup>th</sup> grades)

This course will cover the fundamental concepts of cell chemistry, biotechnology, genetics, evolution, biodiversity, viruses, bacteria, and survey the animal kingdom and human body systems. Since one of the most important aspects to teaching any science is the process by which knowledge in the field is gained, the interplay of experimentation and reasoning during laboratory situations makes laboratory activities an invaluable tool in advancing the knowledge of students.

BIOLOGY II #4005340 (11<sup>th</sup> & 12<sup>th</sup> grades)

Biology II is designed to be a continuation of Biology I/Lab. The course will take a closer look at areas briefly touched upon in Biology I/Lab. Major topics include a detailed study of plants, environmental science, ecosystems,

and ecological relationships of man with his planet, the vertebrate classes (fish, amphibians, reptiles, birds, and mammals). Prerequisite: Successful completion of Biology I/Lab

#### CHEMISTRY I/LAB #401434 H, C

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

The Chemistry lab is intended to provide (a) experience in using common chemical equipment and techniques, and (b) an opportunity to apply some of the principles learned in the classroom. Emphasis is placed on making careful observation and quantitative measurements under controlled experimental conditions. Concepts included in the course are fundamental to a career in science and nursing as well as teaching. Students who know that they are going on to college and are planning to pursue careers in mathematics or science are strongly urged to take Chemistry in their junior year and Physics in their senior year. Prerequisite: Successful completion of Algebra I

#### CONCEPTUAL CHEMISTRY/LAB #401534 A

(11th & 12th grades)

Conceptual Chemistry is designed to offer students a practical approach to learning about matter and its changes. Some mathematical equations will still be studied, but emphasis will be on the concepts of chemistry rather than the mathematics. Laboratory activities will be an invaluable tool in advancing the knowledge of students.

#### CONCEPTUAL PHYSICS I/LAB #400924

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Conceptual Physics is designed to offer the student the physical concepts of nature with less math than a traditional physics course. Mathematics and problem solving are still an integral part of the course, but the emphasis will be on the concepts rather than the mathematics. Prerequisite: Successful completion of Algebra I

\*ENVIRONMENTAL SCIENCE #4060340 (9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)
Environmental Science is a course designed to give the student an understanding of environmental science concepts and processes enabling them to cast an informed vote on local or national environmental issues, to learn proper measuring techniques used to evaluate environmental problems, and to collect and analyze data from various sources including Curtiss Brook and the Meadow Street Reservoir. Topics such as greenhouse effect, global warming, acid rain, populations, energy resources, waste management, and land use are investigated. This course is for students who are concerned about environmental problems and their possible solutions on a local to global level. *This course* will not be available for the 2015-2016 school year.

#### \*FORENSIC SCIENCE # 4064240

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This class is designed for those students interested in learning about real-world applications of science. It will involve several areas of science including General Science, Biology, Chemistry and Physics. Students will learn common forensic science techniques used in crime investigations such as fingerprinting, blood typing and DNA analysis. Students will also examine and analyze past court cases. This course is ideal for those students interested in a career in law, forensic science, or law enforcement. Prerequisite: Successful completion of previous high school science courses

#### FORENSIC SCIENCE/LAB #4055540

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course is designed to meet the needs of students wishing to experience a more in-depth investigation in the field of forensic science. With many hands-on activities and labs, the student will be exposed to real-world practical application of the concepts, information, and techniques utilized in criminal forensic investigations. This course is ideal for those students interested in a career in forensic science, law, or law enforcement. Prerequisites: Successful completion of Biology I/Lab and teacher recommendation

#### GENERAL SCIENCE #400111 H, C, A

(9<sup>th</sup> grade required)

This course is a general survey of chemistry, physics, environmental science, and the mathematics of science. Its aim is to give the student an awareness and understanding of the materials, energy, and forces, which make up our The fundamental concepts to be studied include chemical structures and properties, energy transformations, and global interdependence. Laboratory study is added where applicable and deals with practicable demonstrations for the student. Required of all 9th grade students except those taking Biology I/Lab.

#### \*GENETICS #4050340

(11<sup>th</sup> & 12<sup>th</sup> grades)

This course will attempt to provide the student with the background necessary to understand the principles of the physical basis of heredity and human genetics. This will include the study of genes and related diseases, some probability and problem solving, laboratory work with drosophila, and exposure to the social and ethical problems of genetics. Prerequisite: Successful completion of Biology I/Lab or teacher approval. This course will not be available for the 2015-2016 school year.

#### HCC CHEMISTRY/LAB #4024341 H

(11th & 12th grades)

This four-credit college level class will provide students with an introduction to the fundamental principles and the concepts of inorganic chemistry. Atomic structure, periodic relationships, chemical bonding, kinetics, and equilibria are examined in sufficient detail to permit their use in understanding of chemical reactions. The laboratory component will stress the acquisition of skills in data gathering and in manipulation of apparatus and materials. Students will be required to meet the expectations and requirements set forth by Housatonic Community College. Prerequisites: Successful completion of 2 years of high school science and mathematics, along with application process

#### \*HERPETOLOGY # 4066340

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

If you are interested in reptiles and amphibians, this is the course for you. This course includes a hands-on approach to the study of reptiles and amphibians through the use of group activities, labs, audio-visual aids and internet resources. Students will learn to identify the unique characteristics of each class of these animals as well as their evolutionary path, common ancestors, lifestyles and reproductive mechanisms.

#### PHYSICS I/LAB #400824 H, C

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

Physics is concerned with the relation between matter and energy. Areas of lecture and lab concentration are: motion and force, wave mechanics, optics and light, electricity, electromagnetism, atomic and nuclear physics. Lectures and lab activities are complemented by demonstrations and problem solving exercises. Student groups conduct experiments that provide experience in collecting, recording, organizing, and analyzing data for the purpose of drawing conclusions with regard to stated objectives.

#### \*SCIENCE FOR PROFICIENCY #4070140

(12<sup>th</sup> grade)

This half-year course is designed for students in grade 12 who need to meet the science CAPT requirement. Students will explore a variety of scientific topics to improve their scientific problem-solving skills and conceptual knowledge in science. Topics may include energy transformation; chemical structures and properties; global interdependence; cell chemistry and biotechnology; genetics; evolution; and biodiversity.

#### \*SPACE FRONTIERS #4064340

(11<sup>th</sup> & 12<sup>th</sup> grades)

This course will introduce students to the leading edge of scientific ideas in such diverse areas as Bioengineering, Nanotechnology, Space Exploration, and Computers, and will project trends for the future. Students will research current periodicals, science books, and the Internet. A strong background in the sciences and a desire to learn and discuss science are essential.

#### UCONN PHYSICS 1201Q/1202Q (8 UCONN credits) #4021345

(11<sup>th</sup> & 12<sup>th</sup> grades)

This course is designed to provide a foundation for more advanced courses in physics. The topics covered include classical dynamics, rigid-body motion, harmonic motion, waves, fluids, thermodynamics, electricity, magnetism, and optics. Laboratory work is a key component of the course and offers fundamental training in precise measurements. Students should have a strong mathematical background to ensure successful comprehension and completion of this course. Students are required to take the final exam provided by the UCONN Department of Physics. Prerequisites: Successful completion of Algebra II/Algebra II and current science teacher approval/UCONN application

The following science electives will be offered in the 2015-2016 school year:

#### \*MARINE SCIENCE #4058340

(11<sup>th</sup> & 12<sup>th</sup> grades)

Explore the underwater world and learn about various marine habitats including the rocky shoreline, salt marshes, Long Island Sound and the deep sea. Students will study the composition of the oceans; learn to recognize its characteristics and the many different organisms that live in this environment. **Prerequisite: Successful completion of Biology I/Lab.** 

#### \*METEOROLOGY/WEATHER #4059140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

The meteorology course will expose students to modern scientific examination of the atmosphere including its structure and composition, how the atmosphere and oceans interact to produce weather patterns and climates, and computer weather analysis and forecasting. Use of weekly, if not daily, internet resources, videos, slides, and interesting lab and inquiry exercises will provide the student with a varied approach to the subject. Special topics will include the study of hurricanes, tornadoes, lightning and thunderstorms, blizzards, droughts, and floods.

## The following Advanced Placement course will be offered beginning in the 2015-2016 school year:

#### ADVANCED PLACEMENT PHYSICS 2 ALGEBRA-BASED #4010365

(11th & 12th grades)

This is an introductory, algebra-based physics course, promoting conceptual physics reasoning and understanding, with a focus on: fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics, electric circuits with capacitor; magnetic fields; electromagnetism; physical and geometric optics; and topics in modern physics. Students are required to take the AP exam in May. This course is designed to meet the requirement for a first semester, college physics course.

### **SOCIAL STUDIES COURSES**

#### ADVANCED PLACEMENT EUROPEAN HISTORY #2004445

(10<sup>th</sup> & 12<sup>th</sup> grades)

This Advanced Placement course is geared for those students who wish to pursue a college level social science course. Students will learn the basic chronology, concepts, and major historical facts and personalities, and historical analysis of trends from approximately 1450 (the High Renaissance) to the present. Students who pass the AP examination in European History may receive college credit and appropriate placement in their freshman year in college. All students are required to take the AP examination in May. **Refer to page 7 for the selection process.** 

#### ADVANCED PLACEMENT PSYCHOLOGY #2005445

(11<sup>th</sup> & 12<sup>th</sup> grades)

This full-year psychology course is geared for students who wish to pursue a college level psychology course. This course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to psychological facts, principles, and phenomena associated with each of the major subfields with psychology. All students are required to take the AP exam in May. Individual colleges may grant college credit depending on their acceptance of the scores on the AP exam. **Refer to page 7 for the selection process.** 

## ADVANCED PLACEMENT UNITED STATES GOVERNMENT & POLITICS #2010345 (11<sup>th</sup> and 12<sup>th</sup> grades)

The AP United States Government and Politics course gives students an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret United States government and politics and the analysis of specific examples. It requires familiarity with the various institutions, groups, beliefs, and ideas that constitute United States government and politics. Students will become acquainted with the variety of theoretical perspectives and explanations for various behaviors and outcomes. All students are required to take the AP exam in May. Individual colleges may grant college credit depending on their acceptance of the scores on the AP exam. This course will also fulfill the State of Connecticut Civics requirement. **Refer to page 7 for the selection process.** 

#### ADVANCED PLACEMENT UNITED STATES HISTORY #2003335

(11<sup>th</sup> grade)

This Advanced Placement course is geared for those who wish to pursue a college level social science course in their junior year. The AP History course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States History. Students will learn to assess historical materials, their relevance to given interpretive problems, reliability and importance, and to weigh the evidence and interpretations presented in historical scholarships. Students who pass the Advanced Placement examination in United States History may receive college credit and appropriate placement in their freshman year in college. This course may be taken in place of the regular required United States History course. All students are required to take the AP examination in May. **Refer to page 7 for the selection process.** 

#### **ADVANCED PLACEMENT WORLD HISTORY #2001115**

(9<sup>th</sup> grade)

This Advanced Placement course is geared for those students who wish to pursue a college-level social science course. Course content includes the investigation of five course themes and nineteen key concepts in six different chronological periods, from approximately 8000 B.C.E. to the present. All students are required to take the AP exam in May. Individual colleges may grant college credit depending on their acceptance of the scores on the AP exam. **Refer to page 7 for the selection process.** 

### \*CIVICS #2076240 (11<sup>th</sup> & 12<sup>th</sup> grades) \*CIVICS 9 #2076110 (9<sup>th</sup> grade)

The goal of this course is to prepare young Americans to understand and carry on the fundamentals of our American Republic. This half-year course focuses on the study of what it means to be a responsible, knowledgeable, participating citizen and blends the study of our nation's constitutional history with the structure of our government and its laws. Students will study how ideas about government change over time, and how these ideas apply to current issues impacting our society. The State of Connecticut has made this a required course for students.

#### \*CULTURAL ANTHROPOLOGY #2051240

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This half year course focuses on the study of Anthropology. Anthropology is the only social science to study all the world's people. The course will study past and present day culture. Students will also study large scale modern societies and their relevance to the world. Students will understand how we are all members of a worldwide human community.

#### \*CURRENT WORLD EVENTS #2072340

(11th & 12th grades)

Do you know what is happening in the world today? In this course, you will study local, national, and international events and issues through the use of journals, magazines, newspapers, and television. You will learn how daily events affect your life.

#### \*FACING HISTORY AND OURSELVES #2054240

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course blends 20th century history with sociology, psychology, and literature. Using the events of WWI, the rise of Nazism, WWII, and the Holocaust, it confronts and contrasts evil with the ethical and moral dimensions of human behavior. This course promotes an understanding of events and the human behavior necessary to preserve civilization, freedom, and democracy. It seeks to promote moral responsibility and tolerance for the differences among people everywhere by drawing parallels between the tragic events of the 20th century and the necessity of making right, moral choices in our own daily lives.

#### \*FORENSIC AND LEGAL PSYCHOLOGY #2075340

(11th & 12th grades)

Using research in clinical, cognitive, developmental and social psychology, forensic and legal psychology shows how psychological science can enhance the gathering and presentation of evidence, improve legal decision-making, prevent crime, rehabilitate criminals and promote justice.

#### \*GEOGRAPHY #2062240

(10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

The field of learning called geography seeks to describe how all the world's places are alike and how each is unique. The geographic study will include the people, the way they live, the work they do, the beliefs they hold and the way they organize their portion of the earth's surface. Included in the course will be the study of climates, landforms, and locations, which will afford the student the basic tools to "think geographically" about the world's problems.

\*HISTORY THROUGH FILM: 20<sup>th</sup> CENTURY UNITED STATES HISTORY #2053340 (11<sup>th</sup> & 12<sup>th</sup> grades) By combining the study of films with the text-based primary sources, this course offers the student a clear guidance in studying, interpreting, and understanding motion picture's significance as a primary source in investigating UNITED STATES History. It will also promote, through essay and documents, the student to analyze film as cultural artifacts within the context of actual past events.

#### \*MODERN MIDDLE EAST #2055340

(11<sup>th</sup> & 12<sup>th</sup> grades)

This course will provide a background on the Middle East from the end of World War II to the present. From the creation of the Israel State to the invasion of Afghanistan in 2001 and Iraq in 2003, this course will take a balanced approach to providing students with a background on the relationships between the countries that make up the Middle East and the relationship between the Middle East and the United States.

#### MODERN WORLD HISTORY #200222 H, C, A

(10<sup>th</sup> grade)

Students will study those periods of history from the French Revolution to modern times, which include western and non-western history. This course is recommended for all sophomores as a preparation for the State of Connecticut's academic assessments.

#### \*PSYCHOLOGY #2074340

(11th & 12th grades)

This course will help students explore such topics as the roles of the body and brain in human behavior, the process of consciousness, the causes of mental illness, human intelligence, personality, psychological testing, the roles of

sleep and dreams, developmental psychology, and nature vs. nurture.

\*SOCIOLOGY #2064340 (11<sup>th</sup> & 12<sup>th</sup> grades)

We offer this course so that you may appreciate the social aspects of life today-society, human relations, groups, people's beliefs, values and rules, as well as ways of organizing families, educational systems, religion, parenting and marriage. Various social problems such as crime and delinquency will also be studied. After completing the course, students may acquire a new view of themselves and the world around them that will be helpful in making lifetime decisions.

## \*UCONN ECONOMICS 1201 – Principles of Microeconomics (3 UCONN credits) #2069345 (11<sup>th</sup> & 12<sup>th</sup> grades)

This course covers how the invisible hand of the market functions through the economic decisions of firms and individuals. Course content includes how prices, wages and profits are determined, resources are allocated, and income is distributed. Topical subjects, such as, energy policy and health care are also covered. **Prerequisites: UCONN Macroeconomics 1202/UCONN application** 

## \*UCONN ECONOMICS 1202 – Principles of Macroeconomics (3 UCONN credits) #2007345 (11<sup>th</sup> & 12<sup>th</sup> grades)

This course covers the organization and function of the economic system as a total unit. Economic decisions, institutions, and policies that determine levels and rates of growth of production, employment and prices will be studied as well as government budget deficits and current interest rate policy. **Prerequisites: Teacher approval/UCONN application** 

#### UNITED STATES HISTORY #200333 H, C, A

(11<sup>th</sup> grade required)

The American way of life has its roots far back in history. The material comforts we enjoy, the institutions which serve us so well, and the freedoms we cherish are products of many hands and many minds. This course is designed to guide the student in understanding our heritage and in preparing for the responsibilities of citizenship.

#### WORLD HISTORY #200111 H, C, A

(9<sup>th</sup> grade)

This course begins with a survey of the theories of the origin of the earth and proceeds on through various civilizations to the French Revolution. Emphasis is placed on the major contributions of prior civilizations to contemporary societies. The objectives of the course for the students are to develop: (1) a better understanding of the present through a study of the past, (2) intellectual curiosity and logical thinking, (3) a world-wide sense of social responsibility, (4) an awareness of the common traditions and values we share with other people of the world, and (5) strategies for the State of Connecticut's academic assessments.

#### \*YOU AND THE LAW #2058140

(11<sup>th</sup> & 12<sup>th</sup> grades)

Maintaining our democracy is not an easy task. Through law education, individuals learn to be effective, law-abiding, active, participating citizens. Law-related education helps to develop young citizens who can sustain, preserve, and foster our free, democratic society. Some of the law-related topics covered include: crimes, death penalty, search and seizure, juvenile court system, and hate crimes.

### **WORLD LANGUAGES COURSES**

Although a student is not required to take a world language in order to graduate from Shelton High School, we strongly encourage students to pursue language studies. For both the college bound student and the student entering the work force after graduation, knowledge of a world language is a highly desirable skill. Generally speaking, students are encouraged to take three or four years of one world language rather than two years of two world languages to satisfy college requirements.

A student who earns a grade of "D" or better for the year <u>must</u> advance to the next year of the same language or choose to begin a new language. However, if a student receives an "F", he/she must either repeat the same course, during the summer or during the school year or start a new language. Students advancing from Language III to Language IV must have the recommendation of their current World Language teacher.

#### ADVANCED PLACEMENT SPANISH LANGUAGE #1527445

The AP Spanish course focuses on the mastery of the four skills of listening, speaking, reading, and writing. Aural/oral skills are improved through the use of tapes and daily conversation practice. Intense grammar review is ongoing throughout the year. Students also read literary and journalistic prose, understand lectures and

conversational language, participate in class discussion and conversations, and write essays. Students are required to take the AP examination in May. **Refer to page 7 for the selection process.** 

#### FRENCH I #1511140

The objective of French I is to teach the student to understand the spoken language as well as reading and comprehension. Students will learn to construct simple sentences and understand the cultures of French-speaking people.

#### FRENCH II #1512140

The objective of French II is to further develop the skills of listening, speaking, reading and writing. Review of basic structures is completed and more advanced grammar is included. Students are encouraged to develop an appreciation of the customs and cultures of French-speaking people.

#### FRENCH III #1513240

At this level, the emphasis is placed upon advanced oral and written skills. Conversational skills are stressed. Students continue their study of French customs and culture.

#### ITALIAN I #1501140

The objective of Italian I is to teach the student to speak, read, write, and understand the Italian language. Students will learn to respond to oral questions, write sentences and compositions and will also learn about the customs of the people of Italy.

#### **ITALIAN II #1502140**

Students will continue the work they began in Italian I. They will learn to construct more involved compositions in Italian, as well as answer questions both orally and written. They will be introduced to more Italian culture and history.

#### **ITALIAN III #1503240**

Students will continue to work on grammar, conversation, composition, and vocabulary studies. They will continue their study of Italian culture, history, and literature.

#### **ITALIAN IV #1504340**

With emphasis on greater proficiency, students will continue to work on grammar, composition, and conversation skills. They will continue their study of Italian literature, history, and culture.

#### **SPANISH I #1521140**

The objective of Spanish I is to teach students to understand the spoken language as well as reading/comprehension. Students will learn to construct simple sentences and understand the cultures of Spanish-speaking people.

#### **SPANISH II #1522140**

The objective of Spanish II is to further develop the skills of listening, speaking, reading, and writing. Review of basic structures is completed and more advanced grammar is included. Students are encouraged to develop an appreciation of the customs and cultures of Spanish-speaking people.

#### **SPANISH III #1523240**

At this level, the emphasis is placed upon oral and written skills. Conversational skills are stressed. Students continue their study of Spanish customs and culture.

#### **SPANISH IV #1524340**

The basic objective of this course is to aid and motivate the student to become adept in the language. Emphasis is placed on the four language skills as well as the study of Spanish literature, customs, and geography. Advanced structure and composition are an integral part of this course.

#### SPANISH FOR NATIVE SPEAKERS #1526140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course is designed for the student whose first language is Spanish. The student's vocabulary, syntax and grammatical skills will be enhanced through authentic work and assessment. In addition, the student will expand his knowledge of Spanish customs and culture. Upon completion of the course, the student will be tested and placed into an appropriate level of Spanish.

#### UCONN FRENCH 3268 – Writing in French (3 UCONN credits) #1517345

(11<sup>th</sup> and 12<sup>th</sup> grades)

This college course places emphasis on perfecting both oral and written French expression through discussion, presentations, and compositions. Course curriculum includes an advanced study of French texts and films as well as extensive practice in a variety of forms: essays, poetry, film review, and compositions. **Prerequisites: French III/teacher approval/UCONN application.** 

## UCONN SPANISH 3179 – Spanish Conversation: Cultural Topics (3 UCONN credits) #1529345 (11<sup>th</sup> and 12<sup>th</sup> grades)

This college course provides an in-depth development of speaking skills through cultural readings, group discussions and oral presentations on selected topics concerning the Spanish-speaking world. **Prerequisites: Spanish III/ teacher approval/UCONN application** 

#### The following world languages electives will be offered during the 2015-2016 school year:

UCONN FRENCH 3267 – French Language and Culture (3 UCONN credits) #1516345 (11<sup>th</sup> & 12<sup>th</sup> grades) This college course will cover the study of French and Francophone culture through fiction, nonfiction, journalism, and film. Emphasis will be placed on perfecting both oral and written expression through discussions, presentations, and composition of assigned topics. Students must enroll in the UCONN course. Prerequisites: French III/teacher approval/UCONN application

## UCONN SPANISH 3178—Intermediate Spanish Composition (3 UCONN credits) #1528345 (11<sup>th</sup> & 12<sup>th</sup> grades)

This college course provides a thorough review of grammar and methodical practice in composition leading to a command of practical idioms and vocabulary. Students will analyze different literary text to improve their grammar and vocabulary. **Prerequisites: Spanish III/teacher approval/UCONN application.** 

### SPECIAL SERVICES COURSES

Shelton High School offers a continuum of Special Education and related services to meet the individual needs of identified students. In accordance with the Individuals with Disabilities Education Act (IDEA) students receive their instruction in the Least Restrictive Environment (LRE). Related services are offered to those students requiring specialized therapy and include: Physical Therapy; Occupational Therapy; and Speech & Language Therapy. Recommendation to all Special Education classes is made via the Planning and Placement Team (PPT) process. Placement options include:

#### **Adjusted Curriculum**

Special Education staff delivers instruction to special education students in the four core subject areas, study skills, life skills and CAPT proficiency courses.

#### **Behavior Support Classes**

Students in this classroom are monitored in the areas of self-control, responsibility and interpersonal skills. Core academic classes also are offered in this classroom.

#### **Collaborative Classes**

Special Education and general education staff work together to deliver instruction in classes comprised of special education and general education students.

#### Life Skills Classes

Life Skills I, II, III, Career Explorations, and Work Experience classes are offered.

These courses are available for those students who, by PPT, are determined to be eligible for special services:

**BIOLOGY #9022220** (10<sup>th</sup> grade)

This course involves the study of fundamental concepts starting from protists to plants and animals and finally to man. Upon completion of this course, the student should be aware of the basic concepts of Biology, Laboratory experiences are added where applicable and deal with practical demonstrations for the student.

#### **CAREER EXPLORATIONS #9042120**

(11<sup>th</sup> & 12<sup>th</sup> grades)

This course provides the student an opportunity to participate in entry-level work experience within the school building. Students will be exposed to small business tasks such as collating, stapling, laminating, copying, and office delivery. Emphasis will be placed on social interactions within the work place, employer/employee relations, employee responsibilities, and job completion.

(11th and 12th grades) \*CIVICS #9080240

The goal of this course is to prepare young Americans to understand and carry on the fundamentals of our American Republic. This half-year course focuses on the study of what it means to be a responsible, knowledgeable, participating citizen and blends the study of our nation's constitutional history with the structure of our government and its laws. Students will study how ideas about government change over time, and how these ideas apply to current issues impacting our society. The State of Connecticut has made this a required course for students.

#### **CONSUMER MATH #9016340**

(12<sup>th</sup> grade)

This course is intended to provide students with the basic skills to maintain their personal finances related to income, shopping, and general living expenses. The mathematics of sales tax, discounts, interest, installment buying, unit pricing, budgeting, and travel will be covered.

ENGLISH I (#9001110), II (#9002220), III (#9003330), IV (#9004440) (9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)
The English program emphasizes real life skills utilizing written and oral expression, creative writing and literature and pleasurable reading. These courses meet the objectives of the English program as they apply to ninth through twelfth grade students and their individual needs.

#### ESSENTIALS OF MATH #9010240

(9<sup>th</sup> grade)

This course focuses on specialized math skills dependent on student ability and need. Problem solving, reasoning, computing and estimating problems and skills are addressed in a real-world context.

#### **GENERAL SCIENCE #9020110**

(9<sup>th</sup> grade)

This course is a general survey of chemistry, physics and the mathematics of science. It aims to give the student an awareness and understanding of the materials, energy and forces, which make up our environment.

#### \*HEALTH, SAFETY & PHYSICAL FITNESS #9055140

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

This course will provide the student with a comprehensive approach to personal relationships. Appropriate social interactions in the home, school, community, and workplace will be addressed. Personal health, safety, and wellbeing will be topics of study throughout this course. Placement will be by PPT decision.

#### LIFE SKILLS I (#9040110), II (#9041240), III (#9042340), IV (9043440)

(9<sup>th</sup>, 10<sup>th</sup>, & 11<sup>th</sup> grades)

These courses are designed to assist students in enhancing self-determination and self-advocacy skills. Activities may focus on increasing student's self-awareness, social/communication and assertiveness skills, independent living skills, problem-solving skills, decision-making skills, goal setting and knowledge of one's rights and responsibilities.

#### MATH FOR EVERYDAY LIVING #9010340

(11<sup>th</sup> grade)

This course focuses on specialized math skills dependent on student ability and need. It stresses basic math skills needed to function in today's world. This may include addition, subtraction, multiplication, division, as well as fractions, decimals, percents and becoming proficient with a calculator.

#### \*MATH PROFICIENCY #9035140

(12<sup>th</sup> grade)

This half-year adjusted curriculum course is designed for Special Education students who have not met proficiency on the CAPT Mathematics assessment. Students will be actively engaged in problem-solving. Topics covered will include the areas of Number and Quantity, Algebra and Functions, Measurement and Geometry, and Probability and Statistics. Successful completion of this course satisfies the graduation requirement for the CAPT Mathematics assessment.

#### **MODERN WORLD HISTORY #9032220**

(10<sup>th</sup> grade)

This course will study material from the French Revolution to the present. It may include map skills and current events.

#### PHYSICS/CHEMISTRY #9024340

(11<sup>th</sup> & 12<sup>th</sup> grades)

This course provides a half-year each of chemistry and physics. The program is geared to practical aspects of these sciences including force and work, mechanical advantage, electricity, matter and energy, the Periodic Table, atoms, and chemicals and their formulas. Laboratory experiences are added where applicable and deal with practical demonstrations for the student.

#### \*READING AND WRITING PROFICIENCY #9005140

(12<sup>th</sup> grade)

This half-year adjusted curriculum course is designed for Special Education students who have not met proficiency on the Reading or Writing CAPT assessment. In this class, students will improve their reading comprehension and written expression skills. Successful completion of this course satisfies the graduation requirement for the Reading and Writing sections on the CAPT.

#### **READING STRATEGIES #9023140**

(9<sup>th</sup> & 10<sup>th</sup> grades)

This course is offered for students who evidence the need for additional basic reading instruction. Such need will be determined by performance on the Connecticut Mastery Test, achievement testing and teacher recommendation.

#### **REAL LIFE APPLICATIONS #9046140**

(9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grades)

The purpose of this course is to help the student develop an awareness of appropriate, socially-acceptable behaviors. A counseling component combined with academic support will be provided. Enrollment into this course is by PPT decision for those students in the behavior support program.

#### \*SCIENCE FOR PROFICIENCY #9024440

(12th grade)

This is a half-year course designed for students in Grade 12 who need to meet the science CAPT requirement. Students will explore a variety of scientific topics to improve their scientific problem-solving skills and conceptual knowledge in science. Topics may include energy transformation; chemical structures and properties; global interdependence; cell chemistry and biotechnology; genetics; evolution; and biodiversity.

#### **STUDY SKILLS #9044140**

(9<sup>th</sup> & 10<sup>th</sup> grades)

This full-year course meets every day. Emphasis is placed on study skills, test taking skills, organization, note taking and methods to help students succeed in the mainstream.

#### **SURVEY OF ALGEBRAIC TOPICS #9016350**

(10<sup>th</sup> grade)

Students will engage in the study of algebraic topics with a focus on problem-solving, real world applications, modeling, and the appropriate use of technology. Course content will include the study of real numbers, variables, equations, and data analysis. Students will utilize technology to solve applied problems, create and interpret graphs, and explore algebraic concepts.

#### **UNITED STATES HISTORY #9034340**

(11th & 12th grades)

This course will study material from United States history from colonial to modern times. It may include map skills and current events.

#### \*\*WORK EXPERIENCE PROGRAM #9054240 (2 credits)

 $(11^{th} \& 12^{th} grades)$ 

The course is designed to offer Special Education students a "job shadowing" opportunity. It provides a career training experience, which prepares the student for realistic, ongoing and gainful employment best suited to his needs, interests, and abilities. All participants must be 16 years of age and recommended by the Planning and Placement Team. This course will be assessed as on-the-job training with a Pass/Fail grade.

#### WORLD HISTORY #9030110

(9<sup>th</sup> grade)

This course offers students a chronological history from earliest civilizations through the French Revolution. It may include a study of geography, including landforms, oceans and the continents.

#### POST GRADUATE/TRANSITION COURSES

The following courses are available to 18-to-21-year-old post graduates who have successfully completed their

academic requirements and participated in senior activities at SHS. The primary goal of the program is to assist in promoting the integration of Shelton's young adults into various aspects of the community, further developing life skills competencies and increasing workplace skills. No credit will be awarded for these classes. Grades will be issued on a pass/fail basis in accordance with the student's IEP. Placement into these courses is by PPT recommendation.

#### **CAREER TRANSITIONS #9025550**

(12+)

This course will provide the student with essential workplace skills necessary for obtaining and maintaining a job as well as developing attitudes and behavior necessary for job success.

#### **COMMUNITY LIFE SKILLS #9044440**

(12+)

This course will provide the student with opportunities to access the community to attend to personal health, daily life needs, and leisure activities. Activities may include experiences in shopping, dining out, banking, library and post office visits, and recreation. The curriculum will incorporate academics with life opportunities and focus on the development of meaningful and relevant independent living skills.

#### SURVIVAL SKILLS FOR INDEPENDENT LIVING #9026550

(12+)

This course will incorporate hands-on experience to improve comprehension in the areas of domestic skills, personal safety and care, and communication skills.

#### STATEMENT OF NON-DISCRIMINATION

In compliance with Title VI, Title IX and Section 504 of the Rehabilitation Act of 1973, the Shelton Board of Education does not discriminate on the basis of race, creed, color, national origin, age, sex, marital status, or handicap in establishing and implementing hiring and employment practices and establishing and providing school activities and educational programs.

## INFORMATION REGARDING SECTION 504 OF THE REHABILITATION ACT OF 1973

Section 504 is an Act which prohibits discrimination against persons with a handicap/disability in any program receiving Federal financial assistance. The Act defines a person with a disability as anyone who:

- 1. has a mental or physical impairment which substantially limits one or more major life activities (major life activities include activities such as caring for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning and working);
- 2. has a record of such impairment; or
- 3. is regarded as having such an impairment.

In order to fulfill its obligation under Section 504, the Shelton school district recognizes a responsibility to avoid discrimination in policies and practices regarding its personnel, students, parents and members of the public who participate in school sponsored programs. No discrimination against any person with a disability will knowingly be permitted in any of the programs and practices in the school system.

The school district has specific responsibilities under the Act, which include the responsibility to identify, evaluate, and if the child is determined to be eligible under Section 504, to afford access to appropriate educational services. If the parent or guardian disagrees with the determination made by the professional staff of the school district, he/she has the right to a hearing with an impartial hearing officer.

Other persons who feel that they may be entitled to services under Section 504 should contact the Section 504 coordinator. If they disagree with the resolution offered by the school they may file a grievance. The Family Educational Rights and Privacy Act (FERPA) also specifies rights related to educational records. The Act gives the parent or guardian the right to: (1) inspect and review his/her child's educational records; (2) make copies of these records; (3) receive a list of all individuals having access to those records; (4) ask for an explanation of any item in the records: (5) ask for an amendment to any report on the grounds that it is inaccurate, misleading, or violates the

child's rights; and (6) a hearing on the issue if the school refuses to make the amendment. If there are questions, you may contact Elizabeth Wesolowski, 504 coordinator for the school district, at 924–1023, extension 340.

## CURRICULUM LEADERS, SCHOOL COUNSELORS, AND COORDINATORS

Additional questions regarding course structure, content, or credit may be directed to the individuals listed below. Department Head approval will be needed for some courses.

<u>DEPARTMENT</u>	CURRICULUM LEADER	ROOM
English	Ms. Dana Jeanette-Kneen djeanette@sheltonpublicschools.org	326
World Languages	Mrs. Karen Giordano kgiordano@sheltonpublicschools.org	306
Social Studies	Mr. Jim Hill jhill@sheltonpublicschools.org	119
Math	Mr. Jim O'Toole jotoole@sheltonpublicschools.org	129
Science	Mrs. Mary Clark mclark@sheltonpublicschools.org	403
Career and Technical Education	Mrs. Nancy Duffy nduffy@sheltonpublicschools.org	235
Music	Miss Deb Keller dkeller@sheltonpublicschools.org	373
Art	Ms. Ellen Cox ecox@sheltonpublicschools.org	492
Physical /Health/Athletics Education	Mr. John Niski jniski@sheltonpublicschools.org	Athletic Office
Special Services	Mrs. Allegra Fitzgerald afitzgerald@sheltonpublicschools.org	407
School Counseling	Mrs. Kathleen Riddle kriddle@sheltonpublicschools.org	Career Center
Library Media	Mrs. Joan Tichy jtichy@sheltonpublicschools.org	Library Media Center
SCHOOL COUNSELORS School Counselor	Mrs. Barbara Clifford bclifford@sheltonpublicschools.org	House #1
School Counselor	Mrs. Lynn Giordano lgiordano@sheltonpublicschools.org	House #1
School Counselor	Ms. Lisa Papa lpapa@sheltonpublicschools.org	House #2

School Counselor Mrs. Casey DeGennaro House #2

cdegennaro@sheltonpublicschools.org

School Counselor Mrs. Daria Ploski House #3

dploski@sheltonpublicschools.org

School Counselor Mr. Erik Martire House #3

 $\underline{emartire@shelton publics chools.org}$ 

ADVANCED PLACEMENT/UCONN ECE COORDINATOR

Mrs. Kathleen Riddle Career Center

 $\underline{kriddle@sheltonpublicschools.org}$ 

VIRTUAL HIGH SCHOOL SITE COORDINATOR

Mrs. Joan Tichy Library Media Center

 $\underline{jtichy@sheltonpublicschools.org}$ 

#### COOPERATIVE WORK EXPERIENCE CONTRACT

Listed below is information regarding the Cooperative Work Experience program offered at Shelton High School. Please read it carefully. Signatures indicate that the student and parent(s) or guardian(s) have read this agreement and understand the conditions described herein. All forms must be submitted by October 1. No late forms will be accepted.

- 1. Students who are in good standing will be permitted to enroll in a Cooperative Work Experience Program. The placement supervisor will take into consideration a student's academic standing, attendance, discipline, reports, etc.
- 2. Students are expected to complete a full year's program at their initially assigned job site with a connecting school-site learning activity component. Upon mutual agreement between the placement supervisor and the site supervisor, a student may change his/her site during the year. Upon successful completion, the course will earn two (2) credits for graduation. School-site learning activities will connect and reinforce work-site experience.
- 3. Students will attend the work site at least 6 hours a week, after school unless the student has a senior privilege to leave school early beginning no later than October 1 and continuing through the end of May. Students will provide copies of pay stubs or work hour forms to show they have worked.
- 4. Students must maintain an overall "C" average. Failure to maintain an overall "C" average will result in the student being placed on probation (from Progress Report Quarter/Quarter end until the next grading report) and can then be dropped from the program and not receive the 2 credits for graduation.
- 5. Students may not be placed in a work site program that is owned by or supervised by a parent or a relative. Students must receive monetary compensation unless the job site is through a non-profit organization.
- 6. Students are responsible to the Supervisor of the work site to which they are assigned. The Supervisor of that site may terminate a student's relationship with that establishment when he/she deems it in the best interest of the work site. The site supervisor must immediately contact the placement supervisor in the case of work site termination. Students so dismissed may be dropped from the program without credit.

	nt(s)'/g		n work study programs must have s)' company insurance or with s		overage with their ase circle the type of coverage you	
	ÝES	NO	We have subscribed to the school insurance plan this year.			
			If yes, circle the type of cov		24 hour Part-Time	
YES NO			The student is now covered by my company insurance.  If yes, state the name of your employer:			
			Name of Insurance Company			
Student Name (Print)				_Student Signature		
Parent/Guardian Name (Print)		_Parent/Guardian Sign	nature			
Site Supervisor Name (Print)			rint)	Site Supervisor Signature		

# SHELTON HIGH SCHOOL CAREER PATHWAYS

Shelton High School offers a program of studies that is designed to show students the connection between what they learn in the classroom and what will be expected of them in the world of work, whether they choose to pursue a college degree or enter the workforce upon graduation.

Career Pathways prepares learners of all ages for the information age as schools, colleges and employers strive for higher achievement in math, science and communication. One way to improving learner achievement is providing learners with relevant contexts for studying and learning. Career Pathways offers these contexts by linking school-based learning with the knowledge and skills required for continued, future success.

The Shelton High School Career Pathways are organized around eight pathways: Arts and Media; Business and Finance; Construction: Technologies and Design; Environmental, Natural Resources and Agriculture; Government, Education and Human Services; Health and Biosciences; Retail, Tourism, Recreation and Entrepreneurship; Technologies: Manufacturing, Communications and Repair.

The major goals of the pathways are:

- Students will meet high academic and career-related standards.
- Students will prepare for post high school education.
- Students will connect learning in school with earning in the workplace.
- Students will understand how their interests and preferences relate to careers.
- Students will be able to earn college credits while still in high school.
- Students will learn employability skills.

Students will also discover the following:

- Careers available to them in the future.
- Programs, courses, internships and workplace experiences available to teach them basic and higher-level skills they will need to prepare for a career.
- What they will need to know to succeed in a career.
- What they might expect regarding wages, hours of work, benefits and employment potential.

In our rapidly changing world many careers rely on ever-changing technology. More and more jobs require education beyond high school. Students who want to go to college without adequate career focus are less likely to graduate in two to four years. It will likely take them five to six years. Students who choose to enter the workforce upon high school graduation have an even greater need to select courses that will benefit them in their choice of future employment. The following pages identify the career clusters and the elective courses currently available to students that will help them meet their future career goals.

## TECHNOLOGIES: MANUFACTURING, **COMMUNICATIONS AND REPAIR**

Students interested in pursuing a career in industries that require a technical background such as manufacturing, electric and other utilities, telephone and cable companies, repair of airplanes, computers and other technical products or the development of computer software should choose some of the electives in this cluster.

Sample Careers with:

High School Diploma Associate's Degree or Bachelor's Degree Post-secondary Education or Higher

Service station attendant Automotive electronic technician Aeronautics engineer

Assemblers Aircraft mechanic Air traffic controller Welder apprentice Heating, air-conditioning and refrigeration tech Graphic designer Machine operator Tool and die maker Quality engineer

Welder Warehouse worker Safety engineer Computer repair technician Mechanical engineer

Computer network administrator

CURRENT ELECTIVE COURSES FOCUSED ON THIS CLUSTER (\*Indicates ½ year course) (\*\*2 credit course)

\*Introduction to Engineering & Design/Production (Grades 9-12) Engineering Principles (Grades 10-12) \*\*Technology Occupations (Grade 12)

\*Manufacturing Technology (Grades 9-12)

\*Graphic Arts (Grades 9-12) \*Construction Technology (Grades 9-12) \*Basic CAD (Computer Aided Design) (Grades 9-12)

\*Robotics (Grades 10-12)

\*Intermediate CAD (Grades 10-12)

Discrete Math (Grades 11-12)

UCONN Engineering (Grades 11-12)

\*Research Design and Career Development in the Digital Age (Grades 9-10)

### ARTS AND MEDIA

\*Introduction to Microelectronics (Grades 10-12)

\*Analysis of Current Scientific Topics (Grades 11-12)

Students interested in pursuing a career in theatre performance, dance, music, visual arts, management of theatres, museums or art galleries, radio, television or film should choose electives in this cluster. Behind the scenes careers such as set design, set lighting, camera operation and editing are also included in this cluster.

Sample Careers with:

High School Diploma Associate's Degree or Bachelor's Degree Post-secondary Education or Higher

Stage hand Stage assistant Journalist Freelance artist Commercial artist Director or producer Photographer Photo journalist Photography assistant Dancer Choreographer Museum curator

Graphic arts technician Graphic artist Designer: stage, graphics, Lighting technician jewelry, fashion

#### CURRENT ELECTIVE COURSES FOCUSED ON THIS CLUSTER (\*Indicates 1/2 year course) (\*\*2 credit course)

\*Art Foundations (Grades 9-12) Music Theory I (Grades 9-12)

\*Studio Art (Grades 9-12) \*Music Theory II (Grades 10-12)

\*Art Journaling (Grades 10-12) \*Music Appreciation I (Grades 9-12) \*Crafts (Grades 10-12) \*Book Arts (Grades 10-12)

\*History of Jazz and Rock (Grades 9-12) \*Drawing (Grades 10-12)

\*Painting (Grades 10-12) Concert Choir (Grades 9-12) \*Pottery (Grades 10-12) Chorale (Grades 9-12)

\*Intermediate CAD (Grades 10-12) \*Introduction to Piano Keyboarding (Grades 9-12) Fine Arts Photography (Grades 9-12) \*Introduction to Theatre (Grades 10-12)

\*Digital Art Using Photoshop (Grades 10-12) \*Playwriting (Grades 10-12)

\*Designer's Workshop (Grades 11-12) \*Creative Writing I (Grades 9-12) Creative Advertising/Desktop Publishing (Grades 9-12) \*Creative Writing II (Grades 10-12)

\*Advanced Pottery (Grades 10-12) \*Acting I (Grades 10-12) \*\*Art Career Internship (Grade 12) \*Acting II (Grades 11-12) Video Production (Grades 10-12) Journalism I (Grades 11-12) \*Video and Photography (Grades 9-12) Journalism II (Grade 12)

\*Graphic Arts Technology (Grades 9-12) Yearbook Journalism (Grades 11-12)

\*Piano Keyboarding II (Grades 9-12) \*Basic CAD (Computer Aided Design) (Grades 9-12) \*Piano Keyboarding III (Grades 10-12) Concert and Marching Band (Grades 9-12)

\*Architecture (Grades 10-12) \*Designing Spaces (Grades 11-12)

- \*Fundamentals of Music (Grades 9-12)
- \*UCONN Music Appreciation (Grades 11-12)
- \*Art Appreciation (Grades 11-12)
- \*Technical Literacy for the 21st Century (Grades 9-10)
- \*Music Appreciation II (Grades 9-12)

UCONN Fundamentals of Music 1011 with Music Theory I (Grades 11-12)

\*Introduction to 3D Animation (Grades 9-12)

\*Advanced 2D Art Techniques (Grades 11-12)

\*UCONN Music Appreciation (Grades 11-12)

### **HEALTH AND BIOSCIENCES**

Students interested in careers in providing health services to people or working in the fields of research and development of medicines should choose electives in this biotechnology/biomedical cluster.

Sample Careers with:

 High School Diploma
 Associate's Degree or
 Bachelor's Degree

 Post-secondary Education
 or Higher

Home health aide Licensed practical nurse Registered nurse
Dental assistant Dental hygienist Dentist
Pharmaceutical clerk Pharmaceutical assistant Pharmacist
Certified nurse assistant Medical technician Medical doctor
Biomedical technician Physical therapist
Nurse's aid Registered dieticia

Registered dietician Physician's assistant Radiologist

CURRENT ELECTIVE COURSES FOCUSED ON THIS CLUSTER (\*Indicates 1/2 year course) (\*\*2 credit course)

UCONN Physics (Grades 11-12) Standard First Aid CPR (Grades 9-12)

Biology I/Lab (Grade 10)

Advanced Placement Biology (Grades 9-12)

\*Psychology (Grades 11-12)

World Languages

Advanced Placement Chemistry (Grades 11-12) Conceptual Physics I/Lab (Grades 10-12)

Advanced Placement Physics I (Grades 10-12)

\*Personal Health and Fitness (Grades 9-12)

Biology II (Grades 11-12)

Anatomy & Physiology with Lab (Grades 11-12)

\*Genetics (Grades 11-12)

\*Nutrition for Health (Grades 9-12)

\*Anatomy and Physiology (Grades 11-12)

\*Analysis of Current Scientific Topics (Grades 11-12)

Chemistry I/Lab (Grades 11-12) Discrete Math (Grades 11-12)

\*Foods I and II (Grades 9-12)

Physics I/Lab (Grades 10-12)

\*Current Health Issues (Grades 9-12)

\*Forensic and Legal Psychology (Grades 11-12)

\*Forensic Science (Grades 10-12)

HCC Chemistry/Lab (Grades 11-12)

# RETAIL, TOURISM, RECREATION AND ENTREPRENEURSHIP

Students interested in careers in retail stores, restaurants, hotels, tourist and recreational facilities should choose electives from this career cluster.

Sample Careers with:

High School Diploma
Associate's Degree or
Post-secondary Education
Bachelor's Degree
or Higher

Short order cook
Retail clerk
Pesk clerk
Hotel manager
Public relations director
Public relations director

Executive chef
Fashion designer
Fashion designer
Travel agency director
Market research analyst

#### CURRENT ELECTIVE COURSES FOCUSED ON THIS CLUSTER (\*Indicates ½ year course) (\*\*2 credit course)

\*Entrepreneurship (Grades 9-12)

\*Foods & Nutrition I (Grades 9-12)

\*Foods & Nutrition II (Grades 9-12)

\*Regional and Ethnic Cuisine (Grades 10-12)

Principles of Managerial Accounting (Grades 10-12)

HCC Financial Accounting I (Grades 10-12)

\*Business Management (Grades 10-12)

Creative Advertising/Desktop Publishing (Grades 9-12)

Computer Applications (Grades 9-12)

\*Computer Applications I (Grades 9-12)

\*Designer's Workshop (Grades 11-12)

\*Personal Keyboarding (Grades 9-12)

Introduction to Business (Grades 9-12)

\*Personal Financial Planning (Grades 9-12)

\*Culinary Arts I (Grades 10-12)

\*Culinary Arts II (Grades 11-12)

\*\*Hospitality/Food Service Careers (Grade 12)

Marketing I (Grades 11-12)

\*\*Marketing II Internship (Grade 12)

\*\*Cooperative Work Experience Internship (Grade 12)

\*Marketing Style (Grades 9-12)

\*Global Business Studies (Grades 10-12)

\*Computer Applications II (Grades 9-12)

\*Baking & Pastry Arts

\*Sports & Entertainment Marketing (Grades 9-10)

\*Marketing Yourself (Grade 11-12)

\*Principles of Accounting (Grades 11-12)

\*Introduction to Economics (Grades 11-12)

### ENVIRONMENTAL, NATURAL **RESOURCES & AGRICULTURE**

Students interested in improving the outdoor and indoor environments, reducing waste and byproducts, managing forests and land, producing food from the land and sea and caring for animals should choose some of the elective courses in this cluster.

Sample Careers with:

High School Diploma Associate's Degree or Bachelor's Degree

Post-secondary Education or Higher

Animal caretaker Veterinary assistant Veterinarian Park maintenance Land surveyor Forest ranger Grounds keeper Horticulturist Florist

Lawn care technician Water treatment operator Soil conservationist Health & safety technician Environmental scientist

Hazardous waste technician Marine biologist **Ecologist** 

CURRENT ELECTIVE COURSES FOCUSED ON THIS CLUSTER (\*Indicates ½ year course) (\*\*2 credit course)

Biology II (Grades 11-12) \*Genetics (Grades 11-12)

Advanced Placement Biology (Grades 9-12) \*Nutrition for Health (Grades 9-12) Physics I/Lab (Grades 10-12) \*Environmental Science (Grades 9-12)

Conceptual Physics I/Lab (Grades 11-12) HCC Chemistry/Lab (Grades 11-12) Advanced Placement Physics I (Grades 10-12) \*Meteorology/Weather (Grades 9-12)

\*Space Frontiers (Grades 11-12) Chemistry I/Lab (Grades 11-12)

\*Herpetology (Grades 9-12) Advanced Placement Environmental Science (Grades 11-12) \*Analysis of Current Scientific Topics (Grades 11-12)

Advanced Placement Chemistry (Grades 11-12)

UCONN Physics (Grades 11-12) Conceptual Chemistry (Grades 11-12) Discrete Math (Grades 11-12)

## **GOVERNMENT, EDUCATION** AND HUMAN SERVICES

Students interested in the functions of government, helping people solve their problems or enjoy teaching other people to learn should choose some of the electives offered in this cluster.

Sample Careers with:

High School Diploma Associate's Degree or Bachelor's Degree Post-secondary Education or Higher

Corrections officer FBI agent Police officer Social worker Human services assistant Human services coordinator Legal assistant Paralegal Lawyer Teacher

Childcare aide Teacher's aide Firefighter Fire chief/marshal Foreign diplomat

CURRENT ELECTIVE COURSES FOCUSED ON THIS CLUSTER (\*Indicates ½ year course) (\*\*2 credit course)

\*Psychology (Grades 11-12)

Advanced Placement Psychology (Grades 11-12)

\*You and the Law (Grades 11-12)

\*Facing History and Ourselves (Grades 9-12)

\*Law Studies (Grades 11-12)

\*Sociology (Grades 11-12)

\*Current World Events (Grades 11-12)

\*Civics 9 (Grade 9)

Forensic Science/Lab (Grades 10-12)

\*Forensic and Legal Psychology (Grade 11-12)

\*Forensic Science (Grades 10-12)

\*Civics (Grades 11-12)

Advanced Placement U.S. Government & Politics (Grades 11-12)

\*Speech and Communication (Grades 10-12)

\*UCONN Economics

World Languages (Grades 9-12)

\*Medical Response Technician (Grades 10-12)

### **BUSINESS AND FINANCE**

Students who plan to enter the business world should choose some of the electives offered in Business and Finance. Employers need strong, educated employees who can manage people and money.

Sample Careers with:

High School Diploma Associate's Degree or
Post-secondary Education

Accounts payable clerk Accounting assistant Certified public accountant
Bank teller Head bank teller Bank manager
Bookkeeping clerk Loan officer Business manager

Data entry operator Inventory controller Economist/Financial analyst
Personnel clerk Personnel assistant Personnel manager
Computer programmer Investment banker

Computer systems analyst
Staff accountant

Bachelor's Degree

or Higher

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CURRENT ELECTIVE COURSES FOCUSED ON THIS CLUSTER (\*Indicates ½ year course) (\*\*2 credit course) Introduction to Business (Grades 9-12)

Marketing I (Grades 11-12)

\*Entrepreneurship (Grades 9-12)

Principles of Managerial Accounting (Grades 10-12)

\*\*Marketing II Internship (Grade 12)

\*Marketing Style (Grades 9-10)

HCC Financial Accounting I (Grades 10-12)

\*Marketing Yourself (Grades 11-12)

\*Personal Financial Planning (Grades 9-12)

\*Sports and Entertainment Marketing (Grades 9-10)

\*Global Business Studies (Grades 10-12)

\*Personal Keyboarding (Grades 9-12)

\*Business Management (Grades 10-12)

\*Law Studies (Grades 11-12)

\*Law Studies (Grades 11-12)

\*Investing and the Stock Market (Grades 9-12)

Computer Applications (Grade 9-12)

World Languages (Grade 9-12)

\*Speech and Communication (Grades 10-12)

\*Introduction to Economics (Grades 11-12)

\*UCONN Economics (Grades 11-12)

\*Computer Applications II (Grades 9-12)

Math with Business Applications

Probability and Statistics Programming I

\*Principles of Accounting (Grades 11-12) HCC Marketing (Grades 11-12)

HCC Precalculus (Grades 11-12)

HCC Algebra II (Grades 10-11)

Calculus (Grades 11-12)

## CONSTRUCTION: TECHNOLOGIES AND DESIGN

Students interested in providing architectural, engineering and computer expertise to the design and construction of homes, buildings, bridges and roads should choose some of the electives in Construction: Technologies and Design. A wide spectrum of career opportunities exist in this cluster with a broad range of post high school education.

Sample Careers with:

 High School Diploma
 Associate's Degree or
 Bachelor's Degree

 Post-secondary Education
 or Higher

Carpenter apprenticeBuilding inspectorIndustrial engineerElectrician assistantElectricianInterior designLaborerSurveyor assistantMechanical engineerRooferLandscape assistantArchitect

Civil engineer Project manager

CURRENT ELECTIVE COURSES FOCUSED ON THIS CLUSTER (\*Indicates ½ year course) (\*\*2 credit course)

Engineering Principles (Grades 11-12) \*Digital Art Using Photoshop (Grades 10-12)

UCONN Engineering (Grades 11-12) Video Production (Grades 9-12)

\*Basic CAD (Grades 9-12)

\*\*Technology Occupations Internship (Grade 12)

\*\*Intermediate CAD (Grades 10-12)

\*Construction Technology (Grades 9-12)

\*Robotics (Grades 10-12)

\*Architecture (Grades 10-12)

\*Graphic Arts (Grades 9-12)

Fine Art Photography (Grades 11-12)

\*Designer's Workshop (Grades 11-12)

Discrete Math (Grades 11-12)

\*Introduction to Engineering & Design/Production (Grades 9-12) \*Analysis of Current Scientific Topics (Grades 11-12)

\*Introduction to Microelectronics (Grades 10-12)