

STAFFORD HIGH SCHOOL

PROGRAM OF STUDIES 2022-2023

GRADES 9 – 12



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HOW TO USE THIS BOOKLET

This booklet is intended to be your guide for planning your high school program. It provides you with information regarding various requirements at Stafford High School, as well as brief descriptions of the courses available. Each course listing includes the course level, credit value, as well as a course description with prerequisites for enrollment. The S.H.S. expectations are indicated by a letter (A – Academic, C - Civic, and S – Social), and the relevant indicator number (See Core Values on the following page).

AS A PARENT, YOU SHOULD:

1. Discuss course possibilities and future plans with your son or daughter.
2. Check the list of courses tentatively selected by your son or daughter, his/her teachers, and counselors. Read the course descriptions in the book and make sure all prerequisites have been met.
3. Check your son or daughter's latest report card and compare past achievement with the courses selected. Do they seem appropriate?
4. Contact your student's teachers or school counselor for additional help, if needed, regarding the specifics of your student's program.

AS A STUDENT, YOU SHOULD

1. Read course descriptions carefully to assure that you have accurate information about the courses you are selecting.
2. Discuss course choices with your present teachers to get their recommendations.
3. Seek your parents' advice before making final selections.
4. Complete a course selection worksheet to develop an extensive academic plan.

STAFFORD HIGH SCHOOL CORE VALUES

Stafford High School, in partnership with students, families, and the community, strives to nurture learners that are **Productive, Responsible, Independent, and Dedicated to Excellence** or “**PRIDE**”. We will develop informed members of a 21st Century global society and expect the highest character, integrity, respect cultural understanding, and ethical behavior. We will provide a safe, supportive, and challenging learning environment in which students have the opportunity to learn in ways that best meet their needs, and can work collaboratively to solve problems and accomplish goals.

The above Core Values, Beliefs, and Learning Expectations, as well as our academic, civic, and social expectations, are our guiding principles in the development of Stafford High School’s policies and procedures. In addition, they serve as a measurement of the success of our programs.

ACADEMIC EXPECTATIONS:

- A1:** Use a variety of research tools to access, evaluate, and apply information appropriate for authentic tasks.
- A2:** Effectively apply analysis, synthesis, and evaluative processes that enable productive problem solving.
- A3:** Communicate information clearly and effectively, using a variety of tools for a multiplicity of purposes.
- A4:** Demonstrate innovation, flexibility, and adaptability in thinking patterns and work habits.

CIVIC EXPECTATIONS:

- C1:** Value and demonstrate an understanding of global citizenship.
- C2:** Demonstrate cultural understanding and respect for diversity.

SOCIAL EXPECTATIONS:

- S1:** Value and exhibit personal responsibility and ethical behavior.
- S2:** Work both independently and collaboratively to solve problems and accomplish goals

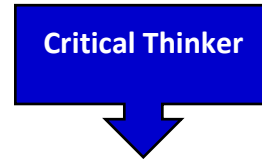
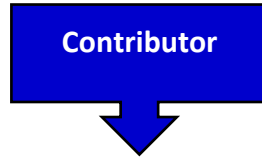
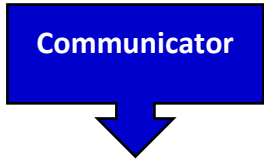
- The Stafford High School Core Values, Beliefs, and Learning Expectations were developed over a significant period of time with input from the student body, the faculty and administration, members of the Stafford community, and the Stafford Board of Education.
- Parents, students, teachers, and the community share responsibility for the educational process and serve as integral partners in striving toward Stafford High School’s Core Values. Parents, actively involved through parent support groups and various committees, are expected to encourage students in their quest for excellence.
- Students are expected to set high personal goals and work towards the attainment of the academic, civic, and social expectations as they develop individual talents and abilities. Teachers are expected to recognize the individuality of students and guide them toward success. The Stafford community provides financial, moral, and civic support to the high school and its student body, while serving as a vital and active partner in the support of education.
- Student attainment of **PRIDE** is an on-going process at Stafford High School.

THE REVIEW PROCESS FOR STAFFORD HIGH SCHOOL’S CORE VALUES, BELIEFS, AND LEARNING EXPECTATIONS

A committee comprised of faculty members, administrators, parents, and students facilitate:

1. Periodic reviews that will be conducted by the high school staff, students, parent representatives, and the Stafford Board of Education.
2. Suggested additions and modifications that will be reviewed by all constituency groups (students, parents, administrators, teachers, community, and Board of Education members).
3. Consensus generated around these additions and modifications and their adoption.

PORTRAIT OF THE GRADUATE



The Characteristics: What Will Students Be Able to Show and Do?

Effective oral, written, and digital communication skills.

Uses a variety of modalities and tools to express and share ideas.

Engage in active listening and respectful discourse to advance understanding.

Uses interpersonal skills to learn and work with individuals from diverse backgrounds.

Write with precision, clarity, and coherence appropriate to the task and audience.

Work effectively with others to solve problems and accomplish goals.

Respect and accept diverse perspectives.

Build consensus when making decisions.

Participate in thoughtful discussions.

Seeks and uses constructive feedback to adapt ideas and persist in accomplishing difficult tasks.

Demonstrates curiosity and creativity through questions and exploration.

Takes risks and utilizes failure as a learning opportunity.

Applies knowledge to new contexts and across disciplines.

Thinks outside the box by developing original solutions to problems.

Actively engages in and takes ownership of learning, school, and extracurricular activities.

Acknowledge global citizenship through understanding diverse perspectives and cultures when considering local, national and world issues.

Acts responsibly and ethically to benefit the broader community.

Works effectively with people from a range of social and cultural backgrounds.

Self-reflect and reasons effectively.

Asks meaningful questions.

Strategizes how to apply learned knowledge to new situations.

Evaluates ideas and information sources for validity, relevance, and impact.

Synthesizes information from multiple viewpoints.

Reasons through and weighs evidence to form conclusions.

Reflects and seeks out feedback to review, revise, and refine work.



CLASS PLACEMENT POLICY

In order to uphold the school's core values and beliefs around learning effectively, Stafford High School utilizes flexible grouping. This class placement procedure provides support for each student as he or she strives to achieve the school's mission and expectations for student learning. It is an effort to engage all students in inquiry, problem solving, and higher order thinking skills, and it encourages authentic application of knowledge and skills. This method of flexible class placement gives all students an equal opportunity to achieve the school's expectations and to become involved as active learners completing work to the highest standard possible.

This method of placement allows for personalization within groups and for differentiated instruction. Equity of curriculum and instruction provides all students with a core of knowledge, while the collaboration between students, parents, and educators allows for placement that encourages all students to strive for excellence.

S.H.S. has made a conscious decision not to track students. A student may be enrolled in an advanced math course, a general English course, and a heterogeneously grouped social studies course. With the exception of honors/AP/ECE courses (where students are invited to participate based on past academic performance, standardized test results, and teacher recommendation), students may select courses based on having met prerequisites. Teachers make course recommendations for the edification of students and parents, but these recommendations are advisory in nature.

Students who are not recommended for honors/AP/ECE courses but would like to challenge themselves and level up may petition the principal to enroll in the course with the understanding that no withdrawals will be permitted.

OPTIONS FOR POST-SECONDARY EDUCATION

FOUR-YEAR COLLEGE

Students should pursue a traditional college preparatory program, which includes four years of college preparatory English and math, three years of social studies, foreign language, and lab science.

TWO-YEAR JUNIOR COLLEGE AND COMMUNITY COLLEGE

These colleges may offer either an associate degree or certificate programs. Admission requirements vary but, in general, are more lenient than at a four-year college.

NURSING SCHOOLS

Nursing programs usually require a college preparatory background with at least two years of college preparatory math and one year of both biology and chemistry. With competition as it is today, the more college preparatory work taken in high school, the better. Students are also advised that some nursing colleges may require physics.

TWO-YEAR TECHNICAL COLLEGE AND TRADE SCHOOLS

Students are advised to take two or three years of both college preparatory math and science (including physics). Pre-tech programs are often available for students who have not completely fulfilled these requirements. Students considering this option should check these schools carefully to see that they are licensed and provide programs as advertised.

MILITARY SERVICE

The military provides training for a wide variety of civilian jobs. High school background should be the same as for civilian jobs that require a high school diploma. Representatives from the military come to the high school periodically, and meetings with students and parents can be arranged by counselors.

COLLEGE PARTNERSHIPS/HONORS COURSES

ASNUNTUCK COMMUNITY COLLEGE

Asnuntuck Community College is a two-year college located in Enfield, CT. Asnuntuck offers students programs that may be transferred into a four-year college and programs that prepare students for employment upon completion of their program. Asnuntuck has two programs that S.H.S. students may take advantage of:

- **ASNUNTUCK HIGH SCHOOL PARTNERSHIP PROGRAM**

This one semester program enables students to take college courses on the Asnuntuck Community College campus and receive college credit while still in high school. A variety of courses are offered. For each semester course passed, the student will receive college credit and a half (0.50) elective credit may be awarded at the high school level. Asnuntuck Community College will waive the cost of tuition and fees for program participants. Transportation, books, and supplies are the student's responsibility. Eligible students may enroll in as many as one course per semester. These courses are offered after the completion of the high school day. This program is open to students in grades 11-12 who have received principal approval and who have a minimum grade point average of 80.

- **COLLEGE/CAREERS PATHWAYS**

Juniors and seniors at Stafford High School may elect to become part of the College Careers Pathways program. Doing so will enable the student to earn Stafford High School credit and Asnuntuck Community College credit simultaneously. There is no cost involved.

Presently, Asnuntuck recognizes that the curricula of our Accounting 1 and Accounting 2, Business Administration, AP/ECE English 12, and **Algebra 2 courses are comparable to their ACC 100 Basic Accounting, BBG Intro to Business, ENG 101 Composition, and Math 137 Intermediate Algebra. Stafford High School students who take these courses and earn a minimum grade point average of 80 will be eligible to receive Asnuntuck Community College credit upon graduation, provided they have completed an application for both the college and the College Careers Pathways. These credits can then be transferred to other community colleges as well as four-year colleges/universities who accept ACC credits for transfer.

**Students applying for math credit must achieve a score of QAS 250 and above and AAF 200 and above on the Quantitative Reasoning, Algebra, and Statistics (QAS) portion of Asnuntuck's Accuplacer Placement test. The test must be taken before the add/drop deadline has passed. SAT Scores of 530- 569, ACT scores of 18-21 or a GPA of $\geq 2.7 - 2.99$. Students applying for MAT 137 credit must take Asnuntuck's final to be eligible for credit.

UConn EARLY COLLEGE EXPERIENCE

Each year, Stafford High School teachers invite students to participate in the UConn Early Campus Experience (ECE). Under this program, students are eligible to receive University of Connecticut credits for approved courses offered at Stafford High School. S.H.S. courses that are part of this program include: ECE English, ECE/AP U.S. History, AP/ECE Biology, French V, and Spanish V.

If the students do not plan on attending UConn, they may apply to transfer the credits obtained through this program to other colleges. Each college determines whether or not it will accept the credits; but in general, colleges of a similar caliber as UConn will grant credit for courses taken as part of this program. Obtaining college credits while in high school allows students to meet their college graduation requirements in a timely manner, reduce the cost of their undergraduate education, and/or take additional courses.

To participate in this program, students must complete an application and pay the UConn fee as detailed in the Early College Experience packet.

PREREQUISITES FOR ENROLLMENT
ADVANCED PLACEMENT/UCONN EARLY CAMPUS EXPERIENCE COURSES

The *ADVANCED PLACEMENT/UCONN EARLY CAMPUS EXPERIENCE PROGRAM* is an opportunity for students to broaden their educational horizons. Through successful completion of high school and college course requirements, students may attain both high school and college credits for these courses.

Minimal requirements for invitation into this challenging program include:

- Grade in previous course – at least an 85
- Recommendation – Teachers who have preciously taught the student in a similar course
- SAT/PSAT – meet benchmark in applicable area

Initially, teacher recommendation for enrollment in these programs is based on the student’s previous academic performance, class rank, test scores, and interest. A motivated student, not initially invited to participate, may seek admission through an application process in which the student shares his/her rationale for inclusion.

HONORS/AP/ECE COURSES

Honors/AP/ECE courses are advanced standing courses for students, where achievement expectancy level is the highest. The courses offered on an honors level include:

Honors English 9	AP Calculus AB	AP/ECE U.S. History
Honors English 10	Honors Chemistry	AP/ECE European History
AP Language & Composition/ECE 1007	Honors Biology	AP Music Theory
AP Literature & Composition	ECE Biology	ECE French 5
Honors Geometry	Honors Anatomy & Physiology	ECE Spanish 5
Honors Algebra 2	AP Government	AP Art
Honors Pre-Calculus		

The honors/AP/ECE courses have been developed in core subject areas for those students identified as above average achievers for whom a more rigorous program is appropriate and beneficial. Students are usually invited into these courses but may also apply to guidance for enrollment consideration in those courses in which they have academic strength. Honors courses stress the acquisition of knowledge and skills needed to be successful at the most demanding colleges and universities. Students are expected to apply their skills and knowledge in useful and creative ways. Additionally, the curriculum encourages experiences outside the regular classroom. Course requirements go beyond the usual age/grade expectations.

AP/ ECE courses offer the opportunity for interested students to gain college-level learning experiences and college credits dependent upon class performance and/or test scores on the College Board AP exams in May. The tests are optional and the College Board charges a fee for testing services. Test scores are forwarded to the college of the respective student’s choice for evaluation, and credits may be granted at the college’s discretion.

STANDARDIZED TESTS

PRELIMINARY SCHOLASTIC APTITUDE TEST (PSAT)

All ninth, tenth, and eleventh grade students will participate in the PSATs each Fall. Like the SAT, the PSAT is designed to measure the ability to understand and process elements of reading, writing, and mathematics. Each student will receive a learning profile following the test, which will guide instructional processes leading up to the Connecticut SAT School Day during their eleventh-grade year. Additionally, student profiles via College Board will specify potential areas in need of improvement and provide the student specific online tutorial opportunities.

CONNECTICUT SCHOLASTIC APTITUDE TEST (SAT) SCHOOL DAY

All Stafford High School eleventh grade students will participate in an annual statewide SAT assessment known as the Connecticut SAT School Day, which will occur each Spring. Students and parents should be aware that many colleges require Scholastic Aptitude Tests (SAT I and/or SAT II) for admission. The SATs are a measure of a students' potential for success in college. The test is comprised of mathematics, English, and writing sections. The SATs are also offered monthly from October through June, with registration deadlines one month prior to testing. Students may register online by going to <http://www.collegeboard.com>.

NEXT GENERATION SCIENCE STANDARDS TEST (NGSS)

Decades of research have resulted in an increased understanding of how to engage diverse learners so that knowledge is retained and built upon for a lifetime. Our nation's leading scientists and science educators were convened by the National Academies of Science in 2012 to synthesize this research and recommend improvements to U.S. science education. Among the envisioned improvements is a more authentic approach to scientific inquiry, the discovery process practiced by scientists that is more flexible and iterative than the scientific method taught in schools. To summarize, an NGSS learning approach teaches students to think on their own and in collaboration with others.

The Next Generation Science Standards (NGSS) are written as Performance Expectations that integrate three dimensions: disciplinary core ideas, crosscutting concepts, and science and engineering practices. To measure student progress toward achieving proficiency in these standards, the NGSS assessment is taken by all students during Grade 11. By making science learning more like the way scientists work, more relevant to the real world and to students' experiences, the NGSS can better inspire and prepare many more students for advanced studies, careers, and citizenship.

ARMED SERVICES VOCATIONAL APTITUDE BATTERY (ASVAB)

All Stafford High School 12th grade students will participate in the ASVAB. The Armed Services Vocational Aptitude Battery measures your knowledge and ability in ten different areas. It is not an IQ test, but the ASVAB does help the military assess which jobs you are best suited to perform.

ASVAB TEST AREAS

- General Science - measures knowledge of life science, earth and space science, and physical science
- Arithmetic Reasoning - measures ability to solve basic arithmetic word problems
- Word Knowledge - measures ability to understand the meaning of words through synonyms
- Paragraph Comprehension - measures ability to obtain information from written material
- Mathematics Knowledge - measures knowledge of mathematical concepts and applications
- Electronics Information - measures knowledge of electrical current, circuits, devices and electronic systems
- Auto and Shop Information - measures knowledge of automotive maintenance and repair, and wood and metal shop practices
- Mechanical Comprehension - measures knowledge of the principles of mechanical devices, structural support and properties of materials
- Assembling Objects - measures ability with spatial relationships

ACADEMICS

STAFFORD HIGH SCHOOL GRADUATION REQUIREMENTS

The Stafford Board of Education conforms with state law regarding credits for graduation from high school.

Humanities (9 credits)

English.....	4 credits
Social Studies.....	3 credits
• 1 credit in U.S. History	
• 1 credit in Government/Civics	
Electives (in Humanities).....	2 credits
• English, Social Studies, World Language, Fine Arts (Music and/or Art)	

Science, Technology, Engineering, and Math (STEM) (9 credits)

Mathematics.....	3 credits
• 1 credit in Algebra 1	
Science.....	3 credits
• 1 credit in Biology	
Electives (in STEM).....	3 credits
• Science, Applied Arts (Technology), Mathematics, Business	

Additional Credits (7 credits)

Health & Safety Education.....	1 credit
Physical Education & Wellness.....	1 credit
World Languages.....	1 credit
Electives.....	3 credits
District Mastery-Based Diploma Assessment.....	1 credit

*Financial Literacy – each student must complete at least one (1) course, as defined within the Program of Studies

Total 25 credits

- Students are required to have a schedule carrying at least 7.0 credits each school year.
- Seniors who have earned 21 credits at the conclusion of their junior year are only required to carry 6.0 credits during their senior year.

DISTRICT MASTERY-BASED DIPLOMA ASSESSMENT

Students will display mastery of the various attributes outlined in the Stafford Public Schools Portrait of the Graduate through successfully displaying proficiency in each of the criterion of the Stafford High School Portrait of the Graduate Rubric through the completion of the following:

- The Active Citizenship Project submitted during a Student's tenth grade Government course.
- Submission of pertinent course work to their faculty advisor and school counselor that displays mastery of a criterion on the aforementioned SHS Portrait of the Graduate Rubric.
- Successfully completing assignments in a Senior Seminar class that would target areas where proficiency was yet to be displayed on the SHS Portrait of the Graduate Rubric.

ADD/DROP POLICY

Students will receive their future schedules in the spring and have until the end of the current academic year to make changes to core academic classes. There will be an Add/Drop Period the first week of each semester for students who would like to change an elective course based on post-secondary aspirations.

If a student would like to withdraw from a class during the current school year, this will be reflected on their transcript with a "W" for withdrawn or a "WF" for withdrawn, failure depending on the student's current grade in the course. A request to withdraw from a course can only be made if the student will still be at full time status once the class is removed from their schedule. If a student is failing and extenuating circumstances exist and are severe in nature, an appeal to the Principal may be made to allow the transcript to reflect a "W" for withdrawn.

LEVEL CHANGE POLICY

Since students and parents, as well as SHS Staff, are involved in course selection, the vast majority of schedules are appropriate. In a few cases, educationally sound reasons exist for requesting a change. Any time a student believes such is the case, they may petition the administration by fully completing and turning in "The Petition to Request a Level Change" form within the first four weeks of the appropriate semester. No level changes will be permitted after the deadline.

PROMOTION POLICY

In order to be considered a member of a particular grade level, students must have earned the following number of credits:

Grade 10 – 6 credits
Grade 11 – 12 credits
Grade 12 – 18 credits
Graduation – 25 credits

CLASS RANK AND WEIGHTING OF GRADES

Class rank is an important consideration in the admission policies of most colleges and universities. All courses are assigned to one of three levels, with the third level being considered the most difficult. Each level is assigned a quality point multiplier based upon academic difficulty. A student's grade will be multiplied by an assigned point multiplier and then averaged to determine class rank:

Level I = 1.00

Level II = 1.05

Level III: Honors/AP/ECE = 1.10

Note: Physical education grades are included when computing grade point averages (GPA) for class rank, while student aide and independent study grades are not included.

INDEPENDENT STUDY

An independent study is designed to allow students an opportunity to pursue study in enrichment areas independently, while under the supervision of a faculty member. It is taken in addition to the normal course load per semester, and students must spend the equivalent of five periods per week in the independent study. Students should be aware that the independent study will be awarded elective credit (1 for a full year and 0.50 for a half year). Total course load, including independent study, may not exceed eight credits for the year. Students interested in obtaining an independent study should contact their school counselor for more information. Open to students in grades 9-12. Prerequisites vary – see your school counselor. Grades for independent study courses are not included in determining class rank.

STUDENT AIDES

Students may apply through guidance to serve as aides within various departments. Each of these positions requires a student who is hardworking, competent, and capable of assuming responsibility with independence. Duties vary from department to department, but generally include lab, clerical, and equipment support. Students will earn 0.50 credits for a full year and 0.25 credits for a half year. Open to students in grades 10-12, with permission of the instructor. Students must be in good academic standing. Grades for student aides are not included in determining class rank.

HOMEWORK POLICY

Homework is an integral part of the instructional program and learning process. Homework is given to provide an opportunity to practice skills that have been learned in class. In addition, it assists in developing long-term retention of learned concepts. The regular practice of homework requires the development of self-discipline and study skills. Individual course syllabi outline specific requirements regarding homework as pertinent to that course.

NATIONAL HONOR SOCIETY

Membership in the National Honor Society is based equally on service to school and community; leadership within classes and activities; a pleasant, helpful, and ethical character; and a high level of scholarship. Points are accrued during your 9th, 10th, and 11th grade years as a result in student participation in activities that exemplify the elements that are outlined in the NHS Charter. Induction into this prestigious group occurs during junior and senior year. Students who desire to be considered for membership should work diligently during all their years at the high school to maintain high levels of performance. NHS is an organization that recognizes juniors and seniors that excel in the areas of scholarship, leadership, service and character. Students are nominated for NHS based on the criterion of scholarship (cumulative GPA of 88 or above). Students fill out an application pertaining to leadership (team captain, drama choreographer, class or club officers, section leaders, etc.) and service (participation in athletics, clubs, musical groups, etc.) Teachers provide input in for the criteria of leadership and character to a Faculty Council. The Faculty Council will review student applications and select the students for the Stafford Chapter of NHS.

SUMMER SCHOOL

Students may attend summer school to attempt to secure credit in courses they have failed, provided they have maintained a 50-course average or have obtained a 50 on the final exam. Students should note that our summer school program is self-funded and each credit taken will cost \$250 (\$125 for 0.50 credit). The maximum credits allowed is 2.



ART DEPARTMENT

Humanities

SHS Art courses provide students with opportunities to develop a lifelong appreciation and enjoyment of creating art. Coursework focuses on developing students' artistic skills, personal expression, knowledge of techniques, and the ability to think, talk, and write in the universal language of art. Self-motivation, independent thinking, and perseverance are strengthened as students create complex artworks from original ideas for personal fulfillment and civic engagement.

Students wishing to pursue art as a career should plan to take at least one half-credit art course each year.

STUDIO ART - I

61830 CREDIT: 0.50

This introductory arts course provides visual art vocabulary, visual thinking, and studio skills, focusing on two-dimensional work, including drawing and painting, and three-dimensional work, including ceramics and sculpture. Students will develop their artistic abilities for both personal growth and communication. This course can be taken as a first high school art course. Students who are serious about art and considering Art College or career are encouraged to take two semesters of Studio Art.

PHOTOGRAPHY - I

61659 CREDIT: 0.50

A basic look at the world through the lens of a camera, this course will introduce student photographers to the basic techniques of digital photography and an overview of the history of photography. Students will learn to "see photographically" - paying close attention to the visible world, composing images, and exploring the metaphoric possibilities of photography, as they create, edit, and share images electronically.

DRAWING & PAINTING - I

61834 CREDIT: 0.50 GRADES: 10-12

In this course, students will explore a variety of traditional and non-traditional subject matter such as still life, landscape, portraits, personal ideas, and varied art styles. Drawing from observation and other sources, students will develop their technical and compositional skills with a wide range of drawing and painting media, such as graphite, colored pencil, charcoal, pen & ink, pastel, watercolor, tempera, acrylic and oil paint. Artists will be studied for their relevance in art history and to students' own artistic development.

Prerequisite: Studio Art.

CERAMICS & SCULPTURE - I

61833 CREDIT: 0.50 GRADES: 10-12

This course is geared toward self-expression, an understanding of form in space, and exploring the possibilities and limitations of 3-D materials. A variety of sculptural methods and techniques will be included, such as assemblage, additive, reductive, wire sculpture and clay construction. Drawing is expected in the planning stages.

Prerequisites: Studio Art.

APPLIED DRAWING & PAINTING - I

61829 CREDIT: 0.50 GRADES: 10-12

This course provides another opportunity for study of drawing and painting as a means of communication and expression, while extending and refining skills with media. Students will study techniques, theories, and historical periods and styles of art. Under the guidance of the instructor, student-initiated projects may explore a particular media in depth, a breadth of media, or the development of a concentration (theme for a body of work).

Prerequisites: Studio Art.

TRADITIONAL & FUNCTIONAL ARTS - I

61838 CREDIT: 0.50 GRADES: 10-12

Students will work with craft traditions to make functional items, such as ceramics, use of the potter's wheel, weaving, sewing, textile arts, printmaking and papermaking. The emphasis will be on attention to detail, originality of design, and quality of execution. Students will examine historic and cultural art objects, from ancient clay vessels to today's activist graffiti, which exemplify the universal human activity of making attractive, useful objects and creating art to provoke social change.

Prerequisites: Studio Art.

GREAT ARTISTS TRENDS & TECHNIQUES - I

61836 CREDIT: 0.50 GRADES: 10-12

The student will create original and appropriate art projects mirroring the style in the historical timeline, while exploring famous artists' approaches, visions, and techniques. The student will study the history of art through text, videos, connections, and art's universal language. First semester will explore ancient art to baroque period, while second semester will investigate the impressionist movement to contemporary art. A student may select one semester or both semesters. This class can be taken each semester in order to receive one whole credit.

Prerequisites: Studio Art.

ART HISTORY - I

61855 CREDIT: 0.50 GRADES: 10-12

Art History is designed to give students a better understanding of the arts and implications they have in our world. This course gives insight into the political, geographical, religious, and economic influences that have affected the development of both art forms from prehistoric times to the Renaissance. The student will: 1) develop breadth of understanding and appreciation of the cultural pattern of the Western world; 2) develop insight into exemplary works of art; 3) develop a technique of critical analysis by which to arrive at his/her own evaluation and judgment of works of visual art.

Prerequisites: Studio Art

UNIFIED ART - I

101 CREDIT: 0.50 GRADES: 12 or with instructor permission

In this course, special needs students and regular education students will work in supportive partnerships to create collaborative artworks using a variety of tactile media and techniques, including ceramics, collage, printmaking, and painting. Students will collaborate to prepare art lesson plans to share with the class. A relaxed, creative setting will foster artistic and creative development, as well as supportive social interaction and friendship, in an inclusive community. All students will be expected to participate fully with tolerance, patience and sensitivity.

Regular education students wishing to take this class will complete a short application indicating their understanding of their role within the class and the purposes of the Unified program.

HONORS PORTFOLIO DEVELOPMENT - III

61835 CREDIT: 1.0 GRADES: 11-12

In this course, students who are serious about their artwork will build a portfolio of work. Students taking this course must have successfully completed the prerequisite courses and show great skill and interest in the arts. Students will learn the requirements to gain acceptance at an art school or university.

Prerequisites: One full credit of art and instructor approval

AP STUDIO ART - III

102 CREDIT: 1.0 GRADES: 11-12



AP Studio Art is not based on a written exam: instead, students submit a portfolio of artwork for AP assessment in May. Students commit to producing a body of technically skilled work with a self-chosen creative concentration, within one of the 3 AP Studio Art portfolio options: 2-D Design, 3-D Design, or Drawing. These portfolio options correspond to common college foundation courses. Students may take this course for two consecutive years, submitting one portfolio for AP review each year. Portfolio work completed will also match requirements for art college entrance portfolios.

Prerequisites: One full credit of art and instructor approval

BUSINESS DEPARTMENT

STEM

The belief of business education at Stafford High School is to prepare our students so they can confidently enter the work place either immediately upon graduation or after obtaining additional education. The confidence of these students will be justified because they have acquired analytical and problem-solving skills that will allow them to make intelligent choices in a world full of options.

<u>Perkins V Cluster Pathways</u>	
 BUSINESS & FINANCE ENTERPRISE STRAND Economics Money Management Accounting 1 Accounting 2 Personal Finance Business Administration	 MARKETING EDUCATION STRAND Marketing E-commerce Professional Technology Sports & Entertainment Marketing

MARKETING – I

61607

CREDIT: 0.50

GRADES: 10-12

The class will cover modern methods and trends in marketing as well as the application of critical thinking and problem solving to the tasks of retail marketing.

E-COMMERCE - I

61608

CREDIT: 1.00

GRADES: 11-12

The E-Commerce course introduces students to the world of e-commerce and develops academic skills, creative thinking, and problem solving through the completion of a comprehensive e-commerce business project. Students and teachers utilize Word process and PayPal to set up, develop, and maintain a fully functioning online store. As part of their coursework, students and teachers participate in synchronous and asynchronous online technical seminars and virtual conferences facilitated by content experts, high school teachers, and technology professionals.

Prerequisites: teacher recommendation.

ENTERTAINMENT MARKETING - I

61609

CREDIT 0.50

GRADES: 11-12

This is an introductory course that will help students develop a thorough understanding of the marketing concepts and theories that apply to sports and entertainment. The areas this course will cover include basic marketing, target marketing and segmentation, event marketing, and promotions. This course will also delve into the components of promotion plans, sponsorship proposals, and the key elements needed in sports marketing plans.

ACCOUNTING 1 - I

61620

CREDIT: 1.00

GRADES: 10-12

This course offers students the opportunity to learn how to keep accurate financial records for personal and business applications. Student's progress through the accounting cycle by learning how to analyze transactions, prepare financial statements, and interpret financial reports. Students also learn about career and employment possibilities in the field of accounting, develop good work habits, and learn the importance of neatness and accuracy. Students are introduced to automated accounting applications on the computer.

ACCOUNTING 2 - II

61630 CREDIT: 1.00 GRADES: 11-12

Accounting II reinforces the theory and concepts acquired in Accounting I. Applications are taken to the next level of complexity in preparing more detailed adjustments, worksheets, and financial statements. The course content also includes computer applications in automated accounting software.

This course is available for College Careers Pathways credit.

Prerequisites: Successful completion of Accounting 1.

PROFESSIONAL TECHNOLOGY - I

61660 CREDIT: 0.50

Students will learn the Google Suite: Drive, Docs, Slides, Sheets, Drawing, Sites, and Forms as well as Microsoft Excel while integrating the structure and development of business documents.

BUSINESS ADMINISTRATION & MANAGEMENT PRINCIPLES - II

61690 CREDIT: 1.00 GRADES: 11-12

This course will introduce the student to the interesting, dynamic, and rewarding world of business -be it domestic or international operations. Different business models successfully employed throughout the world to start, operate, and manage a business entity or operation will be evaluated and analyzed. This course is strongly recommended for the student interested in developing a strong foundation for future success in his or her business career.

This course is available for College Careers Pathways credit.

PERSONAL FINANCE - I

61614 CREDIT: 0.50 GRADES: 11-12

In this course students learn how to manage their personal finances by making informed choices as consumers in the marketplace. The course will use consumer problems that students are likely to encounter during both their school years and adult lives as case studies, and computer simulations. Students will delve deeper into career planning and learn how to grow and protect wealth as they make rational decisions as it pertains to buying and saving. Students will gain the ability to make personal financial decisions in the areas of budgeting, tax return preparation, the wise use of credit, risk management, and investing techniques. Students will use investment strategies to align to their individual personal goals. This course will encompass blended learning from Business and other core courses.

This course fulfills the financial literacy graduation requirement.

ECONOMICS - II

61695 CREDIT: 1.00 GRADES: 11-12

Economics is designed to give students a better understanding of the economy and how it affects their world. Students will learn about specific economic problems and be able to view critically the problem and develop a solution based on economic theory. Students will analyze current economic problems, discuss their impact, and suggest possible solutions to the problems.

Can be counted as one social studies credit.

MONEY MANAGEMENT - I

61815 CREDIT: 1.00 GRADES: 10-12

This course provides an overview of the role of an individual, business and government in our national and global economy. Special emphasis is placed on the individual earning an income, being economically conscious and a concerned citizen. Course content focuses on buying, budgeting, saving, career planning, borrowing, investing and insuring. The intent is for students to recognize economic and financial responsibilities; also build consumer skills to compete in a competitive society.

This course fulfills the financial literacy graduation requirement.

ENGLISH DEPARTMENT

Humanities

To meet the literacy demands of the 21st century, Stafford High School will provide the resources to help students to become proficient in, to think with, to respond to, and to enjoy our language in its many aspects. Study of the language arts is vital for Stafford students because language is the medium for all communication, whether written or spoken. Students need to develop confidence and fluency in their ability to read, write, listen, speak, and view multi-media presentations critically. Students are required to compose papers on the computer and turn them in on turnitin.com, an anti-plagiarism site on the Internet. English courses address the following student expectations: A1, 2, 3, (1.2) C1 S1.

ENGLISH 9 - II

61156 CREDIT: 1.00

The main objective of the course is to lay the foundation for the achievement of the four basic skills of listening, speaking, writing, and reading. This course emphasizes the development of skills in reading and writing through a survey of various literary genres. Students will engage regularly in the writing process to develop communication, research, and critical thinking skills. Assessments include essays, projects, and tests to evaluate student learning. Vocabulary, grammar, and SAT preparation are additional components of the course.

HONORS ENGLISH 9 - III

611589 CREDIT: 1.00

The main objective of the course is to lay the foundation for the achievement of the four basic skills of listening, speaking, writing, and reading. This course will cover similar material to the Introduction to Literature 9 curriculum; however, the pace and rigor are designed to prepare students for honors-level academics. This course emphasizes the development of skills in reading and writing through a survey of various literary genres. Students will engage regularly in the writing process to develop communication, research, and critical thinking skills. Assessments include essays, projects, and tests to evaluate student learning. Vocabulary, grammar, and SAT preparation are additional components of the course.

Prerequisites: Teacher recommendation, SBAC scores (3 or above in related strands), and entrance exam.

ENGLISH 10

61161-61160 CREDIT: 1.00

This course emphasizes the development of skills in reading and writing through the study of selections from world literature. Students will engage regularly in the writing process to develop communication, research, and critical thinking skills. Assessments include essays, projects, and tests to evaluate student learning. Vocabulary, grammar, and SAT preparation are additional components of the course.

Prerequisites for English 10 - I: English 9

Prerequisites for English 10 - II: English 9 and teacher recommendation based on test scores

HONORS ENGLISH 10 - III

61166 CREDIT: 1:00

This course will cover similar material to the English 10 curriculum; however, the pace and rigor are designed to prepare students for AP Language & Composition-III, in which students can earn early college credit. It emphasizes the development of skills in reading and writing through the study of selections from world literature. Students will engage regularly in the writing process to develop communication, research, and critical thinking skills. Assessments include essays, projects, and tests to evaluate student learning. Vocabulary, grammar, and SAT preparation are additional components of the course.

Prerequisites: English 9 and teacher recommendation based on test scores.

ENGLISH 11

61172-61170

CREDIT: 1.00

This course emphasizes the development of skills in reading and writing through the study of selections from American literature. Students will engage regularly in the writing process to develop communication, research, and critical thinking skills. Assessments include essays, projects, and tests to evaluate student learning. Vocabulary, grammar, and SAT preparation are additional components of the course.

Prerequisites for English 11 - I: English 10.

Prerequisites for English 11 - II: English 10 and teacher recommendation.

AP LANGUAGE & COMPOSITION/ECE 1007 - III

61127

CREDIT: 1.00

GRADE: 11

This course is rooted in the lived practice of academic writing. Students will explore how reading and writing transform ways of thinking about and engaging with communities and the world. As a way of engaging in academic work, students will put experiences and ideas into conversation with texts, peers, and broader contexts through language. This seminar emphasizes collaborative inquiry and discovery of new locations for thinking, discussion, and writing. Students will contribute to the intellectual work of the university, and in doing so, will have the opportunity to investigate their own interests through shared readings and materials. Specifically, this course will examine what it means to be American. Students will study literary and nonfiction readings that explore the values, beliefs, dreams, politics, and diverse cultures that make up the American identity. Vocabulary and grammar instruction in addition to SAT preparation are supplementary components of the course. In addition to this requirement, there will be a plethora of informal and timed writing and mechanical practice, including vocabulary and grammar, citations and formatting.

Prerequisites: English 10 with teacher recommendation and performance on SAT/PSAT.

ENGLISH 12 - I

61196

CREDIT: 1.00

This course emphasizes the development of skills in reading and writing through the study of selections from British literature. Students will engage regularly in the writing process to develop communication, research, and critical thinking skills. Assessments include essays, projects, and tests to evaluate student learning. As a course requirement, students are responsible for an intensive term paper on a British author of their choice, as well as a book analysis on this author's work. Vocabulary and grammar are additional components of the course.

Prerequisites: English 11.

COLLEGE ENGLISH 12 - II

61140

CREDIT: 1.00

This course emphasizes the development of skills in reading and writing through the study of selections from British literature. Students will engage regularly in the writing process to develop communication, research, and critical thinking skills. Assessments are aligned with Asnuntuck Community College and include essays, projects, and tests to evaluate student learning. Students are expected to engage thoughtfully and thoroughly with the subject matter and the classroom experience offered by this course. As a course requirement, students are responsible for an intensive term paper on an author of their choice, as well as a book analysis on this author's work. Vocabulary and grammar are additional components of the course.

This course can be taken for Asnuntuck Community College credit.

Prerequisites: English 11 and teacher recommendation.



AP LITERATURE & COMPOSITION - III

61128

CREDIT: 1.00

GRADE: 12

The AP English Literature and Composition course focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods. Students engage in close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, and symbolism. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. The course content is organized into nine units, arranged in a logical, suggested sequence. Teachers create their own curricula by selecting and sequencing texts and tasks, and students develop the skills of literary analysis and composition as they repeatedly practice analyzing poetry and prose, then compose arguments about interpretations of literary works.

Prerequisites: English 11 or AP Lang & Comp/ECE 1007 teacher recommendation and performance on SAT/PSAT.

CREATIVE FICTION & POETRY - I

61152

CREDIT: 0.50

GRADES: 11-12

This course will provide students with the opportunity to hone creative writing skills in a workshop format. The fall semester will encompass various styles of writing, including poetry and fiction. Students will write, workshop, revise, and develop a portfolio of their work. Journal responses to daily prompts will be used to encourage students to write routinely in diverse mediums and genres for a range of tasks, purposes, and audiences. In addition, short readings will accompany each unit as exemplars of craft.

CREATIVE NONFICTION, PLAYS & KID'S LIT - I

611521

CREDIT: 0.50

GRADES: 11-12

This course will provide students with the opportunity to hone creative writing skills in a workshop format. The spring semester will encompass various styles of writing, including playwriting, children's literature, and nonfiction. Students will write, workshop, revise, and develop a portfolio of their work. In addition, journal responses to daily prompts will be used to encourage students to write routinely in diverse mediums and genres for a range of tasks, purposes, and audiences. In addition, short readings will accompany each unit as exemplars of craft.

EXPLORATION OF LITERATURE - I

61117

CREDIT: 0.50

GRADES: 11-12

This course is designed to increase the student's interest in reading. Aimed at developing a reading habit, the course requires that the student read productively each period. The books to be read (no magazines, newspaper, etc.) will be student and teacher choice. Each student will keep a record of the reading done. Written response/reaction to the reading will be done through daily journals; multiple projects book talks, and lit. circles make up the rest of this course. The course grade is determined by the reading, the daily writing, and the projects.

PERSPECTIVES IN LITERATURE - I

61129

CREDIT: 0.50

GRADES: 11-12

The underdog succeeds in this half year course. A Multicultural literature approach to this topic incorporates works by and about people of diverse ethnic backgrounds (African, African American, Native American, Asian, Hispanic, and Latin). Different genres: novels, short stories, and poetry will be used. These works are studied for connecting styles, themes, structure, etc. Critical thinking skills will be developed through class discussions and oral and written project presentations. Evaluation is through essays, objective testing, and projects.

MYTHOLOGY - I

61134

CREDIT: 0.50

GRADES: 11-12

This half year course focuses on mythology and its relevance to modern society and literature. World mythology, including a study of Greek and Roman gods, heroes, and drama, will be the center point for the first half of the course. Other world mythologies will be explored. Topics will include the development and purpose of myths and their continued existence. Writing and research will all be part of this course.

SCIENCE FICTION - I

61153

CREDIT: 0.50

GRADES: 11-12

This course will be concerned with short stories and novels dealing with the genres of science fiction, fantasy and horror. Besides analyzing the various stylistic elements that define a true sci-fi story, the course will examine how writers of this genre use technology and the unknown to explore truths about human nature. Students will also be required to compose various essays as a means of integrating the reading and writing process. Focus will be on classic tales of the unknown written by contemporary authors. Works of fiction by some of the following authors will be explored: Mary Shelley, Arthur C. Clark, Ray Bradbury, Isaac Asimov, and Robert Louis Stevenson.

SPEECH 1 - I

61158

CREDIT: 0.50

GRADES: 11-12

Designed to develop the students' ability to speak effectively before others, this class requires participants to prepare and deliver a variety of speeches while also evaluating others' speeches. Students will learn the value of analyzing their audience and their speaking tasks. In addition, they will practice researching a topic and outlining. Students will also complete a videotaped speech and a Power Point presentation.

SPEECH 2 - I

611581

CREDIT: 0.50

GRADES: 11-12

Designed to enhance the students' ability to speak effectively before others, this class is a continuation of Speech 1 and requires participants to prepare and deliver a variety of speeches with the focus on informative, persuasive, entertaining, and specialized speeches. Students will continue to realize the value of analyzing their audience and their speaking tasks. Students will continue the practice of researching a topic and outlining their speeches. They will also focus on creating effective introductions and conclusions. The students will complete a videotaped speech and PowerPoint presentations.

Prerequisites: Speech 1.

BUSINESS ENGLISH - I

61174

CREDIT: 0.50

GRADES: 11-12

The purpose of this course is to develop practical reading and writing skills based on real world nonfiction literature. Emphasis will be on traditional and new literacies of the Internet. Units on communication and social media, reading and writing about current business articles in the news, along with entrepreneurship are some of the topics learned. Students will have regular short reading and writing assignments, and presentations. In addition, there will be longer writing assignments on some of the larger readings.

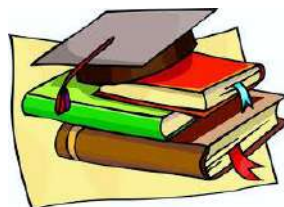
SHAKESPEARE - I

61137

CREDIT: 0.50

GRADES: 11-12

This survey course will cover at least four Shakespearean comedies and tragedies. Additionally, it will provide an historical framework to enhance appreciation and understanding of these works. A variety of formats will be used: parallel text, original text, film and live performances. Students will participate in performance, recitation, and oral interpretation of key scenes and sonnets and make connections to contemporary issues and universal themes of humanity. The students will partake in a variety of learning activities as well as writing, journaling, and reflecting. Projects will also be utilized in this course. Evaluation is through essays, objective testing, and projects. Students will be required to compose papers on the computer and turn them in on turnitin.com, an anti-plagiarism site on the Internet. Weekly vocabulary quizzes will be given.



MATHEMATICS DEPARTMENT

STEM

Mathematics is an area of study that trains the brain to think critically and to assess and analyze material in an organized and efficient manner. It provides the students with concrete skills not only to solve problems in the present but to utilize this information in a predictive fashion. Students are encouraged to enroll in four years of mathematics and to view study in this area as essential to their development as productive members of society.

ALGEBRAIC PRINCIPLES - I

61325 CREDIT: 1.00

This course is designed for students who have mastered basic arithmetic computation involving fractions, decimals, and percent. Students will study topics such as the properties of real number systems, equations and inequalities, graphs and functions. Probability and statistics will be studied in terms of graphing and interpreting data. Geometric and algebraic concepts will be used to solve real world applications. Graphing calculators and computers will be used to explore these topics. Students successfully completing this course will proceed to Geo-Algebraic Functions.

*A graphing calculator is required.

GEO-ALGEBRAIC FUNCTIONS - I

61326 CREDIT: 1.00

This course is designed for students who have successfully completed Algebraic Principles. Students will study topics such as: systems of linear equations and inequalities, quadratic functions, polynomials, exponents and exponential functions, rational and radical expressions, polynomial factoring. Probability and statistics will be studied in terms of graphing and interpreting data. Geometric and algebraic concepts will be used to solve real world applications. Graphing calculators and computers will be used to explore these topics and their applications. Students successfully completing this course will proceed to Algebra 2.

*A graphing calculator is required.

Prerequisites: completion of Algebraic Principles-I.

ALGEBRA 1 - II

61341-61312 CREDIT: 1.00

Algebra 1 places emphasis on the structure of algebra. Students will study topics such as the properties of real number systems, equations and inequalities, graphs and functions, linear systems, exponents and exponential functions. In addition, there is an overall emphasis on developing a systematic approach to problem solving.

*A graphing calculator is required.

Prerequisites for Algebra 1 - II: teacher recommendation.

GEOMETRY

61321-61320 CREDIT: 1.00

The study of geometry helps the student to develop an understanding of induction and deduction as problem-solving techniques and gives the student the opportunity to practice these methods of reasoning. Various geometric figures are studied - points, lines, polygons, circles, and volumes and surface areas of solids, as well as their properties and applications. Many of the geometric concepts are developed through discovery methods. Students are expected to expand their knowledge of geometry through investigation of related topics.

Prerequisites for Geometry - I: completion of Algebra 1.

Prerequisites for Geometry - II: completion of Algebra 1 and teacher recommendation.

HONORS GEOMETRY - III

61322 CREDIT: 1.00

This course will engage students in an intensive study of concepts in plane, solid, and coordinate geometry. Geometric figures, such as points, lines, polygons, circles, and solids, will be studied in great depth and detail, with an emphasis on proof throughout. Classes will be taught at a challenging pace, and students will be expected to investigate related topics.
Prerequisites: a grade of 85 or better in Algebra 1 or teacher recommendation based on test scores

ALGEBRA 2

61331-61330 CREDIT: 1:00

Algebra 2 continues the emphasis on the structure of algebra. Topics include creating, graphing, analyzing, and solving various forms of equations. There is an emphasis on problem solving and SAT preparation throughout.

*A graphing calculator is required.

Note: Some students may choose to take Geometry and Algebra 2 simultaneously in 10th grade, based on teacher recommendation.

Prerequisites for Algebra 2 - I: completion of Algebra 1 & Geometry.

Prerequisites for Algebra 2 - II: completion of Algebra 1 & Geometry and a teacher recommendation.

HONORS ALGEBRA 2 - III

61332 CREDIT: 1.00

The material in the Algebra II program is expanded in this course to include the extended use of word problems, more practical application of the algebraic formulae.

*A graphing calculator is required.

Prerequisites: a grade of 85 or better in Algebra I and Geometry, and teacher recommendation based on test scores.

PRE- CALCULUS - II

61349 CREDIT: 1.00

This course is geared toward college bound students and will cover material from trigonometry and advanced algebra. Students will study and apply the concepts of functions and their inverses, complex numbers, logarithms, and discrete mathematics.

*A graphing calculator is required.

Prerequisites: completion of Algebra 1, Geometry, and Algebra 2 and teacher recommendation.

HONORS PRE-CALCULUS - III

61340 CREDIT: 1.00

This advanced high school mathematics course is designed as a precursor to calculus. It presents material from algebra, trigonometry, sequences and functions, polar coordinates, theorems about limits, and the algebraic and geometric interpretation of the derived function. The emphasis of the course is not only on theoretical understanding but on practical applications.

*A graphing calculator is required.

Prerequisites: a grade of 85 or better in Algebra 1, Geometry, Algebra 2 and teacher recommendation.

PROBABILITY & STATISTICS

61367-61368 CREDIT: 1.00

This course will focus on the application of probability and statistics. Students will develop an understanding of how data are used in many different disciplines and gain additional practice with a variety of math concepts.

*A graphing calculator is required.

Prerequisites for Probability & Statistics - I: completion of 3 math credits and teacher recommendation.

Prerequisites for Probability & Statistics - II: teacher recommendation.

ADVANCED FINANCIAL ALGEBRA

61352 CREDIT: 1.00

This course will offer students the opportunity to view the world of finance through a mathematical lens. The mathematical formulas, functions, and pictorial representations used will assist students in making sense of the financial world around them and equip them with the ability to make sound financial decisions. This course will build strength in reasoning and number sense because the real-world applications demand that solutions make sense. Through contextual problem solving and the mathematical modeling of real situations, the course will give the students the motivation to persevere through routine and non-routine problems and develop strength and confidence in their mathematics ability. This course fulfills the financial literacy graduation requirement.

Prerequisites for Advanced Financial Algebra - I: teacher recommendation.

Prerequisites for Advanced Financial Algebra – II: teacher recommendation

CALCULUS - II

61351 CREDIT: 1.00 GRADE: 12

This class will present the study of change and motion by emphasizing limits, derivatives, integrals and their applications. Students who choose this course will be prepared to enroll in a Calculus I class at the college level.

*A graphing calculator is required.

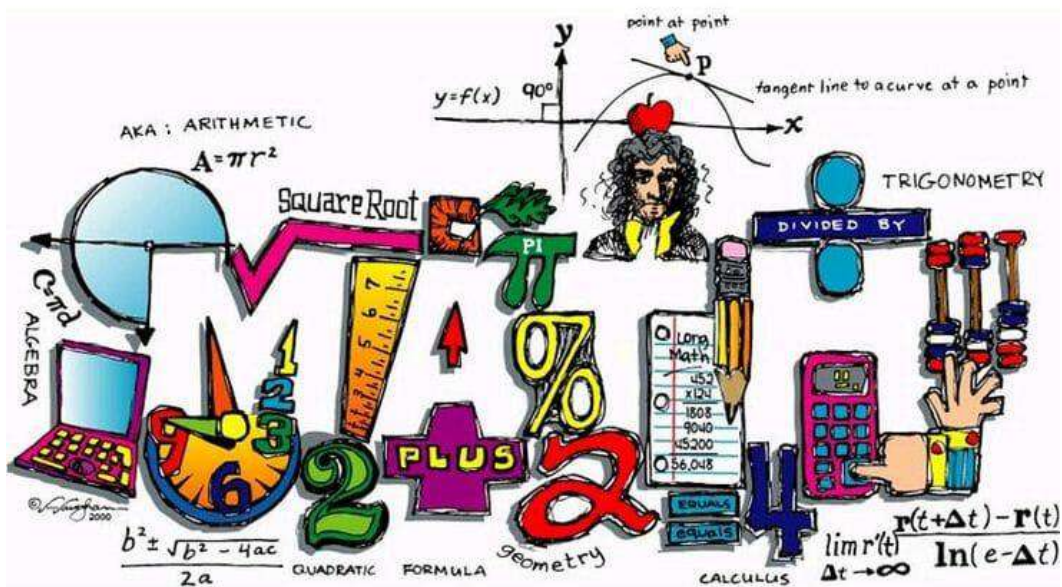
Prerequisites: completion of pre-calculus with a grade of 85 or better or with teacher recommendation.

AP CALCULUS AB - III

61350 CREDIT: 1.00 GRADE: 12

Calculus is the mathematics of change and motion. Advanced placement calculus consists of a full year of calculus comparable to courses in colleges and universities. It is expected that students who take an AP course in calculus will seek credit or placement, or both, from an institution of higher learning. This course stresses both a numerical and graphical approach. Topics include functions and their limits, derivatives, applications and computation of derivatives, integrals and interpretations, and applications of integrals. A graphing calculator is required.

Prerequisites: a grade of 85 or better in Pre-Calculus and teacher recommendation.



MUSIC DEPARTMENT

Humanities

The S.H.S. music department adheres to the philosophy that music practiced is meant to be shared through performance. The concerts, parades, and other scheduled performances are required as part of the course grade, and we encourage students to become members of our active department. Grow up in the high school with music in your life. The road you choose now can make all the difference.

PIANO - I

61945 CREDIT: 0.50

Students will learn how to play the piano or guitar from the ground up. No prior experience is necessary. Students will practice daily on either a piano/keyboard or their own acoustic guitar. Daily progress logs will be kept and weekly performances will be held in front of the class. The focus is that the students practice every day. Students will be instructed at their own pace and entering ability level. Classical and modern piano/guitar literature will be used.

MUSICAL THEATER - I

61946 CREDIT: 0.50 GRADES: 10-12

Students will create, produce, and act in a theatrical performance tailored to the needs of the class. We will explore the history of musical theater from 1900 to the present, study vocal techniques, rehearse and perform, analyze and evaluate other performances. Students will be required to participate in stage direction of scenes, monologues, technical theater elements, and the use of technology in the theater today. Some field trips will be taken to performances and local theaters.

BAND - I

61950 CREDIT: 1.00

The concert band program offers the students an opportunity to rehearse and perform a variety of concert music including transcriptions of classical orchestral masterpieces, important music for wind ensemble, and music in the popular rock, jazz, and Broadway music styles. The fall marking period places emphasis on marching and maneuvering. There will be opportunities for students to participate in festivals, exchange concerts, and other social experiences. One of the primary goals of this group is to develop performance standards.

**There are a number of school performances and outside school performances in which students are required to participate for a grade. Attendance at home football games and four scheduled basketball games is also required. Uniforms will be provided. Black marching shoes must be purchased.

Prerequisites: Student must have previous experience on a band instrument or consent of instructor.

JAZZ BAND - I

61955 CREDIT: 0.50 GRADES 10-12

The jazz band curriculum focuses on improvisation, jazz style, and arranging. Students learn to improvise over various progressions including blues. They also study classic recordings and play transcriptions of solos by legendary jazz musicians. The study of jazz history is on a two-year cycle, with this year's emphasis being on the eras and styles of jazz from 1960 to the present. The students will compose their own pieces for performances in class.

**Concerts, sports events, and special functions are required. Concert dress is black and white.

Prerequisites: permission of instructor.

MUSIC HISTORY - I

61956 CREDIT: 1.00 GRADES: 10-12

Music history is designed to give students a better understanding of the role music has played in the development of western civilization. Insight into the political, geographical, religious, and economic influences that have impacted this topic will be developed. The student will: 1) develop breadth of understanding and appreciation of the cultural pattern of the Western World; 2) develop insight into actual works of music; 3) develop a technique of critical analysis by which the student can arrive at his or her own evaluation and judgment of musical works.

This course may be taken for social studies credit

CONCERT CHOIR - I

61970

CREDIT: 1.00

The concert choir is a group of students with previous choral experience. The performances of the group are varied and rather frequent. There will be an opportunity for these students to participate in festivals throughout Connecticut, an exchange concert, and several concerts at the high school.

**There are a number of performances in which the student is required to participate. Several concerts, including winter and spring concerts, madrigal feast, and coffee house are grade requirement performances. The concert dress is black pants/long black skirts, and white shirts/blouses, or costumes.

THEORY OF MUSIC - I

61972

CREDIT: 1.00

This class will develop basic skills such as note reading, elementary harmony, dictation, and score analysis.

Students interested in music are encouraged to develop basic understanding of the theoretical skills in music.

Prerequisites: consent of instructor.

AP THEORY OF MUSIC - III

61973

CREDIT: 1.00

GRADES: 10-12

Advanced placement music theory is a course designed for the study of musical structure. It will emphasize harmonic, melodic, textural, rhythmic, and formal aspects. The student's ability to read and write musical notation is naturally fundamental to such a course. The ultimate goal of a music theory course is to develop a student's ability to recognize and understand the basic materials and processes of music that are heard or read in score. Students will be encouraged to take the advanced placement test in May in hopes of earning college credit.

Prerequisites: grade of B+ in theory of music.

UNIFIED MUSIC - I

61698

CREDIT: 0.50

Unified music is an inclusive, experiential music course specified to students with special needs. Regular education and special education students will build partnerships while fostering important and meaningful relationships through music. The class will focus on movement to music, singing, theatrics, technology and basic in-class performance coupled with experimentation between different genres and equipment. The philosophy of the music department focuses on providing outstanding music opportunities for all students and creating lifelong learners and lovers of music.

Prerequisites: permission of instructor



PHYSICAL EDUCATION & HEALTH EDUCATION

It is the belief of the SHS Health Department to provide students with the necessary skills to make informed decisions about their physical and mental health. All students are expected to participate in freshmen physical education and sophomore physical education.

HEALTH 9 - I

61416 CREDIT: 0.50

Health education is an understanding of the importance of good health and the factors that enter into acquiring it, with particular emphasis placed on the concerns of adolescents. The curriculum includes topics in the areas of mental/emotional health, substance abuse, AIDS education, nutrition, personal health, disease prevention and control, family life and sexuality, consumer health, environmental health, and safety and accident prevention. Sound knowledge and decision-making skills related to one's health are the ultimate goal of health education.

HEALTH 10 - I

61445 CREDIT: 0.50

Health 10 is a course designed to further enhance the knowledge obtained in Health 9. Here the main focus will be on Safety and Wellness. Students will develop a high degree of safety awareness, including a concern for the well-being of themselves and others. Students will obtain knowledge, attitudes and behaviors patterns for safe living and provide them with an opportunity to practice safe behaviors. An emphasis on First Aid and Emergency Procedures will also be covered. First Aid & CPR Training will be of emphasis so that the students may learn to act and react appropriately in emergency situations.

Prerequisite: Health 9.

PHYSICAL EDUCATION 9 - I

61941 CREDIT: 0.50

This course focuses on preparing students for the CT Physical Fitness Assessment. Students will be expected to perform a variety of different physical activities. The goal of this course is to develop the skills and the knowledge necessary to engage in various health-enhancing lifelong activities after the completion of the course.

PHYSICAL EDUCATION 10 - I

61940 CREDIT: 0.50

This course is a continuation of PE 9. A requirement of this course is to complete all four areas of the CT Physical Fitness Assessment. Improving fitness levels and further developing psychomotor skills are the two main objectives of the course.

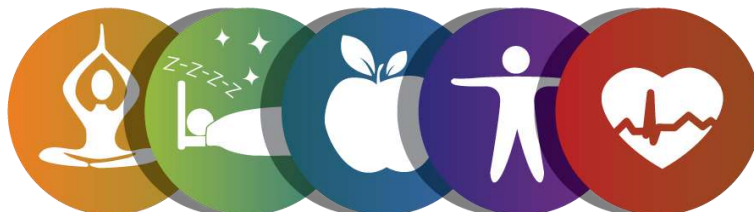
Prerequisite: Physical Education 9.

TEAM SPORTS & FITNESS - I

619011 CREDIT: 0.50 GRADES: 11-12

This course is designed to further enhance fitness levels and participate in more advanced team activities and games learned in PE 9 & 10. The class aims to explore components of fitness, specific strategies to improve skills and the roles in team dynamics. Students will participate in a wide variety of team sports and lifetime activities. Cooperation, leadership, teamwork, communication and patience are all covered in this class.

Prerequisite: Grade of 85 or higher in both PE 9 & PE 10.



UNIFIED PHYSICAL EDUCATION - I

61697

CREDIT: 0.50

GRADES: 11-12

This course combines students of all abilities to participate in developmentally appropriate activities including lifetime activities, physical fitness and sport. Students will work together to increase competence and confidence in a variety of different activities. Through ongoing leadership opportunities, members of this course will be empowered to help create a more inclusive and accepting school environment for all students.

Prerequisite: Grade of 85 or higher in both PE/Health 9 and PE/Health 10 and approval by instructors. Letters of intent are required if prerequisites are not met.

ELECTIVE PHYSICAL EDUCATION - I

61901

CREDIT: 0.50

GRADES: 11-12

This course offers a competitive and strategic environment while reinforcing basic skills learned in PE 9 & 10. Units will include; badminton, basketball, flag football, floor hockey, kickball, speedball, softball, soccer, Ultimate Frisbee and volleyball. The objective of the course is to promote lifelong fitness through the use of recreational activities.

Prerequisite: Grade of 85 or higher in both PE 9 & PE 10



SCIENCE DEPARTMENT

STEM

It is the intention of the S.H.S. science department to prepare students, through the use of scientific inquiry, to problem solve and to utilize technology in order to make informed decisions about the world in which they live.

GEO-PHYSICAL SCIENCE - II

61414 CREDIT: 1.00

Geo-Physical Science is an investigation-driven course to understand the processes of change in earth and space and demonstrate how our lives are impacted by the earth and its place in the universe. The course will focus on the following five main units: Forces and Motion, Astronomy, Earth's Processes, Climate Science, and Natural Resource Science. Students will create explanatory models independently and collaboratively that allow them to investigate scientific concepts and utilize data to propose solutions. Geo-Physical Science is aligned to the Next Generation Science Standards and the Connecticut Science Framework. Required for all 9th grade students.

BIOLOGY

61439-61422 CREDIT: 1.00

Biology is a course that provides a comprehensive survey that explains the basic unifying principles of life. The course will focus on the following five main units: Matter and Energy in Living Systems, Dynamics of Ecosystems, Genetics and Heredity, Natural Selection, and Sustainability. Throughout the course, students will be required to utilize productive problem-solving skills to formulate questions to scientific problems, investigate and defend claims from evidence, and analyze/interpret data. Biology is aligned to the Next Generation Science Standards and the Connecticut Science Framework. Required for all 10th grade students.

Prerequisites for Biology - I: Geo-physical science.

Prerequisites for Biology - II: Geo-physical science with a grade of 75 or higher.

HONORS BIOLOGY – III

61444 CREDIT: 1.00

Biology is a course that provides a comprehensive survey that explains the basic unifying principles of life. The course will focus on the following five main units: Matter and Energy in Living Systems, Dynamics of Ecosystems, Genetics and Heredity, Natural Selection, and Sustainability. Throughout the course, students will be required to utilize productive problem-solving skills to formulate questions to scientific problems, investigate and defend claims from evidence, and analyze/interpret data. Biology is aligned to the Next Generation Science Standards and the Connecticut Science Framework. Required for all 10th grade students.

Prerequisites: Geo-physical science with a grade of 85 or higher.

ECE BIOLOGY - III

61433 CREDIT: 1.00 GRADE: 12

BIOL 1107: Principles of Biology I - Four credits (\$200). Offered Fall. Designed to provide a foundation for more advanced courses in Biology and related sciences. Topics covered include molecular and cell biology, animal anatomy and physiology. Laboratory exercises in BIOL 1107 include dissection of preserved animals.

BIOL 1108: Principles of Biology II - Four credits (\$200). Offered Spring. Designed to provide a foundation for more advanced courses in Biology and related sciences. Topics covered include plant biology, genetics, ecology, and evolution.

Prerequisites: completion of biology-II or -III with an 85 average, chemistry-II or -III with at least an 85 average and/or recommendation of the instructor.



CHEMISTRY

61430-61432 CREDIT: 1.00

Chemistry is a required course that presents an explanation of the relationship between structure, function, and chemical properties. The course will focus on the following five main units: Atomic Structure and the Periodic Table, Chemical Bonding, Chemical Reactions, and Applied Chemistry. Students will create explanatory models independently and collaboratively that allow them to investigate scientific concepts. Students will develop their conceptual thinking skills through experimentation, technical writing, and their grasp of abstract concepts. Chemistry is aligned to the Next Generation Science Standards and the Connecticut Science Framework. Near the completion of this course, students will be administered the new Connecticut Science Assessment. Required for all 11th grade students.

Prerequisites for Chemistry - I: completion of Biology.

Prerequisites for Chemistry - II: completion of Biology with a grade of 70 or higher.

HONORS CHEMISTRY - III

61434 CREDIT: 1.00

Chemistry is a required course that presents an explanation of the relationship between structure, function, and chemical properties. The course will focus on the following five main units: Atomic Structure and the Periodic Table, Chemical Bonding, Chemical Reactions, and Applied Chemistry. Students will create explanatory models independently and collaboratively that allow them to investigate scientific concepts. Students will develop their conceptual thinking skills through experimentation, technical writing, and their grasp of abstract concepts. Chemistry is aligned to the Next Generation Science Standards and the Connecticut Science Framework. Near the completion of this course, students will be administered the new Connecticut Science Assessment. Required for all 11th grade students.

Prerequisites: Successful completion of biology with a grade of 85 or higher and/or teacher recommendation.

ENVIRONMENTAL SCIENCE - I

61480 CREDIT: 1.00 GRADES: 12

This course examines how individuals and societies use natural resources and the consequential environmental impact of using and extracting those resources. Students will explore content and activities in the areas of Earth's Place in the Universe, Earth's Systems, as well as Earth and Human Activities. Emphasis will be placed on STEM (Science, Technology, Engineering, Mathematics) in laboratory activities which will support the students in understanding the application of scientific concepts in real life as well as across disciplines. Environmental Science is aligned to the Next Generation Science Standards and the Connecticut Science Framework.

Prerequisites: successful completion of physical science, biology and chemistry.

PHYSICS - II

61440 CREDIT: 1.00 GRADES: 12

This is an introductory, in-depth course in physics in which students will expand upon concepts taught in Geo-physical science. They will further their knowledge of the principles of classical physics and basic scientific skills. These skills include the gathering of data, treatment of data, problem-solving, building of scientific models, and the use of mathematics as an analytical tool. The subject matter covered in this course is mechanics in semester one (classical physics). Mechanics is continued in semester two and includes rotational mechanics. Mechanics is followed by wave theory (mechanical waves, sound, and optics) and Electricity/Magnetism. Students learn the basic skills of laboratory science, graphing techniques, analyzing errors in measurement, laboratory report writing and using technology to take and analyze data.

Prerequisites: Algebra II with a 75 or above, and recommendation by a science teacher based on test scores.

HONORS ANATOMY AND PHYSIOLOGY - III

61450 CREDIT: 1.00 GRADE: 12

This course is recommended for highly motivated students who plan to continue to study biology in college or for students who are interested in careers in medicine, nursing, or in the allied health field. Anatomy and physiology is a detailed study of the structure and function of human body systems along with the impact of disease and malfunction on these systems. There is a heavy emphasis on medical terminology and application of skills using clinical case studies. The lab experience involves a detailed analysis of human anatomy through dissections of representative mammals and organs. Research and oral presentations are required.

Prerequisites: successful completion of biology-II, chemistry-II, and/or teacher recommendation.

SOCIAL STUDIES DEPARTMENT

Humanities

The philosophy of the Stafford High School social studies department is to allow students to gain perspective of local, national, and global issues. The department seeks to challenge young people to construct solutions to today's problems. Students take a variety of academic courses to provide them the foundation to become active, knowledgeable citizens. To this end, students are encouraged to participate in the classroom, throughout the school, and in the local community.

WORLD CULTURES - II

61197 CREDIT: 1.00

This course's curriculum has an increased emphasis on the five themes of geography and the economic development of specific societies. In addition, students will be required to research and write a term paper.

GOVERNMENT

611922-611912 CREDIT 1.00

This civics course provides the opportunity for students to study and practice the principles of democracy. Students will learn about the origins of our democratic system and how these foundations are applied today. Each branch (Legislative, Executive, and Judicial) of the government will be focused on. Students are expected to participate in community service as part of the course requirements. In addition, students must complete the SHS Mastery-Based District Assessment, which is required for graduation. Required for all 10th grade students.

Prerequisites for Government - I: completion of World Cultures

Prerequisites for Government - II: completion of World Cultures and teacher recommendation.

AP GOVERNMENT & POLITICS - III

61232 CREDIT: 1.00

Students will explore both theoretical and practical issues in contemporary politics and current events in the context of the constitutional underpinnings of our government. It is intended to acquaint students with the vital governing documents from the United States history such as the Articles of Confederation, the Declaration of Independence, the United States constitution and the federalist papers. Students will then study both the formal and informal institutions of American Government with the goal of developing a thorough understanding of the interaction of the two in the policy making process and for the purpose of nurturing a systemic approach to the study of government.

Prerequisites: World Cultures - II and teacher recommendation.

U.S. HISTORY

61238-61237 CREDIT 1.00

This course offers a chronological survey of major events in United States history from the early cultures of North America through World War II. Students should expect an emphasis on the improvement of their reading, writing, research, critical thinking, and SAT-related skills in addition to expanding their knowledge of United States history. Students will practice history-specific skills like forming an argument and using evidence to support a position. Furthermore, course will focus on analysis of primary and secondary sources. Students will be required to research and write a term paper each semester. Required for all 11th grade students.

Prerequisites for U.S. History - I: completion of World Cultures and Government.

Prerequisites for U.S. History - II: completion of World Cultures and Government with teacher recommendation.

ECE/AP U.S. HISTORY - III

61189

CREDIT: 1.00

GRADES: 11-12

This course is a survey of American history that attempts to duplicate college-level inquiry and discussion. There is a tremendous amount of historical data that is sifted through by the students that is later organized into well-defined historical arguments. The focus of the course is for student to be able to engage in higher levels of thinking through analysis of historical evidence and then be able to write a persuasive historical essay. There is a term paper requirement for each semester in this course. The coursework is all preparation for the AP examination in which students can earn college credit. *Prerequisites: teacher recommendation.*

AP EUROPEAN HISTORY - III

612625

CREDIT: 1.0

GRADES: 11-12

This course focuses on developing students' understanding of European history from approximately 1450 to the present day. Students will study the content of European History for significant events/individuals/developments and the processes in four historical periods, develop and use thinking skills and methods employed by historians when they interpret the past. The course focuses on 5 themes: interaction of Europe and the world, poverty and prosperity, objective knowledge and subjective visions, states and other institutions of power, and individuals and society.)

Prerequisites: US History - II or AP US History & teacher recommendation.

ECE EUROPEAN HISTORY - III

61226

CREDIT 1.00

GRADES: 11-12

This course provides students with an opportunity to examine some of the cultural, social, political, and economic developments of the last five hundred years of European history. Through a combination of lectures and discussions, it presents an overview of some of the major changes of the period while focusing in greater depth on analysis of some specific themes, events, and issues that continue to have a profound impact on our own modern society.

Prerequisites: permission of the instructor.

CURRENT EVENTS - I

61242

CREDIT 0.50

GRADES: 11-12

Students will demonstrate their comprehension of important, often controversial, issues through daily and weekly news. In order to increase awareness of current events at the local, national, and international level, students will focus on and examine issues of special interest to them individually. Students will be responsible for learning about current events outside of their own personal interests. Each student will be required to read, analyze, evaluate, and possibly debate an issue. Weekly assessments will determine the students' ability to identify and summarize the key components of current events. Stories and articles will come from a variety of global-media and web-based resources including CNN Student News. CNN Student News offers a blog so that students may respond about a segment of the news as well as reading daily opinions from other students and schools. By accessing a wide range of resources, students will be able to utilize the information for class discussion and then to present their evidence objectively. By examining the multiple viewpoints of nations and cultures on current events, students will develop informed perspectives and opinions about the increasingly interdependent and diverse world of the 21st century.

WOMEN IN HISTORY - I

61247

CREDIT: 0.50

GRADES: 11-12

Women have been key players in U.S. history as well as in a global context. In this course, students will learn about some of the most important women in historical events in our history. Students will demonstrate their knowledge of Women in History spanning all periods of history encompassing many diverse groups, races, and regions of the United States. Students will be required to compare everyday experiences, failures, frustrations, and hard-won victories of ordinary and extraordinary American women. Each student will analyze and interpret firsthand accounts of the lives of American women from some of the original settlers to the women of today. In order to place a document in a historic framework, students will research primary/secondary sources. Students will analyze and interpret this information to conduct class debates and discussions.

PSYCHOLOGY - II

61221

CREDIT: 0.50

GRADE: 12

This is a semester course that introduces students to the field of psychology. This study explores the behavior and mental processes of individuals, methods of psychological research, psychological disorders, and more.

SOCIOLOGY - II

61218

CREDIT: 0.50

GRADE: 12

This semester-long course offers an introduction to the field of sociology. This discipline explores the behavior of people in social groups, as well as the role of groups as a socializing force upon individuals.

WORLD HISTORY - I

61205

CREDIT: 1.00

GRADES: 11-12

This course examines the history of human development and aspirations, using a chronological and thematic approach. The first semester studies the contributions of ancient Eastern, Middle Eastern, Greek, and Roman cultures. The second semester focuses on the middle ages, French Revolution, Agricultural Revolution, and Industrial Revolutions. The topics will embrace the struggle of the human mind and spirit throughout the ages.

THE CIVIL WAR ERA - II

61254

CREDIT: 0.50

GRADES: 11-12

The course will center around exploring the causes of the Civil War, including a detailed study of slavery, abolitionism, development of Southern sectional consciousness, rise of the Republicans, Lincoln's election, and secession crises of 1860–1861. The political and military history of the period will also be examined, as will the postwar struggle to reconstruct the union. The course will conclude with an evaluation of the Civil War's effect on the post-war development of the South through the 1960s, of the Civil War's election, and secession crises of 1860 – 1861. The political and military history of the period will also be examined, as will the postwar struggle to reconstruct the union. The course will conclude with an evaluation of the Civil War's effect on the post-war development of the South through the 1960s.

RUSSIAN HISTORY - II

61248

CREDIT: 0.50

GRADES: 11-12

Students interested in a better understanding of communism and the history of Russia and the Soviet Union are encouraged to take this course. The changes in the former Soviet Union will be researched. By comparing communism to our system, students will have a better understanding and appreciation of our form of government.

BLACK & LATINO STUDIES - I

611945

CREDIT: 1.00

GRADES: 10-12

The course is an opportunity for students to explore accomplishments, struggles, intersections, perspectives, and collaborations of African American/Black and Puerto Rican/Latino people in the U.S. Students will examine how historical movements, legislation, and wars affected the citizenship rights of these groups and how they, both separately and together, worked to build U.S. cultural and economic wealth and create more just societies in local, national, and international contexts. Coursework will provide students with tools to identify historic and contemporary tensions around race and difference; map economic and racial disparities over time; strengthen their own identity development; and address bias in their communities.





Prerequisites: teacher recommendation



TECHNOLOGY EDUCATION DEPARTMENT

STEM

Technology education encourages students to explore and develop individual interests, creative and intellectual abilities that relate to technical careers, problems, and solutions.

<u>Perkins V Cluster Pathways</u>	
 <p>TECHNOLOGY EDUCATION STRAND</p> <p>Wood Technology Construction Technology Architectural Design & Drafting</p>	 <p>MANUFACTURING STRAND</p> <p>Metals 1 Metals 2 Welding</p>
 <p>INFORMATION TECHNOLOGY STRAND</p> <p>Graphics 1 Graphics 2 Video Game Design Video Production & Editing Web Development Computer Science Principles 1 Computer Science Principles 2</p>	 <p>ENGINEERING & DESIGN STRAND</p> <p>Robotics 1 Robotics 2 Computer Aided Drafting (CAD) Mechatronics Research and Development</p>

GRAPHICS 1 - I

61741 CREDIT: 0.50

Making movie posters, calendars, business cards, advertisements, comics, illustrations, and photo editing, students in this course will use all four areas of graphic design (design and layout, image generation, pre-production and production, and binding and finishing) to create professional looking material using the Corel suite as well as Adobe Photo shop and other programs. Students will use these skills to produce these professional grade materials for class as well as producing material for Stafford High School and the rest of the district.

GRAPHICS 2 - II

61743 CREDIT: 0.50 GRADES: 10-12

Students that successfully completed Graphics will dive deeper into Adobe Photoshop, Adobe Illustrator and Adobe InDesign. Students will be exploring advanced techniques as well as ways to produce projects and items that they would encounter in industrial, professional and commercial settings.

Prerequisites: completion of Graphics I.

WEB DEVELOPMENT - I

61040 CREDIT: 0.50 GRADES: 10-12

Students who take this course will learn how to create original responsive websites using various techniques and tools. Coding technologies such as HTML, CSS, JavaScript, and JQuery are introduced and explored by completing different projects. This course is perfect for students interested in careers in computer programming, graphic arts, video game design, and more.

Prerequisites: completion of Graphics.

VIDEO GAME DESIGN - I

61731

CREDIT: 0.50

GRADES: 10-12

This is an introductory course to game design and development that engages students using project-based learning. From the first lesson to the last lesson, students navigate through guided tutorials building several different games that test and enhance different coding skills. Beyond building games, students learn the components of how gaming is used in the "real" world, what goes into designing good games, how physics principles are used in game development, the gaming and engineering design cycle, and much more.

Prerequisites: completion of Graphics.

VIDEO PRODUCTION & EDITING - I

61701

CREDIT: 0.50

GRADES: 11-12

Lights, Camera, ACTION! Everywhere we go we are bombarded by visual media. In Video Communications & Production we will be exploring the world of video. Students will film, direct, star in, and edit pieces from commercials to movies. Over the span of this course, students will gain experience using cutting edge equipment and software to create their pieces. Graphic Design is a required pre-requisite for this course as the programs we cover in that course will be leaned on to create components in your movies.

Prerequisites: completion of Graphics.

COMPUTER SCIENCE PRINCIPLES 1 - I

61713

CREDIT: 0.50

Students will explore how computers store complex information like numbers, text, images and sound and debate the impacts of digitizing information. They will learn about how the Internet works and discuss its impacts on politics, culture, and the economy. While designing various apps, they will learn both fundamental programming concepts and collaborative software development processes.

COMPUTER SCIENCE PRINCIPLES 2 - II

61714

CREDIT: 0.50

Students will design and analyze algorithms to understand how they work and why some are considered better than others. They will learn how to design clean and reusable code that can be shared with a single classmate or the entire world. They will explore and visualize datasets from a wide variety of topics as they hunt for patterns and try to learn more about the world around them. They will also research and debate current events at the intersection of data, public policy, law, ethics, and societal impact.

Prerequisites: Successful completion of Computer Science Principles 1-I.

WOOD TECHNOLOGY - I

61710

CREDIT: 1.00

This course is designed for the beginning student in woodworking. The student will learn all of the hand tools, power hand tools, and machinery on an introductory level stressing personal safety when using these tools. The students will learn project planning, layout work, and plan of procedures for product development. Construction techniques and finishing will be explored. Students will construct beginning level projects to develop their skills and appreciation for good craftsmanship. Active participation, positive attitude, and daily cleanup are required. A \$10 shop fee for basic materials will be required for all students. Any materials above what the shop fee covers will be the responsibility of the student.

CONSTRUCTION TECHNOLOGY - I

61704

CREDIT: 1.00

GRADES: 10-12

This course will introduce students to residential house construction while continuing to build on the skills and techniques learned in Wood Technology 1. Students will design and construct increasingly complex wood projects for individual use. Students may also contribute to the Stafford High School community by constructing various projects for use around the school. Building design and construction will be studied throughout the class including the use of building codes, site preparation, material selection, framing, and finishing techniques. Active participation, positive attitude, and daily cleanup are required. A \$10 shop fee for basic materials will be required for all students. Any materials above what the shop fee covers will be the responsibility of the student.

Prerequisites: completion of Wood Technology 1 and permission of the teacher.

ARCHITECTURAL DESIGN/DRAFTING - I

61737

CREDIT: 0.50

Designing sheds, homes, schools and offices, students will learn the ins and outs of architectural design and drafting. Students will learn how to create landscape designs that include grass, trees, shrubbery, etc. in computer-based architectural software that will allow them to create stunning designs with fully finished, furnished, and landscaped structures that include exterior and interior design. Finally, students will create 3-D models of their house designs in the form of framing models and landscape models.

ROBOTICS 1 - I

61700

CREDIT: 0.50

GRADES: 11-12

This course will introduce students to a variety of basic robotic systems. Students will work with VEX IQ robotics kits and learn about mechanical systems, motion systems, motor controls, transmissions, sensors, autonomous behavior, and arms/manipulators to move objects. Students will work as individuals and as teams to complete various tasks and design challenges. Students will be given a problem and be asked to go through the design process towards an end result. This course is ideal for any student considering a career in engineering, robotics, programming, or manufacturing.

ROBOTICS 2 - II

61738

CREDIT: 0.50

GRADES: 11-12

This course will build upon the knowledge and skills learned in Robotics 1. Students will be using VEX EDR kits individually and as teams to design, build and test robots to complete a multitude of tasks and competitions. These will range from simple object manipulation to autonomous movement. Through the use of sensors and programming, the students will learn to have their robots interact with the environment around them in order to better complete their tasks. This course is ideal for any student considering a career in engineering, robotics, programming, or manufacturing.

Prerequisites: completion of Robotics 1.

COMPUTER AIDED DRAFTING (CAD) - I

61728

CREDIT: 0.50

GRADES: 10-12

Using Mountain Boards to Trebuchets, students will learn the skills necessary to operate some of the most advanced solid modeling software available. This course will be guided through instruction, demonstration, hands-on activities, and problem-solving techniques in computer-aided design (CAD). Since all objects can be broken down to points, lines, arcs, symbols, and text, students will become masters at manipulating these primitives to create 3-D objects in the digital and physical realm. This course is appropriate for students planning to pursue careers in engineering, architecture, graphic design, manufacturing, building trades, or related fields.

METAL TECHNOLOGY 1 - I

61751

CREDIT: 0.50

This first-year course in beginning metals is designed for the student who has never had a course in metals. The course involves developing safe work habits using various hand tools, hand-operated equipment, and other hand related processes that are used in the fabrication of sheet metal projects. The student will learn how to use basic measuring tools, basic layout procedures, and pattern making that is used for sheet metal bending and forming. Fastening concepts using various forms of hardware, soldering, brazing, spot welding, and MIG welding used in sheet metal work will also be covered. A \$10 shop fee for basic materials will be required for all students. Any materials above and beyond what the shop fee covers will be the responsibility of the student. Taking CAD at the same time is recommended.

METAL TECHNOLOGY 2 - I

61752

CREDIT: 0.50

GRADES: 10-12

The second-year course in metals is designed to give the student an opportunity to identify and use machinist hand tools and develop a better understanding of blueprint reading and layout procedures of a project. The student will learn how to use the various machines that machinists use every day. The emphasis is placed on developing individual skills in metal machining, metal product development, and fastening methods that are required to complete various fabricated parts. Active participation, positive attitude, and daily cleanup are required. A \$10 shop fee for basic materials will be required for all students. Any materials what the shop fee covers will be the responsibility of the student.

Prerequisites: completion of Metal Technology 1 and permission of instructor.

WELDING TECHNOLOGY - I

61762

CREDIT: 0.50

GRADES: 10-12

This course is designed to introduce the student to the basic introductory concepts of safe welding practices. Skill development will depend on each student's individual practice. The types of welding to be explained and practiced safely will be gas welding, arc welding, spot welding, MIG welding, and TIG welding. The students in this course must pass required safety tests and other set-up procedure tests and practice safe work habits each time they use the equipment. The students must wear appropriate clothing each day throughout the course to protect their bodies. Active participation, positive attitude, and daily cleanup are required. A \$10 shop fee for basic materials will be required for all students. Any materials above and beyond what the shop fee covers will be the responsibility of the student.

Prerequisites: completion of Metal I.

MECHATRONICS – II

61705

CREDIT: 0.50

GRADES: 11-12

Mechatronics provides students with the opportunity to explore automation technology using mechatronics systems. Students will be challenged to design an automated system by taking on the role of a mechatronics engineer. They will explore the interaction between mechanical, electrical, and computer engineering disciplines to develop systems that handle tasks meant to help speed up processes that are too time consuming or unsafe for humans to do. This is a STEM class that is being made possible through a partnership between 3M Corp. and Asnuntuck Community College. Students will have the opportunity to earn an industry certification in Mechatronics.

Prerequisites: Metal Tech 1, Wood Tech 1, Welding, Cad, Robotics, or Video Game Design and teacher recommendation.

RESEARCH AND DEVELOPMENT (R&D) - II

612002

CREDIT: 1.00

GRADES: 11-12

This is a college level course focused on the design process. This student driven class will explore topics related to Science, Technology, Engineering and Mathematics. Students may choose to compete in the CT Electrathon in which they will construct an ultra-high mileage electric race car. Or the students might choose to participate in the CT hovercraft races which would require them to design and build a hovercraft to go on land and water. However, the students are not restricted to these two options, any topic that the class researches and presents to the instructors can become the focus of the course. Focusing on the design and engineering processes students will spend a year delving deep into 21st century skills related to modern manufacturing and design.

Prerequisites: completion of CAD, Metals 2, Woods 2, or Physics and instructor recommendation.

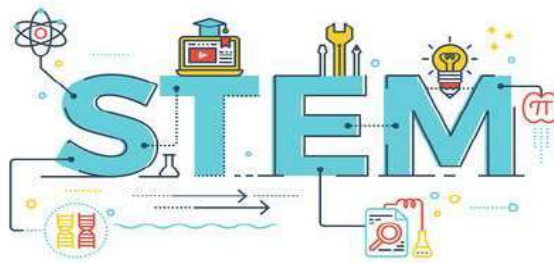
YEARBOOK - I

61942

CREDIT: 0.50

Creation of the yearbook is a longstanding tradition at Stafford High School. Put your creativity and talents to good use and help create the next great edition of the Stafford High School Torch.

Prerequisites: Graphics (grade 90 or better) or teacher recommendation.



WORLD LANGUAGE

Humanities

As a result of world language education in grades 9-12, students will: communicate in at least one language other than English; gain knowledge and understanding of other cultures; make connections with other areas of study and acquire information; understand the nature of language and cultures through comparisons; and participate in multicultural communities within a variety of contexts.

FRENCH 1 - II

61510

CREDIT: 1.00

This is an introductory course to spoken and written French. Speaking skills will be practiced through the use of authentic audio resources, oral classroom drills, short presentations, and skits. Writing skills will be practiced through written exercises, classroom drills, and short compositions. French culture and customs are also introduced. On completion of the course, students should be able to hold a limited conversation, give a short presentation, write a brief composition and read simple prose. *A student who does not achieve at least a 70 in this course is advised not to take French 2.*

FRENCH 2 - II

61520

CREDIT: 1.00

This class is a review of French 1 skills while continuing on to more complex grammar. Oral skills are further perfected through short presentations, oral classroom exercises, dictation, longer compositions, and letters. There will be continued study of French and Francophonic culture and civilization. Students will be expected to practice new lessons and vocabulary along with previously mastered material through conversation, skits, songs, and written assignments. Students will read short stories. Songs and poems are used to reinforce grammar and pronunciation.

Prerequisites: completion of French 1 and teacher recommendation.

FRENCH 3 - II

61530

CREDIT: 1.00

GRADES: 10-12

In French III, more advanced grammar is taught. Students create and perform skits as well as participate in classroom drills in the target language. Stories and grammar are intertwined with cultural and integrated units. Current French topics are discussed as well. Songs and poems are used to reinforce grammar and pronunciation. Classroom discussions, oral reports, and compositions are all included.

Prerequisites: completion of French 2 and teacher recommendation.

FRENCH 4 - II

61540

CREDIT: 1.00

GRADES: 11-12

A central focus of this course is on French literature and film. Stories, plays, and poems will be studied in thematic units. Literature circles, where students analyze together in groups and other group/paired activities, will be utilized. Finer points of grammar will be studied. Audio and video presentations by native speakers will be used to further increase students' aural comprehension. Current events and daily life events will be used, including oral reports and summaries to further increase oral proficiency. Grammar is reviewed and elaborated upon, as needed. French 4 students are encouraged to take the AAPPL exam with the goal of earning the Seal of Biliteracy.

Prerequisites: completion of French 3 and teacher recommendation.



ECE FRENCH 5 - III

61545

CREDIT: 1.00

GRADES: 12

French 5 is taught as a history of French literature and culture through the centuries which includes the history of France, corresponding scientific discoveries, music, and art works, while following themes of societal changes, religion, and economics. A variety of methods are utilized: lecture, student-teacher question and answer interaction, group work, pair work, and students' oral presentations and re-enactment. Many exercises of comprehension and "perception" are in the text that will often be used in conjunction with the methods stated above. Testing will include oral presentations, analysis through written essays, and objective instruments. A five-page paper is required by the University of Connecticut and will be worked on in stages throughout the second semester. French 5 students are encouraged to take the AAPPL exam with the goal of earning the Seal of Biliteracy. Six UConn college credits will be awarded.

Prerequisites: completion of French 4 and teacher recommendation

SPANISH 1 - II

61550

CREDIT: 1.00

Initial instruction emphasizes correction pronunciation of the language, basic vocabulary, essential grammar concepts, and study skills. On completion of the course, students should be able to hold a limited conversation, give a short presentation, write a short composition, and read short readings on the topics studied in the course. Students are introduced to Hispanic and Latin-American customs and culture. *A student who does not achieve at least a 70 in this course is advised not to take Spanish 2.*

SPANISH 2 - II

61560

CREDIT: 1.00

Students continue developing skills in listening, speaking, reading, and writing. Short dialogues, stories, and articles will serve as a basis for oral and written practice. Study of grammar will include present, present progressive, past, and near future tenses. Students will be expected to practice new vocabulary and grammar topics along with previously mastered material through conversation, skits, songs, and written assignments.

Prerequisite: completion of Spanish 1 and teacher recommendation.

SPANISH 3 - II

61570

CREDIT: 1.00

Spanish 3 will continue to develop audio-lingual skills with greater emphasis on developing speaking proficiency in the foreign language. Previously learned verb tenses will be reviewed and advanced tenses will be introduced and practiced in oral and written activities. Students will read authentic texts and respond to inquiries in Spanish based on the readings. Students will be expected to practice new vocabulary and grammar topics along with previously mastered material through conversations, dialogues, songs, and written assignments.

Prerequisite: completion of Spanish 2 and teacher recommendation.

SPANISH 4 - II

61580

CREDIT: 1.00

GRADES: 11-12

Spanish 4 students will be expected to work more independently than they have in their previous years of language study. Students will study the geography, history, and culture of different Spanish speaking countries through articles, literature, and videos. Students will be expected to do individual research and presentations in Spanish on the Hispanic countries being studied. Conversation will be conducted in Spanish, and students will create and present dialogues to the class based on the vocabulary and grammar topics being studied. Students who are enrolled in Spanish 4 are encouraged to take the AAPPL exam with the goal of earning the Seal of Biliteracy.

Prerequisite: completion of Spanish 3 and teacher recommendation.

ECE SPANISH 5: PERSPECTIVES ON LATIN AMERICA - III

61590

CREDIT: 1.00

GRADE: 12

Spanish 5 is a multidisciplinary course that covers the topics of society, politics, economy, and culture of contemporary Latin America and its place in today's world. Students will be expected to do individual research and write compositions in Spanish on the Latin-American countries being studied. Conversation will be conducted in Spanish, and students will make frequent oral presentations to the class. Students who are enrolled in Spanish 5 are encouraged to take the AAPPL exam with the goal of earning the Seal of Biliteracy. Three UConn college credits will be awarded.

Prerequisite: completion of Spanish 4 and teacher recommendation.

ITALIAN 1 - II

61546

CREDIT: 1.00

In this course students will develop a foundation in the skills of listening, speaking, reading and writing in Italian. Vocabulary and grammatical structures are introduced through conversational contexts and short reading selections. Communication skills progress from brief conversations on common interests to oral presentations on the topics and themes being studied. While emphasis is on the development of oral proficiency, students will also correlate the spoken words to their written forms and express themselves by writing brief compositions and informative visual presentations in Italian. Students will acquire an understanding of both language and culture through the use of texts, educational online resources, videos and songs, as well as explore the geography and regions of Italy. *A student who does not achieve at least a 70 in this course is advised not to take Italian 2.*

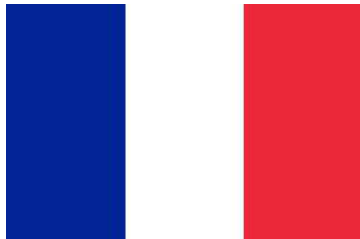
ITALIAN 2 - II

61547

CREDIT: 1.00

The Italian 2 course continues the development of the listening, speaking, reading and writing skills in Italian. The emphasis is on expanding vocabulary and communication skills focused on selected topics, with grammar playing an important supporting role. Oral and written assignments as well as reading selections will be used to reinforce and expand the vocabulary and grammar learned. Integrated into the units of the course is the study of geography, culture, and the achievements of famous Italians throughout the country's history.

Prerequisite: completion of Italian 1 and teacher recommendation



Online Course Descriptions

***All online courses are awarded elective credit unless special permission has been granted by the principal.
**Maximum of 2 online course per school year.*

AGRICULTURE, FOOD & NATURAL RESOURCES COURSES

Introduction to Agriculture, Food, and Natural Resources (STEM)

Agribusiness Systems (STEM)

Animal Systems (STEM)

Food Products and Processing Systems (STEM)

Plant Systems (STEM)

Power, Structural and Technical Systems (STEM)

Introduction to Agriculture, Food, and Natural Resources - I

Credit: 0.50

This course introduces students to the basic scientific principles of Agriculture and Natural Resources. Students will be recognizing and researching plant systems, animal systems, government policy, “green” technologies, agribusiness principles, and sustainability systems.

Agribusiness Systems - I

Credit: 0.50

Agribusiness Systems introduces the business, management, marketing, and financial skills needed to successfully produce food, fiber, and fuel for domestic and global markets. Nearly 16 percent of total U.S. employment and 14 percent of the U.S. gross domestic product can be attributed to agribusiness systems, which means agriculture, food, and natural resources play a pivotal role in the economic success of our nation. Students will learn about the components of the agribusiness system and how they interact to deliver food to our tables. They will also learn about the key elements of a successful agribusiness enterprise: economics, financial management, marketing and sales, and government policies and regulations.

Animal Systems - I

Credit: 0.50

This course provides students with a wealth of information on livestock-management practices, animal husbandry, physiological systems, the latest scientific trends, and innovations in food production. Changes in practices, regulations, and legislation for animal welfare continue as new research provides solutions to medical, ethical, and practical concerns. The course reviews current topics, such as advancements in technology and research, and defines areas of discussion while maintaining focus on best-management practices. How the research translates to management practices is a vital area of study and discussion.

Food Products and Processing Systems - I

Credit: 0.50

Agriculture, food, and natural resources (AFNR) are central to human survival and civilization. Mankind’s development, use, and stewardship of natural resources to create food products have a long and ever-changing timeline. This course explores the history and evolution of food products, along with the processing methods that have arisen to feed an ever-growing world population. Students study specifics in a wide spectrum of food product topics, from early methods of preservation to technological advancements in packaging, regulations in labeling, and marketing trends. The course prepares students for a variety of possible educational and career pathways in the food industry. Students learn industry terminology in each area of the overall system, from “farm to fork” to vertical integration to smart packaging. Advertising, marketing, product testing, and distribution of food products comprise a huge sector of food product systems and careers. The course prepares students for further research and work experience in these lucrative fields.

Plant Systems - I**Credit: 0.50**

Plant Systems introduces students to the basics of plant biology, soil science, agriculture, and horticulture, along with the environmental management practices involved in each, including integrated pest management, biotechnology, growth techniques, and crop management. Students will learn the basic parts of a plant, how plants are scientifically classified, and how they interact with water, air, nutrients, and light to undergo the processes of photosynthesis and respiration. Plant reproduction, including pollination, germination, and dispersal of seeds, is also presented.

Power, Structural and Technical Systems - I**Credit: 0.50**

Power, Structural, and Technical Systems provides students with an understanding of the field of agriculture power and will introduce them to concepts associated with producing the food and fiber required to meet today's and tomorrow's needs. This understanding gives students the opportunity to explore agriculture machinery, as well as structures and technological concepts. Students will understand the technological innovations that have contributed to changing the face of agriculture. Students will gain an understanding of the professional career opportunities and responsibilities of growers across the country. Additionally, students can learn about some of the resources available to professionals in the agriculture industry.

ARCHITECTURE & CONSTRUCTION**Introduction to Careers in Architecture and Construction (STEM)****Construction Careers (STEM)****Introduction to Careers in Architecture and Construction - I****Credit: 0.50**

The goal of this course is to provide students with an overview of careers in Architecture and Construction in order to assist with informed career decisions. This dynamic, rapidly evolving career cluster is comprised of three pathways (fields): Design and Pre-Construction (Architecture and Engineering); Construction (Construction and Extraction); and Maintenance and Operations (Installation, Maintenance, and Repair). The Architecture and Construction career cluster is defined as careers in building, designing, managing, maintaining, and planning the built environment. The built environment encompasses all zones of human activity—from natural conservation areas with minimal human intervention to highly dense areas with tall skyscrapers and intricate highway systems to suburban cul-de-sacs. The interrelated components that make up the built environment are as varied and unique as the professionals who help shape it.

Construction Careers - I**Credit: 0.50**

This course in Construction Technology introduces students to the basics of construction, building systems, engineering principles, urban planning, and sustainability. Students will learn the key techniques in building all types of buildings, as well as the key individuals involved in each step of the process. Many lessons present information on green building techniques and concepts that are becoming a standard part of the construction industry. Safety practices are emphasized in several lessons because construction is one of the most dangerous industries; students will learn that there is no way to be successful in construction without taking such issues seriously. Toward this end, the lessons also explore regulatory agencies and guidelines established for the purpose of protecting not only construction workers but also the occupants of a building.

ARTS, A/V TECHNOLOGY & COMMUNICATIONS**A/V Technology and Film Careers (Humanities)****A/V Technology and Film Careers - I****Credit: 0.50**

This course discusses careers in audio/visual (AV) technology and film, and provides students with background about the required skills, education, equipment, and technology in this industry. Students will understand the collaborative team effort of many different professionals who make films, videos, audio, and TV programming. The course begins with an introduction to the history and development of AV technology and film, with subsequent units focusing on specific sectors of the industry and the stages for producing film and media. The concluding unit focuses on the finishing stages for exhibition, distribution, and reaching a market. In addition, the course will provide information about many different careers that are available to students who are interested in AV technology and film.

BUSINESS

Essentials of Business (Humanities)

Essentials of Communication (Humanities)

Media Studies (Humanities)

Principles of Business & Finance (STEM)

Technology and Research (STEM)

Essentials of Business - I

Credit: 0.50

This course is an introduction to the goals, processes, and operations of business enterprises for students. The main focus is on the functions that a company – whether a multinational corporation or a corner grocery store – must manage effectively to be successful. These include accounting, finance, human resource management, marketing, operations management, and strategic planning. Attention is also given to the legal environment in which businesses operate, and the importance of business ethics and corporate citizenship.

Essentials of Communication - I

Credit: 0.50

Essentials of Communication covers fundamentals of the communication process important for successful interaction in a variety of social and professional settings. Students can use the course to gain and apply knowledge about communication theories, characteristics of language and language use, interpersonal relationships, group dynamics, and public speaking in order to interact more effectively with others.

Media Studies - I

Credit: 0.50

This course is part of a worldwide educational movement called media literacy that focuses on analyzing the media. The goal of the media literacy movement is to educate people about how the media impacts both individuals and society as a whole. Students will examine media such as magazines, the Internet, video games, and movies. They'll learn the kinds of strategies that advertisers use to persuade people to buy products. They'll also explore how news broadcasters choose which stories to air. Lessons and projects encourage students to examine ways in which media helps shape our culture and the ways in which our culture shapes the media.

Principles of Business & Finance - I

Credit: 0.50

This course will introduce students to the fundamental structure of the American economy, the complexities of the global economy, and the principles, practices, and strategies associated with starting, managing, or simply working for a business. Through a combination of lessons, students will trace a trajectory of their potential role in the American economy as consumers, laborers, and executives. With lessons on everything from marketing to writing formal business correspondence, from the basic structures and legal definitions of business to the operations and importance of financial institutions, students will emerge from this course with a thorough introductory understanding of the business world.

Technology and Research - I

Credit: 0.50

This course uses the topic of technology as a way to help students develop fundamental knowledge of the steps in the research process. During the course, students learn how new technology is developed and evaluate ways that technology affects society. Students learn about the development of the personal computer, robots, blogs, and wikis. They learn research and writing skills such as how to evaluate scientific journal articles, how to write an abstract, and how and when to use different online sources.

BUSINESS MANAGEMENT AND ADMINISTRATION

Business Law (Humanities)

Principals of Business and Finance (STEM)

Small Business Entrepreneurship (STEM)

Technology and Business (STEM)

Business Law - I

Credit: 0.50

This course is designed to provide students with the knowledge of some of the vital legal concepts that affect commerce and trade, after first gaining some familiarity with how laws are created and interpreted. Students will then be introduced to the types of businesses that can be created to engage in commerce as well as the contractual and liability considerations that can impact a business. Laws that affect how a business is regulated will also be reviewed, particularly the impact of administrative rules and regulations on a business. Global commerce and international agreements, treaties, organizations, and courts that can affect business will be discussed to get a better sense of what it means to "go global" with a business.

Principles of Business and Finance - I

Credit: 0.50

This course will introduce students to the fundamental structure of the American economy, the complexities of the global economy, and the principles, practices, and strategies associated with starting, managing, or simply working for a business. Through a combination of lessons and projects, students will trace a trajectory of their potential role in the American economy as consumers, laborers, and executives. With lessons on everything from marketing to writing formal business correspondence, from the basic structures and legal definitions of business to the operations and importance of financial institutions, students will emerge from this course with a thorough introductory understanding of the business world.

Small Business Entrepreneurship - I

Credit: 0.50

This course is designed to provide the skills needed to effectively organize, develop, create, and manage your own business, while exposing the challenges, problems, and issues faced by entrepreneurs. Throughout this course, students will be given the chance to see what kinds of opportunities exist for small business entrepreneurs and become aware of the necessary skills for running a business. Students will become familiar with the traits and characteristics that are found in successful entrepreneurs and will see how research, planning, operations, and regulations can affect small businesses. Students will learn how to develop plans for having effective business management and marketing strategies as well as the major steps relevant to starting a new business including financing, marketing, and management skills.

Technology and Business - I

Credit: 1.00*

Technology and Business is a course that teaches students technical skills, effective communication skills, and productive work habits needed to make a successful transition into the workplace or postsecondary education. In this course, students gain an understanding of emerging technologies, operating systems, and computer networks. In addition, they create a variety of business documents, including complex word-processing documents, spreadsheets with charts and graphs, database files, and electronic presentations.

**This course can be given as two .5 credit courses*

CAREER EXPLORATION

Career Management (Humanities)

Career Explorations 1 (Humanities)

Career Explorations 2 (Humanities)

Career Explorations 3 (Humanities)

Career Management - I

Credit: 0.50

Career management is a semester-length high school elective course that assists students in their preparation for career selection. The course is designed to improve workforce skills needed in all careers including: communication, leadership, teamwork, decision making, problem solving, goal setting, and time management. Students will complete activities that help identify personal interests, aptitudes, and learning styles, and will use results of self-assessments to determine careers that may prove personally satisfying.

Career Explorations 1 - I

Credit: 0.50

The Career Explorations I course introduces one particular field in each of its five units. Unit 1, Career Management examines the elements of employment, from the purpose and personal benefits of work to lifelong learning and technology; Unit 2, Introduction to Careers in Health Sciences. students learn about the history of health care and explore important medical discoveries of the 17th and 18th centuries, and the integration of technology into medicine; Unit 3, Hospitality and Tourism Systems, students explore the various sectors that provide services to people going on vacation, taking a business trip, or visiting an attraction; Unit 4, Human Services, students learn about the human services professionals; Unit 5: Consumer Services: Consumer services organizations are those that provide services to individual consumers, as opposed to businesses.

Career Explorations 2 - I

Credit: 0.50

The Career Explorations II course introduces one particular field in each of its five units. Unit 1, Information Technology examines Computer Systems and Networks along with Communications Technology; Unit 2, Introduction to Information and Support Services, examines On-Premise Systems and Cloud-Based Systems; Unit 3, Introduction to Network Systems, examines Computer Networks and Networking Models; Unit 4, Introduction to Agriculture, Food, and Natural Resources, examines an Overview of Agriculture, and Agriculture's Role in Society; and Unit 5 examines Introduction to STEM (Science, Technology, Engineering, and Mathematics), and an exploration of careers in STEM.

Career Explorations 3 - I

Credit: 0.50

The Career Explorations III course introduces one particular field in each of its five units. Unit 1, Introduction to Business and Finance, which examines business structure and philosophy, and management and leadership; Unit 2: Introduction to Manufacturing, which examines manufacturing's impact on the economy and the structure of manufacturing; Unit 3: Introduction to Transportation, Distribution, and Logistics, which examines modes of transportation and the regulatory environment; Unit 4: Introduction to Architecture and Construction, which examines the built environment as an interrelated system; and Unit 5, Introduction to Marketing, which examines the marketing process and ethics.

EDUCATION & TRAINING

Introduction to Careers in Education and Training (Humanities)

Teaching and Training Careers (Humanities)

Introduction to Careers in Education and Training - I

Credit: 0.50

The Introduction to Careers in Education and Training course will introduce students to the field of education and training, and the opportunities available for early-childhood care, primary school, secondary school, higher education, vocational training, and adult and continuing education. The students will gain an understanding of the career options available in teaching, administrative work, and support services. They will also explore the education and background experience needed to succeed in these careers.

Teaching and Training Careers - I

Credit: 0.50

This course introduces students to the art and science of teaching. It provides a thorough exploration of pedagogy, curriculum, standards and practices, and the psychological factors shown by research to affect learners. In five units of study, lessons, and projects, students engage with the material through in-depth exploration and hands-on learning, to prepare them for teaching and training careers. Students are given many opportunities to be the teacher or trainer, and to explore the tasks, requirements, teaching strategies, and research-based methods that are effective and high-quality.

FINANCE

Introduction to Careers in Finance (STEM)

Banking Services Careers (STEM)

Money Matters A (STEM)

Money Matters B (STEM)

Personal Financial Literacy (STEM)

Introduction to Careers in Finance - I

Credit: 0.50

The Introduction to Careers in Finance course provides the fundamentals of the financial services industry in the United States and explores the jobs and career opportunities that the industry offers. Lessons include: an examination of securities markets and investment companies, how companies evaluate and mitigate risk, and discusses the valuation of stocks and bonds; the roles and responsibilities of corporate finance and accounting, analysis of financial statements, capital budgeting, and capital structure; banking services, including how the industry is organized and regulated and how risks are managed; the insurance industry, including how it is organized and regulated, how it addresses risks, and the career opportunities it offers.

Banking Services Careers - I

Credit: 0.50

This course will focus on the specific skills related to banking and related services. In addition, you will explore career paths and the required training or higher education preparation necessary to obtain a career in banking and related services. Also, students will gain an understanding of the basic functions of customer transactions, cash drawer activity, check collection processes, and other customer service–related transactions. This course will also discuss how technology has changed the banking and related services industry. Finally, this course will provide an overview of the technical and people skills necessary to aid consumers with setting up an account, processing a loan, or establishing a business.

Money Matters A - I

Credit: 0.50

In this course students will explore global economics, and the impact of the free enterprise system on business and consumers. Students will learn about their financial options and goal-setting based on existing and projected economic indicators. Investments, income taxes, asset planning will also be investigated, as will risk management, and retirement and estate planning. The course will cover the following topics: Unit 1: Economics; Unit 2: Economic Roles; Unit 3: How the Market Works; Unit 4: Market Structure and Regulation; Unit 5: The Macroeconomy.

This course fulfills the financial literacy graduation requirement.

Money Matters B - I

Credit: 0.50

In this course students will explore global economics, and the impact of the free enterprise system on business and consumers. Students will learn about their financial options and goal-setting based on existing and projected economic indicators. Investments, income taxes, asset planning will also be investigated, as will risk management, and retirement and estate planning. The course will cover the following topics: Unit 1: Financial Responsibility and Decision Making; Unit 2: Careers and Income; Unit 3: Saving and Spending Wisely; Unit 4: Principles of Business; Unit 5: Economics and Business.

This course fulfills the financial literacy graduation requirement.

Personal Financial Literacy - I

Credit: 0.50

Personal financial Literacy is designed to help high school students prepare for success in making financial decisions throughout their lives. Topics in the course address the advantages of making sound financial decisions in both the short and long term, income planning, money management, saving and investing, and consumer rights and responsibilities.

This course fulfills the financial literacy graduation requirement.

HEALTH SCIENCE

Introduction to Careers in the Health Sciences (STEM)

Careers in Allied Health (STEM)

Criminal Procedures (STEM)

Forensics – Using Science to Solve a Mystery (STEM)

Health, Safety & Ethics in Healthcare (STEM)

Medical Assistance (STEM)

Medical Exploration (STEM)

Nursing – Unlimited Possibilities and Unlimited Potential (STEM)

Nutrition and Fitness (STEM)

Physicians, Pharmacists, Dentists, Veterinarians and Other Doctors (STEM)

Public Health – Discovering the Big Picture in Health Care (STEM)

Scientific Discovery and Development (STEM)

Therapeutics – The Art of Restoring and Maintaining Wellness (STEM)

Introduction to Careers in Health Sciences - I

Credit: 0.50

This course is an overview of health careers and overriding principles central to all health professions. Units include: science and technology in human health; anatomy, physiology, and disease development; privacy, ethics, and safety in health care; communication and teamwork in the health care environment; and health careers, creating a diverse workforce of lifelong learners. The course provides a foundation for further study in the field of health science. When students complete the course, they will be able to discuss the potential career choices and have an understanding of basic concepts that apply to many different career choices.

Careers in Allied Health - I

Credit: 0.50

Allied health is the term for the area of healthcare (and health care professions) that provide support and care services other than specific doctoring and nurse care. Allied health career paths can be divided into general roles like diagnostic (testing to see what's wrong), technical (taking care of technology aspects), therapeutic (moving the patient toward healing) and direct patient care (caring for the patient in other ways). In this course, students will focus on select allied health careers, studying a variety of different levels, responsibilities, settings, education needs and amounts of patient contact. Students will also look at things like the degree or training needed for each job, the environment one would work in, how much money the position could make, and the facts of the actual working day.

Criminal Procedures - I

Credit: 0.50

This course is the overview of modern-day careers that focus on crime and the law enforcement and legal steps that follow a crime. The first unit gives an overview of Federal Law Enforcement, followed by a unit that discusses various classifications of crimes. Following this, students will take a look into the criminal justice arena, followed by various investigative careers in law enforcement.

Forensics: Using Science to Solve a Mystery - I

Credit: 0.50

This course is the overview of modern-day forensic science careers at work using science concepts to collect and analyze evidence and link evidence to the crime and suspects in order to present admissible evidence in courts of law. Modern-day forensic science practices have come into being thanks to the contribution of science and legal professions seeking ways to study crime scenes and criminal activities in an effort to stop crime. Following the presentation of the concepts, students are encouraged to conduct online research exploring examples and applying the concepts just learned. Of particular interest in this course are the various applications of medicine in the field of forensic science.

Health, Safety, & Ethics in Healthcare - I

Credit: 0.50

Health, Safety, and Ethics in the Health Environments focuses on healthcare safety, health maintenance practices, environmental safety processes and procedures, and ethical and legal responsibilities. It also reinforces, expands and enhances biology content specific to diseases and disorders. Students participate in project- and problem-based healthcare practices and procedures to demonstrate the criticality of these knowledge and skills.

Medical Assistance - I**Credit: 0.50**

Medical Assistance focuses on the skills needed to work in a medical office. Topics covered are an introduction to allied health careers; privacy, ethics and safety; health informatics and health administration; communication and teamwork in the healthcare environment; and health careers, creating a diverse workforce of lifelong learners.

Medical Exploration - I**Credit: 0.50**

This course explores a variety of job sectors within the medical field including Medical Illustrators, technologist and therapeutic jobs in the Arts and Technology unit; Exercise Science and Patient Evaluation; a look at what it takes to be a physician and physician assistant: Clinical Laboratory Careers; and Primary Nursing Positions.

Nursing—Unlimited Possibilities and Unlimited Potential - I**Credit 0.50**

More registered nurses (2.7 million in 2010) work in healthcare than any other professional position; at the same time, a national shortage of qualified nurses exists and is projected to become significantly worse by 2020. As new nursing positions become available and a significant number of registered and licensed practical nurses approach retirement age, there are opportunities for recent graduates of accredited nursing programs throughout the country. This course provides students opportunities to compare and contrast the various academic and clinical training pathways to an entry-level position in nursing and to explore the growing number of opportunities for professional advancement given the proper preparation and experience. Students will have the opportunity to learn about the expanding scope of professional practice for registered nurses and better understand the important changes proposed in the education and ongoing professional development of nurses.

Nutrition and Fitness - I**Credit: 0.50**

Covered topics include units on Careers to Support a Healthy Body; Careers in Whole Person Fitness; Dietetics and Nutrition; Exercise Science and Patient Evaluation; and Counseling, Dietetics, and Choosing a Career in Allied Health.

Physicians, Pharmacists, Dentists, Veterinarians and Other Doctors - I**Credit: 0.50**

This course focuses on preparation for physician-level careers, including dental, veterinary and pharmaceutical, along with a look into the Physician Assistant and alternative medicine systems. This course will also introduce the topics of diversity, and the move toward an emphasis on social and cultural skills in medicine, in addition to academic ability. Students will explore important aspects that are applicable to the entire health field, such as behaving ethically, keeping patients safe and free from infections and germs, and following laws and policies. This course will also focus on diversity, the need for social and cultural skills in medicine, the degree or training needed for each job, the environment one would work in, how much money the position could make, and the facts of the actual working day.

Public Health—Discovering the Big Picture in Health Care - I**Credit: 0.50**

In this course, the multiple definitions of public health and the ways that these definitions are put into practice are discussed. Explored are the five core disciplines and the ways that they interact to reduce disease, injury and death in populations. The contributions of public health to society have shaped our modern world and will continue to do so in the future.

Scientific Discovery and Development - I**Credit: 0.50**

This course teaches students about careers in laboratory science while simultaneously instructing them on major concepts in the biological sciences. The curriculum is quite comprehensive and includes a history of clinical laboratory science, immunology, microbiology, blood-bank system biotechnology, nanotechnology, pharmaceutical research and development as well as clinical research. Students will study the circulatory system, cells and tissues, cell division and the difference between basic and applied research. Students should come away from this course with a solid understanding of the basic responsibilities of working in a laboratory.

Therapeutics—The Art of Restoring and Maintaining Wellness - I

Credit: 0.50

This course focuses on careers that help restore and maintain mobility and physical and mental health, such as physical therapists, physical therapy assistants, occupational therapists, athletic trainers, massage therapists, dieticians and dietetic technicians, art therapist, neurotherapists, vocational rehabilitation counselors, and registered dental hygienists. Each career is explored in depth, examining typical job duties, educational and licensure requirements, working conditions, average salary, and job outlook.

HOSPITALITY AND TOURISM

Food Safety and Sanitation (Humanities)

Marketing and Sales for Tourism and Hospitality (Humanities)

Planning Meetings and Special Events (Humanities)

Sustainable Service Management for Hospitality and Tourism (Humanities)

Transportation and Tours for the Traveler (Humanities)

Food Safety and Sanitation - I

Credit: 0.50

This comprehensive course will cover the principles and practices of food safety and sanitation that are essential in the hospitality industry for the protection and well-being of staff, guests and customers. The course will provide a systems approach to sanitation risk management and the prevention of food contamination by emphasizing the key components of the Hazard Analysis Critical Control Point (HACCP) food safety system. After successful completion of this course, students will be prepared to meet the requirements of state and national certification exams.

Marketing and Sales for Tourism and Hospitality - I

Credit: 0.50

This course is designed as an introduction to the study of tourism and hospitality marketing and sales. Students will be introduced to marketing theory and application of the basic principles of marketing as applied in hospitality and tourism. The relationship between marketing and other functions such as advertising, sales techniques, and public relations in order to maximize profits in a hospitality organization is addressed. Students will have an opportunity to explore this multi-faceted world, identifying multiple career paths and opportunities.

Planning Meeting and Special Events - I

Credit: 0.50

Being a meetings and special events planner is an important job that's both demanding and rewarding. The Bureau of Labor Statistics projects this profession will grow by 43.7 percent between 2010 and 2020. A meeting coordinator is responsible for every detail of an event. Planners have to know how to communicate, be empathetic, and think of their clients. Topics include networking, working with committees, catering, and advertising.

Sustainable Service Management for Hospitality and Tourism - I

Credit: 0.50

This comprehensive course will cover the principles and practices of sustainable service management. The purpose of this course is to provide students with an understanding of socially, environmentally, and financially sustainable hospitality management. The course will provide a sustainable approach to service management, incorporating the role of the customer, employee, leaders, and the environment. After successful completion of this course, students will understand and be able to explain the fundamentals of sustainability in the hospitality industry.

Transportation and Tours for the Traveler - I

Credit: 0.50

Transportation and Tours for the Traveler looks at transportation and package tours. During this course, students will learn about the package tour industry, travel industry professionals, and package tour customers. Students will find out who tour operators have to work with to create travel products and what kinds of decisions they have to make in terms of meal, lodging, attractions, and, of course, transportation. Finally, students will learn about how technology, world events, the global recession, and increased environmental awareness are affecting the travel industry today.

HUMAN SERVICES

Introduction to Human Services (Humanities)

Family and Community Services (Humanities)

Introduction to Consumer Services (Humanities)

Introduction to Human Growth and Development (Humanities)

Personal Care Services (Humanities)

Introduction to Human Services - I

Credit: 0.50

This course introduces high school students to the possibilities for careers in the human services professions. Through anecdotes, lessons, and a variety of assignments and projects, students will learn about the broad variety of jobs available in the human services. The history of the profession will be covered, as well as the impact of the cultural, social, and economic environment on individual people, especially those who are in need of social services assistance.

Family and Community Services - I

Credit: 0.50

This course introduces applications within professions related to Family and Community Services. Students will identify degree and credential requirements for occupations in this pathway and identify individual, social, historical, economic, and cultural context to increase awareness of family and community services; will develop the abilities necessary to evaluate and identify a range of effective communication strategies and skills for establishing a collaborative relationship with others; and complete a variety of projects to apply skills and knowledge.

Introduction to Consumer Services - I

Credit: 0.50

This course is designed as an overview to prepare students for a consumer services-related career and to introduce them to specialty areas. Emphasis is placed on the human services aspect (vs. corporate concerns) of consumer services. Social issues and advocacy, as well as ethics and legalities, are a recurring theme. Students will gain knowledge of current issues affecting various consumer services professions, and the impact of local, state, national and global issues on consumer services.

Introduction to Human Growth and Development - I

Credit: 0.50

Introduction to Human Growth and Development focuses on human growth and development over the lifespan, as well as careers that help people deal with various physical, intellectual, and socio-emotional issues, such as physicians, nurses, nutritionists, substance abuse counselors, clergy, teachers, career counselors, psychologists, and psychiatrists. Students who take this course will come away with a broad understanding of all the careers that help people.

Personal Care Services - I

Credit: 0.50

This course in Personal Care Services introduces students to a variety of careers in the following areas: cosmetology (including hairstyling and haircutting, esthetics, manicuring, makeup, and teaching) and barbering (including cutting and styling of hair and facial hair and manicuring for men); massage therapy, teaching body-mind disciplines (yoga, Pilates, and the martial arts), and fitness (general exercise classes and acting as a personal trainer); and mortuary science (embalming and funeral directing). The course teaches students about what each career entails and the education and training they will need to become credentialed in various career specialties.

INFORMATION TECHNOLOGY

Business Computer Information Systems (STEM)

Computer Science Principles (STEM)

Introduction to Computer Science (STEM)

Introduction to Information Technology (STEM)

Fundamentals of Computer Systems (STEM)

Fundamentals of Digital Media (STEM)

Fundamentals of Programming and Software Development (STEM)

Introduction to Information Technology Support and Services (STEM)

Introduction to Network Systems (STEM)

Network System Design (STEM)

New Applications: Web Development in the 21st Century (STEM)

Software Development Tools (STEM)

Business Computer Information Systems - I

Credit: 0.50 or 1.0

BCIS explores the use of technology applications in both business and personal situations. The course provides key knowledge and skills in the following areas: communication skills, business technology, word processing applications, spreadsheet applications, database applications, telecommunications technology, desktop publishing technology, presentation technology, computer networks, and computer operating systems. This course is intended to help students arrive at the following understandings: Effective communications skills and productive work habits can increase employees' success, and technology solutions can help employees be more productive and effective. Can be taken as a .5 or 1 credit course.

Computer Science Principles - I

Credit: 0.50 or 1.0

The Computer Science Principles course helps students understand computing systems beginning with how they work on the inside and how they communicate with each other through networks to create the internet. They will also learn how to handle errors that users make. In this course, students will study the impact of computer science on the world around them. They will investigate the digital divide and measures that can be employed to address inequities, and learn about security issues and how they can be addressed. In every lesson, students will complete computer-graded assessments. Each lesson also includes at least one video animation and an interactive activity. Each unit contains at least two projects that require students to do research or solve a problem, often by writing an original program. The course ends with a culminating project that will require students to create a computing artifact. Can be taken as a .5 or 1 credit course.

Introduction to Computer Science - I

Credit: 0.50 or 1.0

Introduction to Computer Science is designed to give students an introduction to basic computer science knowledge and skills. Students will begin by understanding the history of computer science and will end with a look at extensions such as application programming interfaces (APIs), mobile apps, and artistic designs. Students will create a network design, a real-world data file analysis, a mock-up of a mobile app, and a computer game. Students will also investigate the social, legal, and ethical impacts of computers. Can be taken as a .5 or 1 credit course.

Introduction to Information Technology - I

Credit: 0.50

In this course students are introduced to the knowledge base and technical skills that will help them to successfully compete for jobs within the Information Technology Career Cluster. Students will explore a range of career tracks that include network engineers, application/programming developers, and systems analysts. These career paths are described in depth, discussing typical job responsibilities, educational and licensure requirements, working conditions, and job outlooks.

Fundamentals of Computer Systems - I**Credit: 0.50**

The Computer Fundamentals course will provide students with an understanding of computers and how they operate as well as a basic understanding of how to manage and maintain computers and computer systems. These skills will provide students with the ability to configure computers and solve computer problems. Students will learn details about the different elements of computers and computer systems. They will learn to identify hardware devices and their functions. They will be instructed on the role of operating systems as well as how to install and customize the Windows operating system. Students will learn about networking and the Internet. They will also be introduced to security issues in order to protect themselves and their computers and data.

Fundamentals of Digital Media - I**Credit: 0.50**

This course gives an overview of the different types of digital media and how they are used in the world today. Students examine the impact that digital media has on culture and lifestyle. The course reviews the basic concepts for creating effective digital media and introduces a number of different career paths that relate to digital media. Students will examine the use of social media, digital media in advertising, digital media on the World Wide Web, digital media in business, gaming and simulations, e-commerce, and digital music and movies. Students will review ethics and laws that impact digital media use or creation.

Fundamentals of Programming and Software Development - I**Credit: 0.50**

This course will provide students with an understanding of basic software development concepts and practices, issues affecting the software industry, careers within the software industry, and the skills necessary to perform well in these occupations. Students will learn details about core concepts in programming using Java, including writing and debugging code, proper syntax, flow of control, order of operations, comparison operators, and program logic tools and models. They will learn the function of key program techniques including if statements, looping, and arrays. They will also learn about web development using HTML and drag-and-drop development of user interfaces in an Integrated Development environment.

Introduction to Information Technology Support and Services - I**Credit: 0.50**

This course focuses on real-world application including common industry best practices and specific vendors that offer tools for technicians, project managers, and IT leadership. Students will analyze technical support needs to perform customer service, perform configuration management activities, and evaluate application software packages and emerging software. Students will demonstrate and apply knowledge of IT analysis and design by initiating a system project and evaluating applications within the IT system. Information Technology is a dynamic discipline that is continuously evolving.

Introduction to Network Systems - I**Credit: 0.50**

This course introduces students to the fundamental technology and concepts that make networking systems possible and explores various components of technology, specifically the software and hardware supporting LANs, WANs, and Wi-Fi networks. Students are also introduced to the hardware, including hubs, switches, bridges, routers, and transmission media.

Network System Design - I**Credit: 0.50**

The Network System Design course will provide students with an understanding of computer networks and how they operate, as well as a basic understanding of how to manage and maintain computer networks. Students will learn the basics of network design, including how to identify network requirements and determine the proper network architecture. They will be instructed on the requirements of network models, as well as be introduced to local area networks. Students will also learn about Internet Protocol and the basics of routing data on a network.

New Applications: Web Development in the 21st Century - I**Credit: 0.50**

This course begins with a historical tour of the Internet and World Wide Web as well as the programs and applications that made it possible for computer users on every continent to begin to explore and better understand their world. Students are introduced to the evolution of networking and data-transfer capabilities beginning with early HTTP protocols continuing through to the recent introduction of smartphones capable of connecting to sites on the World Wide Web without having to rely on a browser for navigation. The course concludes with a survey of the continuing explosion of new apps, or applications, designed to operate on one or more of the proprietary mobile devices (smartphones, tablets, and netbooks).

Software Development Tools - I**Credit: 0.50**

This course introduces students to the variety of careers related to programming and software development. Students will gather and analyze customer software needs and requirements, learn core principles of programming, develop software specifications, and use appropriate reference tools to evaluate new and emerging software. Students will produce IT-based strategies and a project plan to solve specific problems, and define and analyze system and software requirements.

LAW, PUBLIC SAFETY, CORRECTIONS, AND SECURITY**Introduction to Law, Public Safety, Corrections, and Security (Humanities)****Corrections: Police and Procedure (Humanities)****Fire and Emergency Services (Humanities)****Law Enforcement Field Services (Humanities)****Legal Services (Humanities)****Security and Protective Services (Humanities)****Introduction to Law, Public Safety, Corrections, and Security - I****Credit: 0.50**

In this course, students will analyze and interpret the differences between the public sector criminal justice system, and private security; understand the duties of the various career paths in the legal, public safety, corrections, and private security fields; recognize and be able to apply the different laws and regulations affecting the legal, public safety, corrections, and private security fields; demonstrate an understanding of legal, public safety, corrections, and security practices; apply analytical methods to understand the process of gathering and utilizing intelligence in crime prevention and providing security services; and recognize the different regulations and requirements required to obtain employment in the legal, public safety, corrections, and private security fields.

Corrections: Policies and Procedure - I**Credit: 0.50**

Corrections is one of the three branches of the Criminal Justice System in the United States. All three branches employ personnel who are authorized to uphold and enforce the law, and are required to operate under the rule of law. Each branch works as part of the entire system to maintain the public safety and well-being, and bring criminals to justice. Corrections facilities and programs are run by a complex system of policies and procedures, which uphold local, state, and federal laws. This course gives students an introductory, yet thorough view of many aspects of corrections operations. Students receive historical and legal background information as they study how prisons and prisoners have evolved into correctional facilities and programs for offenders.

Fire and Emergency Services - I**Credit: 0.50**

Emergency and fire-management services are essential infrastructure components of a community. They provide a resource for dealing with numerous types of emergencies, including fires, motor vehicle, and industrial accidents, and medical emergencies. In addition, these services provide fire prevention and community-outreach programs. This course provides students with the basic structure of these organizations as well as the rules and guidelines that govern pre-employment education requirements. The vehicles, equipment, and emergency-mitigations strategies that are commonly used in the emergency- and fire-management field are also explored. Students will understand the goals of an emergency-management service and how they are implemented and managed, including personnel, budget, and labor-management challenges in the organization.

Law Enforcement Field Services - I**Credit: 0.50**

The Introduction to Law Enforcement Services course will introduce students to the field of law enforcement and the local, county, state, and federal laws that law enforcement personnel are sworn to uphold. The student will also gain an understanding of the career options available in this field and the skills, education, and background experience needed to succeed in these careers.

Legal Services - I**Credit: 0.50**

The Legal Services course will provide students with an overview of the system of laws in the United States and the practice areas and career options in the field. Students will learn about how the legal system operates to control how society punishes those who commit crimes and settles disputes; how criminal and civil cases reach court and are resolved; the courtroom and the basics of a typical court case; constitutional rights and legal safeguards; how technology has changed the practice of law; and about legal education and careers in law for attorneys and non-attorneys with an interest in the field.

Security and Protective Services - I**Credit: 0.50**

Security is critical for the safety and stability of life in the United States and many other nations. The security and protective services industry includes companies and professionals that provide the strategic, managerial, and legal knowledge and skills that are necessary to protect property and people. The purpose of this course is to provide an overview of the security and protective services industry. Students will understand different types of security services and how they relate to one another. They will also understand the distinction between the criminal justice system within the public sector and private security.

SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS COURSES**Introduction to STEM (STEM)****Engineering and Design (STEM)****Engineering and Product Development (STEM)****Mathematical Models with Application A (STEM)****Mathematical Models with Application B (STEM)****Probability and Statistics A (STEM)****Probability and Statistics B (STEM)****Science and Mathematics in the Real World (STEM)****Scientific Research (STEM)****STEM and Problem Solving (STEM)****Introduction to STEM - I****Credit: 0.50**

This course introduces students to the four areas of Science, Technology, Engineering, and Mathematics through an interdisciplinary approach that will increase awareness, build knowledge, develop problem solving skills, and potentially awaken an interest in pursuing a career in STEM. Students will be introduced to the history, fundamental principles, applications, processes, and concepts of STEM. Students will explore some of the great discoveries and innovations in STEM and review and analyze some of the world's problems that still exist today.

Engineering and Design - I**Credit: 0.50**

Engineering and Design is part of the STEM (Science, Technology, Engineering, and Mathematics) education and career path. By building real-world problem-solving and critical thinking skills, students learn how to innovate and design new products and improve existing products. Students are introduced to the engineering design process to build new products and to the reverse engineering process, which enables engineers to adjust any existing product and will incorporate the engineering design process, environmental life cycle, and green engineering principles to create a decision matrix to learn how to solve environmental issues.

Engineering and Product Development - I**Credit: 0.50**

Engineers address society's needs and problems by designing and producing products and services. The field is diverse and includes professionals who design skyscrapers, design machinery, oversee public works, and develop software and systems. The purpose of this course is to provide an overview of the concepts of product engineering and development. Students will analyze the life cycle of a product to prepare a product for distribution and for target markets. In addition, the course will provide information about the different careers available to students interested in engineering, product development, and project management.

Mathematical Models with Applications A – I**Credit: 0.50**

Mathematical Models with Applications A starts with a review of the math skills that students will need throughout the course, then moves on to build their knowledge of financial math applications with banking and credit cards, cars and housing, budgeting and bills, and investing and retirement. Students will gain a better understanding of various financial situations and use math to guide their decision-making.

Mathematical Models with Applications B – I**Credit: 0.50**

Mathematical Models with Applications B is designed to apply mathematical modeling concepts to architecture, engineering, fine art, photography, and music. In Unit 1, students will identify and apply appropriate algebraic processes and models to solve problems and analyze data in science contexts. Unit 2 objectives will require students to identify and apply appropriate algebraic and geometric processes and models to solve problems and analyze data in architecture and engineering contexts. In Unit 3, students will identify and apply appropriate algebraic and geometric processes and models to examine patterns and techniques in fine arts contexts. Unit 4 requires student to identify and apply appropriate models and techniques to solve problems and analyze data in social sciences, and Unit 5 has students apply appropriate probability models to solve problems and analyze data in various contexts.

Probability of Statistics A - I**Credit: 0.50**

Probability of Statistics is designed to give students an overview of basic concepts of statistics, with an emphasis on descriptive statistics. Topics covered include key concepts of data, samples, and populations. Students will create visual representations of data sets, such as histograms and bar graphs; describe the central tendency and spread of data for a data set; look for patterns in a data set and determine models based on those patterns. Concepts learned will be applied to a variety of real-world applications.

Probability and Statistics B - I**Credit: 0.50**

Probability and Statistics B is designed to give students a more in-depth look at statistics and its many applications, with an emphasis on inferential statistics. Students are also introduced to advanced counting techniques as well as probability and its applications. The course begins with the concept of sample space, basic probability, and the difference between theoretical and experimental probabilities. A more in-depth look at probability follows, with an emphasis on compound and conditional probabilities. Students explore normal data distributions and its properties, followed by a look at the standard normal distributions and its usefulness as a probability model for making inferences about a population. Hypothesis testing is then put into practice through a variety of real-world of applications and projects.

Science and Mathematics in the Real World - I**Credit: 0.50**

Science and mathematics are part of the STEM (Science, Technology, Engineering, and Mathematics) multi-dimensional strategy that can effectively sustain our twenty-first century knowledge-based economy. STEM careers provide a wide variety of opportunities to understand and address global issues. The most pressing issues of this generation include overpopulation, environmental degradation, pollution, and global warming. These are all subjects of intense and dedicated research by STEM professionals in very diverse fields. The course exposes students to a wide variety of STEM applications and to real world problems from the natural sciences, technology fields, and the world of sports, and emphasizes the diversity of STEM career paths.

Scientific Research - I**Credit: 0.50**

The course Scientific Research describes these activities from the point of view of a professional scientist. While this inside look should appeal to students of all ages, the lessons provide support, accessible ideas, and specific language that do not dumb down the content but rather guide students at their own pace through most of the steps, insights, and experiences they would eventually face if they continue through higher education toward a graduate degree.

STEM and Problem Solving - I**Credit: 0.50**

Science, technology, engineering, and math (STEM) are active components in the real world. This course will outline how to apply the concepts and principles of scientific inquiry, encouraging the use of problem-solving and critical-thinking skills to produce viable solutions to problems. Students will learn the scientific method, how to use analytical tools and techniques, how to construct tests and evaluate data, and how to review and understand statistical information. This course is designed to help students understand what we mean by problem solving and to help understand and develop skills and techniques to create solutions to problems.

TRANSPORTATION, DISTRIBUTION & LOGISTICS**Introduction to Careers in Transportation, Distribution, and Logistics (STEM)****Careers in Logistics Planning and Management Services (STEM)****Introduction to Careers in Transportation, Distribution, and Logistics - I****Credit: 0.50**

Transportation and Distribution Logistics is a course intended to introduce students to the complicated world of commercial transportation. Transportation is among the most crucial and defining elements of modern commerce and includes the ability to move people and goods from place to place requires vast investments of technology, and of manpower.

Careers in Logistics Planning and Management Services - I**Credit: 0.50**

This course discusses careers in Logistics Planning and Management Services, and provides students with the history of logistics and recent advances in the field. Modern societies and economic development depend on the ability to transport products from their point of origin to store shelves and then into the hands of consumers. Students will learn about packaging goods and materials for safe transport; managing inventory; documentation and liability for goods; and regulatory agencies and compliance with OSHA standards.

ADDITIONAL COURSES**Art History (Humanities)****Life Skills (Humanities)****Personal and Family Living (Humanities)****20th Century American History (Humanities)****Vietnam Era (Humanities)****Art History - I****Credit: 0.50 or 1.00**

In the first section of this course, students will conduct an in-depth examination of art history, beginning with prehistoric art and ending with the Romantic era of the early nineteenth century; students will understand the impact that historical and cultural context has on art, and will closely examine specific visual examples of key concepts. In the second section of the course, students will continue an advanced exploration of art history, beginning with early photography and ending with contemporary art, including art from cultures and countries around the world; students will complete research and writing projects to demonstrate their learning of key ideas. This course may be taken in individual sections for .5 credit or both sections for 1 credit.

Life Skills - I**Credit: 0.50 or 1.00**

Life Skills touches upon basic skills that are essential to students as they learn how to become independent adults. Topics include interpersonal relationships; Credit, Debt, and Consumer Skills; Health, Finances, and Safety; Career and Employment Preparation; Financial Responsibility and Decision Making; Careers and Income; and Money Management. Students may take half of the course for .5 credit, or the entire course for 1 credit.

Personal and Family Living - I**Credit: 0.50**

In this .5 credit course, students will examine specific principles that will help develop their personal lives; learn about proper nutrition, and demonstrate skill in preparing various food items; prepare weekly and monthly budgets; develop strategies for an employment search; explore work and careers and how different interests, abilities and personalities influence employment decisions; and develop an understanding of relational dynamics with family members, friends, classmates, co-workers, and those encountered in the marketplace.

20th Century American History - I**Credit: 0.50**

Twentieth Century American History is a history elective for high school students interested in examining American history during a century of change, continuity, and conflicts. Students will examine America's economic, political, governmental, cultural, and technological growing pains during the twentieth century. They will also consider the causes and effects of national and international cooperation, competition, and conflict. In attaining these goals, students will develop insight and perspective on the themes and patterns of history and a greater understanding of today's world.

Vietnam Era - I**Credit: 0.50**

In an in-depth exploration of the Vietnam Era, students will learn about the history of Vietnam before the war and explain why the United States got involved in Vietnam. In Unit 2, students will study the growth of U.S. involvement in Vietnam following the 1954 Geneva Accords to the first American combat troops in 1965 after the Gulf of Tonkin incident; Unit 3 will describe fighting techniques and efforts by both the Vietnamese and Americans as well as the U.S. public opinion about the war; Unit 4 will explore the Tet Offensive, Vietnamization, and the end of the war. In Unit 5, students will identify the outcome of the Vietnam War, examine the 1973 Paris Peace Accords, and explain the impact of the Vietnam War on American foreign policy.