

Fauquier County

2021-2022

PROGRAM OF STUDIES



Kettle Run High School est. 2008

Liberty High School est. 1994

Fauquier High School est. 1963



The cover for the 2021-2022 Program of Studies was designed by Josephine Van Camp, a Graphic Imaging Student at Kettle Run High School.

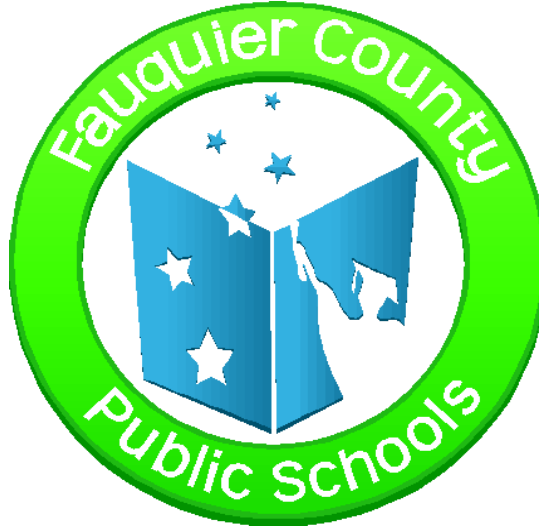
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Mission Statement

Fauquier County Public Schools, an innovative learning community, is committed to developing creative, confident, and knowledgeable citizens who are globally-competitive by cultivating the potential of each learner.

*Fauquier County high schools are accredited by the Southern Association of Colleges and Schools,
the Virginia State Board of Education,
and the Virginia Department of Education.*

Special disclaimer for 2021-2022: The Virginia Department of Education (VDOE), our School Board, and our schools, in response to the pandemic, have adjusted some guidelines.

PLEASE NOTE: Due to recent changes to graduation requirements from the Virginia Board of Education, the information contained in this Program of Studies refers to graduation requirements for both students that entered 9th grade for the first time prior to 2018-19 and for students that entered the 9th grade in 2018-19 or later. If further changes are made, please recognize that this publication is made in December, and may not reflect the most recent clarifications and guidance from the Virginia Department of Education. The online version of this publication will be updated and available at fcps1.org. If you have questions, please be sure to contact your school's counseling office.

To Our Students:

The information in this *Program of Studies* will assist you in planning your high school course of study. We strongly encourage you to read through this publication prior to registration and to consult with your parents, school counselor, and teachers in planning your high school program. *The Academic and Career Planning Guide* on page 32 in this booklet can be used to project an academic program for the remainder of your high school years.

Planning for Your Future

Your plan should include courses that will meet the graduation requirements of Fauquier County Public Schools and prepare you to meet your educational and career goals. Your school counselor can assist you in determining your interests, needs, and special talents. Your school counselor also has up-to-date information about educational opportunities at various universities, two-year and four-year colleges, as well as trade, technical, and business schools. Your counselor can also provide you with information about military, career, and employment possibilities.

In selecting courses, please be aware that employment and college admission opportunities are highly competitive. The rigor of the subjects studied and the quality of academic performance are crucial factors in decisions made by employers and college admission personnel. All students planning to continue their education beyond high school should recognize that educational institutions differ in their requirements for admission. However, surveys of a cross-section of Virginia colleges reveal that the rigor of the student's academic program is the most important criterion in the admissions decision. Highly competitive universities will expect to see on your transcript courses that have an Honors, Advanced Placement (AP), or Dual Enrollment (DE) designation. These courses are available in English, world languages, mathematics, history and social science, science, and art.

Students wishing to augment their college preparation with skills in the practical arts, to enter the workplace in highly competitive career areas or enter a technical discipline in higher education are encouraged to seek Career and Technical Education certifications and credentials. These certifications and credentials require that you take a state board-approved certification or licensing examination and earn a particular score. Please refer to the Career and Technical Education section of the Program of Studies for a complete list of these certifications and credentials.

As students decide which diploma they will work towards, they should realize that the type of diploma, by itself, does not determine their higher education and future career plans. Students may go to a four-year college, a community college, or a technical school with any diploma type, as long as they meet the entrance requirements of the school they wish to enter. Students may also find jobs immediately after graduation from high school if they have acquired the necessary skills, regardless of the type of diploma they receive.

Organization of the Program of Studies

The *Program of Studies* is divided into two sections. The first section includes general information about graduation and diploma requirements and other policies that may affect choices you make. We urge you and your family to read through this information carefully to avoid possible misunderstandings or missed deadlines. The second section consists of a description of each course offered by Fauquier County high schools.

In Brief: Profile of a Virginia Graduate

Virginia's revised graduation requirements maintain high expectations for learning in English, Math, Science and History and Social Science while reducing the number of Standards of Learning (SOL) tests students must pass to earn a high school diploma. The new standards also implement the "Profile of a Virginia Graduate," which describes the knowledge, skills, attributes and experiences identified by employers, a higher education and the state Board of Education as critical for future success.

Profile of a Virginia Graduate

A student meeting the Profile of a Virginia Graduate has achieved the commonwealth's high academic standards and graduates with workplace skills, a sense of community and civic responsibility and a career plan aligned with his or her interests and experiences.

The Five C's

In preparing students to meet the Profile of a Virginia Graduate, schools are required to ensure that students develop the following competencies known as the "Five C's":

- Critical Thinking
- Creative Thinking
- Communication
- Collaboration
- Citizenship

The career-planning component of the Profile of a Virginia Graduate provides an opportunity for students to learn more about the employment options and career paths they first explored in elementary and middle school.

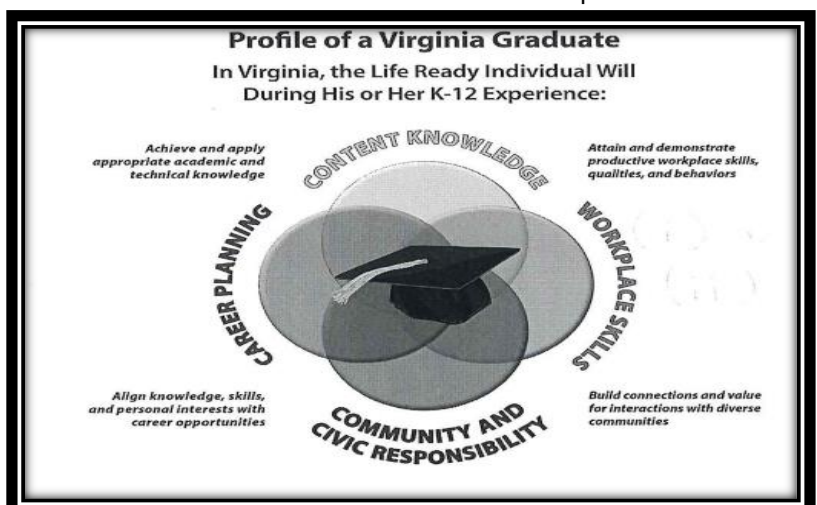
While there is no specific career-related activity that a student must experience (such as an internship or job-shadowing assignment) to earn a diploma, school divisions must provide opportunities for students to learn about workplace expectations and career options in their own communities and elsewhere.

By reducing the number of SOL tests students must pass to earn a diploma, the new standards increase flexibility for schools to expand work-based and service-learning programs that promote college, career and civic readiness.

Standards and Verified Credits

The new graduation requirements are effective with students entering the ninth grade in the fall of 2018 and beyond (classes of 2022, 2023, and 2024). The number of standard credits for a Standard Diploma and Advanced Studies Diploma remain the same but the number of required verified credits – earned by passing a course in the content area and the associated end-of-course assessment – is reduced to five (one each in English Reading, English Writing, Mathematics, Science and History and Social Science) for both diplomas.

In English Writing, a student may be able to verify course mastery through a locally developed performance-based assessment. Performance assessments require students to apply what they have learned and provide an opportunity for students to demonstrate that they have acquired critical thinking, creative thinking, communication, collaboration and citizenship skills.



Virginia High School Graduation Requirements and Diplomas

Students Entering 9th Grade in 2018-2019 and Beyond

Required Courses	Advanced Studies Diploma		Standard Diploma	
	Standard Units of Credit	Verified Units of Credit	Standard Units of Credit	Verified Units of Credit
English – 9, 10, 11, and 12	4	2	4	2
Mathematics – The Advanced Studies Diploma requires four credits from at least three different selections from among Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Standard Diploma requires three credits from at least two different selections from among Algebra I; Geometry; Algebra Functions and Data Analysis, Algebra II; or other mathematics courses approved by the Board. For both Diploma types , a Computer Science course credit earned may be considered a math course credit.	4	1	3	1
Laboratory Science – The Advanced Studies Diploma requires at least three different Science disciplines from among: Earth Sciences, Biology, Chemistry, or Physics. The Standard Diploma courses shall include at least two different Science Disciplines: Earth Sciences, Biology, Chemistry, or Physics.	4	1	3	1
History and Social Sciences – Courses completed to satisfy this requirement shall include World History I, World History II, Virginia and U.S. History, Virginia and U.S. Government.	4	1	4	1
World Language – The Advanced Studies Diploma requires three years of one language or two years each of two languages.	3 or 4			
Health and Physical Education 9 and Health and Physical Education 10 - Health and PE 9 also includes the requirement for training in CPR, First Aid, and the AED.	2		2	
Economics and Personal Finance – This course also meets the requirement for a virtual course with integrated online units. Students will also take the WISE exam.	1		1	
Fine Arts or Career and Technical Education (CTE) – The Advanced Studies Diploma requires one credit. A Computer Science credit earned by students may be considered a career and technical credit. The Standard Diploma requires credits earned for this requirement shall include one credit in Fine Arts or CTE. For both Diploma types , a Computer Science credit earned by students may be considered a career and technical credit.	1		2	
Electives – For Standard Diploma , courses to satisfy this requirement shall include at least two sequential electives.	3 or 2		3	
Total Credits Required	26	5	22	5
Additional Requirements Advanced Placement, Honors, or Career and Technical Education Credential – Students must either (i) complete an AP or Honors course or (ii) earn a CTE Credential. Demonstration of the 5 C's – Students shall acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication and citizenship.				

Virginia High School Graduation Requirements and Diplomas
Students Entering 9th Grade in 2014-2015 through 2017-2018

Required Courses	Advanced Studies Diploma		Standard Diploma	
	Standard Units of Credit	Verified Units of Credit	Standard Units of Credit	Verified Units of Credit
English – 9, 10, 11, and 12	4	2	4	2
Mathematics – The Advanced Studies Diploma requires four credits from at least three different selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Standard Diploma requires three credits from at least two different selections from among: Algebra I, Geometry, Algebra Function Data Analysis, Algebra II or other math courses above the level of Algebra II. For both Diploma types , a computer science course credit earned by students may be considered a mathematics course credit.	4	2	3	1
Laboratory Science – The Advanced Studies Diploma requires at least three different Science disciplines from among: Earth Sciences, Biology, Chemistry, or Physics. The Standard Diploma requires selections from at least two different Science disciplines from among: Earth Sciences, Biology, Chemistry, or Physics.	4	2	3	1
History and Social Sciences – Courses completed to satisfy this requirement shall include World History I, World History II, Virginia and U.S. History, Virginia and U.S. Government.	4	2	4	1
World Language – The Advanced Studies Diploma requires three years of one language or two years each of two languages.	3 or 4			
Health and Physical Education 9 and Health and Physical Education 10 - Health and PE 9 also includes the requirement for training in CPR, First Aid, and the AED.	2		2	
Economics and Personal Finance - This course also meets the requirement for a virtual course with integrated online units. Students will also take the WISE exam.	1		1	
Fine Arts or Career and Technical Education – For both Diploma types , a computer science course credit earned by students may be considered a career and technical credit.	1		2	
Electives – For Standard Diploma courses to satisfy this requirement shall include at least two sequential electives.	3 or 2		3	
Student Selected Test for Verified Credit		1		1
Total Credits Required	26	9	22	6
Additional Requirements – For the Standard Diploma , students must earn a Career and Technical Education credential.				

Other Diplomas & Certificates

Applied Studies Diploma

This diploma is available to students with disabilities who complete the requirements of their IEP and who do not meet the requirements for other diplomas.

General Education Development Certificates (GED)

This certificate is available to students who are at least one year behind in high school credits and wish to earn a high school equivalency credential. Students who qualify can enter the Individual Student Alternative Education Plan Program (ISAEPP) and receive the GED certificate awarded through The Virginia Department of Education.

Certificate of Program Completion

This certificate is available to students who complete prescribed programs of studies defined by a local school board but who do not qualify for diplomas.

Standard Diploma Credit Accommodations

Credit accommodations provide alternatives for students with disabilities to earn the standard and verified credits required to graduate with a Standard Diploma. Credit accommodations for students with disabilities may include:

Alternative courses to meet the standard credit requirements

Modifications to the requirements for locally awarded verified credits

Additional tests approved by the Board of Education for earning verified credits

Credit accommodations for students with disabilities may include those options listed in the chart below; these accommodations should appear in the students Individualized Education Plan (IEP).

CREDIT ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES AT A GLANCE

Accommodation	STUDENTS WITH DISABILITIES (IEP and 504) WHO QUALIFY FOR CREDIT ACCOMMODATIONS
Alternative Assessments	VMAST (EOC Algebra I and English Reading)
Locally Awarded Verified Credit	Science and History/Social Studies Math and EOC English Reading and Writing
Economics and Personal Finance	Personal Living and Finance (3120) may substitute for Economics and Personal Finance (6120) * (must have also earned 3 standard credits in History/Social Sciences)
Courses Taught in 2 Parts	2 standard credits for <u>first</u> sequence in a content area.**

* Students with disabilities are encouraged to consider 6120 before considering 3120

** Example: Algebra I Part 1 = 1 standard credit; Algebra I Part 2 = 1 standard credit
Geometry I Part 1 = 1 elective credit; Geometry I Part 2 = 1 standard credit

Post-Secondary Planning Timeline

Comprehensive Four Year Plan

09 Freshman Year: The Beginning

Investigate

- High school graduation requirements
- Interests as they relate to careers
- Personal strengths
- Skills you have and those which you need to build

Create

- A portfolio – demonstrate your skills, gather your report cards, evidence of awards and honors, and a list of school and community activities

Action

- Set personal goals using the Virginia Wizard
- Take challenging courses
- Meet with your school counselor to discuss post-secondary goals
- Read as much as you can from a variety of materials
- Prepare for the PSAT
- Volunteer or work part-time
- Participate in extra-curricular activities
- Update your Academic and Career Plan in Campus

10 Sophomore Year

Investigate

- Career options
- College entrance requirements
 - Competitive college requirements include
 - English (4 units)
 - Social Studies (4 units)
 - Science (3-4 units)
 - World Language (3-4 units)
 - Mathematics (3-4 units)
 - Fine/Practical Arts/Electives (with a focus)
- AP Dual Enrollment Courses
- The cost of post-secondary education

Create

- Update your portfolio throughout the year
- Create a resume
- Update/modify your personal goals as needed

Action

- Continue to take challenging courses
- Meet with your school counselor to evaluate your current performance pertaining to future goals
- Read as much as you can from various materials
- Take the PSAT
- Volunteer or work part-time
- Start saving for post-graduation education
- Participate in extra-curricular activities

11 Junior Year

Investigate

- College options and the application process
- NCAA Clearinghouse for potential college athletes
- Personal traits and how they relate to future plans
- Dual Enrollment with LFCC

Create

- Update personal goals
- Update your portfolio
- Finalize/update your resume

Action

- Continue to take challenging courses, including AP/Honors
- Take the SAT and/or ACT
 - SAT prep is free at www.khanacademy.org
- Form relationships with teachers who might write you a letter of recommendation
- Participate in extracurricular and consider leadership roles with them
- Attend college and career fairs
- Visit college campuses during spring break and the summer
- Meet with your school counselor to update your Academic and Career plan and begin to finalize your post-secondary plan

Post-Secondary Planning Timeline

Comprehensive Four-Year Plan

12 *Senior Year: Crunch Time*

Investigate

- College entrance requirements
 - College application deadlines
 - Financial aid deadlines
 - Scholarship options
 - College majors
 - Community College options
 - Workforce credentials
-

Create

- Update your personal portfolio throughout the school year
 - Finalize your resume
 - Finalize your personal goals
-

Action

• June-August:

- Prepare for the SAT/ACT. Remember, preparation is free at www.khanacademy.org
- Practice completing online applications
- Practice college essays and ask family, friends and teachers to review your writing
- Decide if you will apply to college early
- Work part-time or intern

• September:

- Meet with your school counselor and review your plans
- Register for the fall SAT/ACT tests
- Research for colleges and make a plan for meeting application deadlines
- Request letters of recommendation from teachers and family friends

• October-December:

- Complete the Free Application for Federal Student Aid (FAFSA) with your parents.
- Take the SAT or ACT again if needed
- Request Recommendations from teachers
- Apply to colleges

• January-March:

- Complete scholarship applications

• April :

- Review college acceptance decisions and finalize your college choice
- Notify your selected school by sending a letter of commitment and submitting a deposit check
- Review any financial aid packages and scholarship awards with your family
- Study for AP exams
- Apply to Lord Fairfax Community College or Northern Virginia Community College if that is your chosen path
- Take the NOVA/LFCC placement tests if need

• May:

- Take AP exams
- Send thank you notes to those who wrote your letters of recommendation
- Inform your school counselor of any earned Scholarships
- Inform your school counselor about your final post-secondary plan
- Schedule interviews for employment

• June-August:

- Register for college courses
- Participate in any summer orientation programs available at your school of choice
- Finalize financial aid arrangements

Get ready to start your post-secondary career!

VIRGINIA STANDARDS OF LEARNING REQUIREMENTS

Students must earn a combination of standard and verified units of credit to receive a Standard or an Advanced Studies Diploma. There have been several changes to the diploma requirements over the last four years. Diploma requirements are effective with the year in which the student enters ninth grade for the first time, rather than the year in which the student graduates from high school. Additional credit accommodations for students with Individualized Education Programs (IEP) or 504 plans are available if determined the student meets state criteria.

Standard Credit

A standard unit of credit is earned by taking a high school course of approximately 140 clock hours of instruction and meeting the objectives of the course with a passing grade.

Verified Credit

A verified unit of credit is awarded for a course in which the student earns a standard unit of credit and achieves a passing score on a corresponding End-of-Course (EOC) Standards of Learning (SOL) test or a substitute test approved by the Virginia Board of Education. A list of substitute tests is available in the school Counseling Department. Students and parents should be aware of the risks in using substitute tests. If a student delays taking an SOL test in order to receive a passing score on the substitute test, graduation may be delayed.

Locally Verified Credit

The criteria for the award of locally-awarded verified credit is summarized below:

- To qualify for locally-awarded verified credits, a student must:
 - Pass the high school course;
 - Score within a 375-399 scale score range on any administration of the Standards of Learning test after taking the test at least twice; and
 - Demonstrate achievement in the academic content through an appeal process administered at the local level.
- Students with credit accommodations are not subject to the limit on the number of locally-awarded verified credits.
- **For students entering the ninth grade for the first time prior to the 2018-2019 academic year:**
 - No more than three locally-awarded verified credits may be awarded.
 - Locally-awarded verified credits cannot be applied toward an Advanced Studies diploma.
- **For students entering the ninth grade for the first time in the 2018-2019 academic year and beyond:**
 - No more than one locally-awarded verified credit may be awarded.
 - Locally-awarded verified credits can be applied toward either a Standard or Advanced Studies diploma

End-of-Course SOL Tests

End-of-Course (EOC) tests are given in the areas of English, mathematics, science, and history and social science. The Algebra I and Geometry SOL tests are administered both in middle school and high school. They are indicated by **SOL** in the course descriptions.

End-of-Course SOL Tests			
English	Mathematics	Science	History & Social Science
English: Reading (Grade 11)	Algebra I	Earth Science	World History & Geography to 1500 (World History I)
English: Writing (Grade 11)	Geometry	Biology	World History & Geography: 1500 to the Present (World History II)
	Algebra II	Chemistry	Virginia & United States History

Standards of Learning and Verified Credits Requirements for Transfer Students

Students transferring to a Fauquier County high school from a non-public school, a public school outside of Virginia, or a home school are required to take SOL tests to earn verified units of credit. Transfer students should see their school counselor to determine the number of verified credits needed. More information can be found at the following link -

http://www.doe.virginia.gov/instruction/graduation/student_transfers.shtml

HIGH SCHOOL COURSES TAKEN IN MIDDLE SCHOOL

High school courses taken in middle school will count toward meeting high school diploma requirements. Students who successfully complete French I, Spanish I, Algebra I, and/or Geometry in middle school will receive credit toward a high school diploma. A verified credit can be earned in Algebra I and Geometry by successfully completing the course and receiving a passing grade on the corresponding EOC SOL test.

French I and Spanish I credits may be applied toward either the elective or World language high school diploma requirements. Algebra I and Geometry credits may be applied to the high school diploma requirements for mathematics credits.

The grade and credit for high school courses taken in middle school will appear on the high school transcript and will be included in high school grade point average calculations. Occasionally, students may not demonstrate a desired degree of success in high school courses taken in middle school. In these cases, parents have the option of requesting that the grade be removed from the transcript. However, when a credit-bearing grade is removed from the transcript, the high school credit is forfeited. To exercise this option parents must request, in writing, that the credit-bearing course taken before entering high school be removed from the student's high school transcript. Parents are encouraged to contact the **middle school Counseling Department** for procedure and deadline requirements. This process must be completed before student records are transferred to the high school. Exceptions to this deadline may be granted (for extenuating circumstances only) up to the end of the 9th-grade year, after which a student's transcript may not be altered relative to this regulation.

DIPLOMA SEALS AND RECOGNITIONS

Board of Education Seal

The Board of Education seal is awarded to students who complete the requirements for a Standard Diploma, or an Advanced Studies Diploma with an average weighted GPA of 3.75 or higher.

Governor's Seal

The Governor's Seal is awarded to students who complete the requirements for the Advanced Studies Diploma with an average weighted GPA of 3.00 or higher and successfully complete Advanced Placement (AP) or Dual Enrollment (DE) courses that will earn the student at least nine transferable college credits.

Board of Education Seal for Career and Technical Education

The Board of Education Seal for Career and Technical Education is awarded to students who complete the requirements for either a Standard Diploma or an Advanced Studies Diploma, complete a prescribed sequence of courses in a Career and Technical Education concentration or specialization, and either (a) maintain an average weighted grade of 3.00 or higher in those courses, or (b) pass an examination in a Career and Technical Education concentration or specialization that confers certification from a recognized industry, trade or professional association, or (c) acquire a professional license in that Career and Technical Education field from the Commonwealth of Virginia.

Board of Education Seal for Advanced Mathematics and Technology

The Board of Education Seal for Advanced Mathematics and Technology is awarded to students who complete the requirements for either a Standard Diploma or an Advanced Studies Diploma, satisfy all of the mathematics requirements for the Advanced Studies Diploma with an average weighted grade of 3.00 or higher, and complete one of the following: (a) pass an examination in a Career and Technical Education concentration or specialization that confers certification from a recognized industry, trade, or professional association, or (b) acquire a professional license in that Career and Technical Education field from the Commonwealth of Virginia, or (c) pass an examination approved by the Virginia Board of Education that confers college-level credit in a technology or computer science area.

Board of Education Seal for Excellence in Civics

The Board of Education's Seal for Excellence in Civics Education will be awarded to students who earn either a Standard or an Advanced Studies Diploma and: (i) complete Virginia and United States History and Virginia and United States Government courses with a grade of B or higher; and, (ii) have good attendance and no disciplinary infractions as determined by local school board policies and, (iii) complete 50 hours of voluntary participation in community service or extracurricular activities. Activities that would satisfy the requirements of clause (iii) of this subdivision include: (a) volunteering for a charitable or religious organization that provides services to the poor, sick, or less fortunate; (b) participating in Boy Scouts, Girl Scouts, or similar youth organizations; (c) participating in JROTC; (d) participating in political campaigns or government internships, or Boys State, Girls State, or Model General Assembly; or (e) participating in school-sponsored extracurricular activities that have a civics focus. Any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement. The application is available in the Counseling Department.

Board of Education's Seal for Excellence in Science and the Environment

The Board of Education's Seal for Excellence in Science and the Environment is awarded to students who enter the ninth grade for the first time in the 2018-2019 year and thereafter, and meet each of the following criteria:

- Earn either a Standard or Advanced Studies Diploma
- Complete at least three different first-level board-approved laboratory science courses and at least one rigorous advanced-level or postsecondary-level laboratory science course, each with a grade of "B" or higher
- Complete laboratory or field-science research and present that research in a formal, juried setting
- Complete at least 50 hours of voluntary participation in community service or extracurricular activities that involve the application of science such as environmental monitoring, protection, management, or restoration.

Governor's Senior Year Plus: Early College Scholars

The Early College Scholars Agreement is intended to allow and encourage eligible high school students to complete requirements for a high school diploma and concurrently earn at least 15 hours of transferable credits toward a college degree. Students who participate in this program will be recognized as Early College Scholars and will receive a Governor's certificate of recognition. Agreement forms and additional information are available in the Counseling Department. Students interested in this program should complete the agreement form before the beginning of the senior year. Eligibility for this program requires the following: a) earn an Advanced Studies Diploma with a Governor's Seal, b) earn at least 15 transferable college credits while enrolled in high school (complete Dual Enrollment (DE) courses and earn a "C" or better, or complete Advanced Placement courses and score a 3 or higher on the AP exams), and c) apply and be accepted to a college or university.

Board of Education Seal of Biliteracy

The Board of Education's Seal of Biliteracy certifies attainment of a high level of proficiency by a graduating high school student in one or more languages in addition to English, and certifies that the graduate meets the following criteria: 1. The Board of Education's Seal of Biliteracy will be awarded to students who earn either a Board of Education-approved diploma and (i) pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level; and (ii) be proficient at the intermediate-mid level or higher in one or more languages other than English, as demonstrated through an assessment from a list to be approved by the Superintendent of Public Instruction. 2. For purposes of this article, "World language" means a language other than English, and includes American Sign Language.

EARLY GRADUATION AND EARLY COMPLETION REQUIREMENTS

Under certain circumstances, students may leave high school without completing four full years.

Early Graduation

With parental permission, rising juniors (current sophomores) who have completed at least 14 credits may request permission for early graduation. Any student interested in pursuing the early graduation option must complete an application and submit letters to their school counselor from the student and the parent explaining why the student would like to graduate early. Once the principal approves the request, it is forwarded to the Superintendent of Schools, or designee, for approval. Applications are available in the Counseling Department at each high school. Applications are due by July 1. Students miss this deadline for extenuating circumstances should contact their school counselor. Students interested in this option should keep in mind that they are required to meet the graduation requirements that are in effect in their ninth grade year as opposed to those in effect during their anticipated year of graduation.

Early Completion

With parental permission, rising seniors (current juniors) who will complete all graduation requirements by the end of the Fall term may request approval for early completion. Students who choose this option will not receive a final class rank since graduation requirements will be completed at the end of the Fall term. GPA will be computed on only six terms and will not qualify students for the same benefits as students who complete all eight terms. Any student interested in pursuing the early completion option must complete an application and submit letters to their school counselor from the student and the parent explaining why the student would like to complete school early. Applications are available in the Counseling Department at each high school. Applications are due by June 1. Graduation ceremonies take place once a year at the end of the Spring term. School activities for early completion students are limited to attending graduation and prom.

CUSTOMIZED HIGH SCHOOL PROGRAMS

Fauquier County Public Schools offers high school students several opportunities to customize their program of studies and units of credits towards graduation.

Southeastern Alternative Program

The Alternative Learning Programs offered to students in grades 7-12 at Southeastern Alternative School are designed to offer a hands-on, interactive, project-based learning approach to instruction and assessment in all core academic areas required for promotion and graduation. These programs are designed to assist students in obtaining their high school diplomas offering a project-based learning approach to learning and testing. This approach to learning is significantly different but still adheres to the guidelines of the Virginia Standards of Learning. However, this difference makes school success more attainable for students who struggle with traditional teaching approaches and the larger base school routines. Class sizes are extremely small with an average student to teacher ratio of 1:10. The Alternative Learning Programs are programs of *choice* requiring interested students and/or parents to submit an application for admission. Each student's progress and achievement are reviewed quarterly.

STEM Academies

Fauquier County Public Schools is proud to offer 3 unique high school academy programs providing students with hands-on experience in the fields of Cybersecurity, Environmental Studies, or Integrated STEM. *Please see the Academies section at the end of this book for more information.*

Mountain Vista Governor's School

Fauquier County high schools offer several courses and programs to serve the needs of its gifted students. In addition to honors and Advanced Placement (AP) courses, Mountain Vista Governor's School (MVGS) provides a learning option for identified gifted and highly able students. Mountain Vista Governor's School is an academic year Governor's School for Science, Mathematics, and Technology serving six area school divisions including Fauquier County for students in grades 10-12. The mission of Mountain Vista Governor's School is to present a research-based, technology-enhanced, integrated program in Mathematics, Science, and the Humanities. The program challenges students to reach their full potential as independent thinkers capable of assuming leadership roles in a constantly changing global society. Fauquier County students should contact their school Counseling Department for admission requirements and application procedures. Fauquier County students are required to take AP exams for any AP content-based courses taken at the Mountain Vista Governors' School. Grades earned in AP content-based courses receive an additional 1.0 weight only when the AP test is taken. Courses beyond the AP level (for which AP is a prerequisite) also receive a weight.

Carnegie Units Program

This program is for 5th-year high school students and enables them to attend college and earn credits which will complete their high school program. Interested students should ask their counselor for more information. Students who wish to enroll in this program must have completed the necessary verified credit requirements for the diploma they desire. Students must receive written permission from their high school principal to participate in this program. Carnegie Unit credits will not be included in GPA calculations and Carnegie Unit students will not be included in class rank and will be limited to attending graduation only.

Cooperative Education

A work component may be taken for one additional credit in certain Career and Technical Education courses. Students are required to work in an approved position for a minimum number of hours as specified by the requirements of the class. The work is supervised by the course teacher and may begin on July 1, continuing through the last day of the school year. Students should contact the teacher supervising the Co-op or COE program of interest for an application. Co-op and COE classes have course codes ending in 25. When this option is selected, students receive 1 credit for their supervised work in addition to the credit for the class.

Exception to the Full Day

Unless enrolled in a cooperative work-study program, high school students are expected to attend school for a full day. All exceptions to a full-day schedule must be approved on an individual basis by the Superintendent of Schools or designee. An application for an exception to the full day must be submitted by July 1. Students who miss this deadline due to extenuating circumstances should see their school counselor. The Principal and the Superintendent of Schools must approve the request. Full day schedules are in effect until the Superintendent approves the exception.

Homebound Instruction

Homebound instruction is available for students who are confined at home or in a health care facility for periods that would prevent normal school attendance based upon certification of need by a licensed physician or licensed clinical psychologist. Typically, standard academic English, history, and mathematics courses are available through homebound instruction. Certain courses may not be available through homebound instruction, such as Physical Education, Lab Sciences, Career and Technology Education, World language, advanced coursework, and coursework with a dual enrollment credit. Graduating seniors who are in need of science or physical education credits may have additional options and should contact their Counseling Department for further details.

Independent Study

Seniors and juniors who have an interest in a course of study not offered in a Fauquier County public high school may apply to participate in an independent study program. Students must complete an application which requires a rationale statement from the student, an outline of the course from a teacher qualified to supervise the study, and approval from the school administration. Students must have a 90-minute block of time during the term to complete the coursework. Students receive a credit for Independent Study on a pass/fail basis. Students may obtain an application in the Counseling Department. An Independent Study program may also be prompted by a teacher for a temporary pilot.

ACADEMIC SUPPORT PROGRAMS

Freshman Transition Program

The goal of the Freshman Transition Program is to provide year-long academic support for selected freshmen in order to foster school success and a positive attitude. Classroom experiences emphasize language literacy, mathematical literacy, and strategies for high school success. Students who are enrolled in the program will receive writing and reading assistance as well as supplemental assistance in the core content areas. Instruction will focus on research strategies, field experiences, and career exploration. All grade-level Standards of Learning will be covered in the core content courses, and students will take the appropriate End-of-Course SOL assessments.

Academic Coaching

The goal of the academic coaching course is to teach students how to work strategically in multiple content areas. The course is recommended for students who need help scheduling and completing homework and class projects, and managing the demands of rigorous reading and homework assignments in standard and advanced academic classes.

AP Potential

The AP Potential program uses PSAT scores to identify students who have the ability to take more rigorous courses as part of their high school program. Once the College Board has identified these students, each student's schedule is examined. If identified students are not already taking at least two AP or Honors classes as sophomores, then the students are counseled to increase the rigor of their curriculum. Many factors contribute to a student's success in an AP class, but AP Potential identification indicates that with hard work and perseverance a student has the potential to do well in AP classes and later in college.

SELECTING AND SCHEDULING COURSES

Fauquier County high schools follow a modified 4x4 block scheduling plan. In a standard 4x4 schedule, students take four 90-minute courses in the Fall term, and four 90-minute courses in the Spring term. Eight courses are taken in a year. Each term is divided into two 9 weeks. The Fall term is divided into marking period one and two and the Spring term is divided into marking period three and four. In a modified 4x4 schedule, some courses are scheduled for a full year (both terms) in addition to the block courses. Many of these full-year courses are offered on an A/B schedule where students attend class every other day, alternating attendance between two courses (course A and course B).

Standard 4X4 Schedule		
Block	Fall Term	Spring Term
Block 1	Course 1	Course 5
Block 2	Course 2	Course 6
Block 3	Course 3	Course 7
Block 4	Course 4	Course 8
Sample Modified 4X4 Schedule		
Block	Fall Term	Spring Term
Block 1	Course 1	Course 6
Block 2	Course 2	Course 7
Block 3	Course 3	Course 8
Block 4	Course 4 A days	Course 4 A days
Block 4	Course 5 B days	Course 5 B days

COURSE SELECTION

Access to Courses

Fauquier County Public Schools does not unlawfully discriminate on the basis of gender, race, color, religion, handicapping conditions, or national origin in employment or in its educational programs. No person shall be denied access to courses solely because of an impairment that is unrelated to the ability to engage in activities involved in the course or programs for which a selection has been made.

Course Availability

Courses listed in the *Program of Studies* will be offered provided sufficient students request the classes, and teachers and funds are available. If courses are cancelled, students will be registered in alternate courses as listed on their registration forms or determined by school personnel. Scheduling conflicts may result in students not being able to take their chosen courses. Information in the *Program of Studies* is subject to change pending state and local school board action.

Course Selection Options

Course selection should be made in consultation with parents, teachers, and school counselors. Student interest, performance and teacher recommendations are a valuable part of this process. Course selection should relate to the student's strengths. For example, a student may have strengths in history but may need academic support in mathematics. These decisions should be made annually in an effort to give all students the most rigorous academic program. Parents, teachers, and school counselors are encouraged to choose courses that will best fit students' strengths, challenge them academically, and adequately prepare them for life, learning, and employment after high school.

Advanced Placement (AP)

AP courses follow a rigorous national curriculum developed by the College Board and conclude with a required AP examination in May. AP courses are academically demanding and are the equivalent of courses offered at the college level. They require students to be able to manage an increased amount of work both inside and outside the classroom. AP classes prepare students for competitive four-year colleges and universities. All advanced placement curricula must go through a national curriculum audit and certification to carry the AP trademark. These courses will meet the academic needs of gifted learners and other students who wish to work at an advanced level. Students may be asked to prepare by completing pre-course assignments. These courses are designated with AP in the course title. Selected AP courses are also available for dual enrollment (DE) credit through Lord Fairfax Community College (LFCC), Richard Bland College, James Madison University or other institutions of high learning.

Based on their performance on the AP exam, students may earn college credit. Most colleges and universities have an AP policy granting incoming students credit, placement, or both on the basis of their AP exam grades. Students should consult with the policies of the colleges and universities to which they are applying to determine how their AP credits will be evaluated.

Final grades for AP courses receive a 1.0 additional weight as long as the student completes the AP exam. Weighted cumulative GPAs appear on transcripts at the beginning of the Fall term of the student's senior year and at the conclusion of the student's senior year.

Fauquier County Public Schools will pay the student registration fee for AP exams. Students who take an AP course but fail to take the AP exam will forfeit the weight on their high school transcript.

Advanced Placement Courses Offered by Fauquier County Public Schools		
Art History AP*	English Language & Composition AP	Seminar AP and Research AP
Biology AP	English Literature & Composition AP	Spanish Language AP
Calculus AB AP	Environmental Science AP	Spanish Literature AP
Calculus BC AP	French Language AP	Statistics AP
Chemistry AP	German Language AP	Studio Art AP
Comparative Government AP*	Human Geography AP*	United States Government AP
Computer Science A AP	Latin Virgil/Caesar AP	United States History AP
Computer Science Principles AP	Physics I AP and Physics II AP	World History: Modern AP
Economics AP	Psychology AP	

*Some classes may only be offered online due to low enrollment or staffing concerns

Virtual Advanced Placement (AP)

The Virtual AP Program offers on-line AP courses in English, Government, Calculus, Statistics, U.S. History, Chemistry, Biology, Spanish, Human Geography, Economics, Psychology, Physics, and more. FCPS students may only take Virtual Advanced Placement courses that are not offered or available to students at the high school they attend. Special situations will be considered on an individual basis.

Dual Enrollment (DE)

The Virginia Plan for Dual Enrollment (DE) is offered in conjunction with Lord Fairfax Community College, Richard Bland College, and James Madison University or other institutions of higher learning. Students will have the option of getting Dual Enrollment (DE) credit in conjunction with selected high school Advanced Placement and other courses offered in the high school buildings. The program enables students to earn both high school and college credit. Course offerings may be limited due to teacher availability. Dual Enrollment courses are designated with **DE** in the course description. Parents and students are strongly encouraged to check with their prospective colleges and universities to determine their acceptance protocols and transfer credit equivalencies for dual enrollment.

Dual Enrollment Courses Offered by Fauquier County Public Schools			
High School Course	High School Credit	Equivalent College Course(s)	College Credit
Language & Composition AP	1	English 111 & 112	6
Literature & Composition AP	1	English 201 & 202	6
World History AP	1	History 112	3
United States History AP	1	History 121 & 122	6
United States Government AP	1	Political Science 211 & 212	6
French IV	1	French 111	3
French Language AP	1	French 211	3
Spanish IV	1	Spanish 111	3
Spanish Language AP	1	Spanish 211	3
Latin IV	1	Latin 201	3
Geospatial Science (GIS)	1	Geospatial Science	3
American Sign Language I	1	American Sign Language I 101,102	6
American Sign Language II	1	American Sign Language II 201,202	6

Students are eligible to participate in the Dual Enrollment (DE) program under the following conditions:

- 1) Students must have a conference with their school Counseling Department prior to enrolling and obtain signed permission to participate in the program from their parent and school Counseling Department. Students must complete an application, and take placement tests in reading and writing and score within a passing range, or receive a 500 on the Verbal portion and a 520 on the Mathematics portion of the SAT or 50 on the on both the Critical Reading and Writing and 52 on the Math sections of the PSAT. Certain LFCC Dual Enrollment (DE) courses have prerequisites, which

must be met prior to enrollment. For example, in order to enroll in ENG 201 & 202, a student must have passed ENG 111 & 112 with a C or better or have passed the AP Language and Composition exam with a score of 3 or better. For a complete explanation of course prerequisites, see the LFCC course descriptions: <http://www.lfcc.edu/areas-of-study/course-descriptions/list-of-courses/index.html>

2) For each Dual Enrollment (DE) course taken with Lord Fairfax Community College, students must pay a portion of the LFCC tuition. As of this printing, the LFCC tuition and fees are \$67.65 per credit and are subject to change for the following school year.

3) With the exception with French IV, Spanish IV, French Language AP, and Spanish Language AP, Dual Enrollment (DE) students take the equivalent of two college courses for 3 credits each. Students who receive a failing grade at midterm will receive an F for the first college course and will not be able to continue in the Dual Enrollment (DE) program. Students who are passing at midterm but receive a failing grade at the end of the course will receive credit for the first college course but will not receive credit for the second college course and may be in jeopardy of not graduating from high school.

Lord Fairfax Community College and Fauquier County Public Schools are working together to expand opportunities that would enable students to complete an associate's degree or a general educational certificate concurrently with a high school diploma. Additional information is available through the high school Counseling Department.

Honors Courses

These courses are designed to exceed standard requirements and prepare students for Advanced Placement course work, available primarily in the junior and senior year. These classes require extensive reading and writing. Advanced concepts are explored, and classes stress development of skills and practices used by professionals in the discipline. Projects that require extensive outside preparation and work are among the requirements for these classes. Honors classes prepare students for competitive four-year colleges and universities. These courses will meet the academic needs of gifted learners and other students who wish to work at an advanced level.

Standard Academic

Courses in this category make up the majority of offerings in the high school program of studies. These classes will prepare students for four-year colleges, community college, vocational/technical schools, or for direct entry into the work force. In English, History and Social Science, Science, and Mathematics, the courses meet all Standards of Learning requirements to include independent reading of a variety of texts. Essays, narratives, research papers, and lab reports are among the writing expectations, and students are required to use higher-level critical thinking skills independently. World Language, Art, Music, Physical Education, and Career and Technical Education courses are also in this category. They are designed to broaden students' educational experiences to include knowledge and appreciation for healthy life choices, Fine Arts, Career and Technical Education and Languages.

Academic Support

These courses are designed to offer academic support for students who require additional teacher guidance and adjustment in the pace of lessons. Students pursuing a Standard or Advanced Studies Diploma, seeking admission to a 2-year or 4-year college, and/or seeking admission to a NCAA collegiate athletic team, should limit these courses in their schedules, particularly during their junior and senior years.

Courses Offered Only at Certain High Schools

Certain Career and Technical Education and Army Junior Reserve Officer Training Corps (AJROTC) courses are only offered at one High School. However, students at all high schools are eligible to take these courses. Those students who wish to take one of these courses will be provided transportation to the school where the course is offered. Students will travel before school, during lunch, and/or after school. For those courses which take only one 90-minute block, students will need to enroll in another one-block course to facilitate the travel schedule.

Certain specialized programs are only offered at one High School. At this time, they may not be open to all FCPS students as they are in the initial implementation stages.

Courses Offered Only at Certain High Schools		
Automotive Servicing Online (FHS)	Early Childhood Education & Services I, II, III (FHS)	Technology Foundations (LHS)
Automotive Technology I - III (FHS)	Nursing Aide (FHS)	Technology Transfer (LHS)
Auto Body Technology I - III (FHS)	Graphic Imaging Technology III and IV (FHS)	i-STEM I and II (KRHS)
Exploring Physical Therapy (KRHS)	Building Trades I and II (FHS)	Electricity I- III (FHS)
Military Science 1-8 (AJROTC) (LHS)	Technology Assessment (LHS)	
Environmental Literature (FHS)	Reading & Writing Across STEM Disciplines (KRHS)	

Additional Virtual Courses

On a limited basis, students may take specialized courses not available in their high school, including AP courses, through a virtual high school program. Virtual courses are generally taken as part of the regular high school schedule. Guidelines and limitations, as well as a list of available courses, are available in the Counseling Department.

Under special circumstances, seniors and second term juniors may request permission from their high school principal to take a virtual course outside the normal school schedule. Guidelines, requirements, and limitations are available in the Counseling Department.

*Please note that students who are non-Early College Scholars will be expected to pay for Virtual Virginia Courses.

GRADE LEVEL DETERMINATION

A student must meet the following minimum criteria to be classified in a high school grade:

Grade 9	Pass 4 of 5 required middle school courses: English, Mathematics, Science, History and Social Science, Health and Physical Education
Grade 10	Earned 6 credits
Grade 11	Earned a total of 12 credits
Grade 12	Earned a total of 17 credits. Fourth-year students with 14 or more appropriate credits who are candidates for graduation may be classified as seniors.

Students will be promoted to the next grade level at the end of the school year. There are no mid-year promotions.

GRADING POLICIES

Grading Scale

Fauquier County Public Schools uses letter grades on report cards and transcripts. The following grading scale equates the grade earned in a class to the equivalent letter grade and point value:

Class Grade	Letter Grade	Quality Points
90-100	A	4.0
80-89	B	3.0
70-79	C	2.0
60-69	D	1.0
59 and below	F	0

Grade Point Average (GPA)

Grade Point Average (GPA) includes all courses for which students earned credits in grades 9-12 and any credit-bearing high school courses taken in middle school. GPA is obtained by dividing total grade points (quality points) by the number of courses taken. Official GPAs are calculated in the fall of the senior year and at the conclusion of the senior year.

Weighted Grades

Courses which require a nationally recognized examination receive a 1.0 additional weight only if the student takes the test. Courses which have an AP course as a pre-requisite are also weighted. Weighted cumulative GPAs appear on transcripts.

Honor Roll

At the end of each term (Fall and Spring), FCPS students in grades 9-12 whose GPAs are 4.0 or above will be recognized on the 4.0 Honor Roll and students whose GPAs are 3.0 or above but below 4.0 will be recognized on the 3.0 Honor Roll. High school students must have no failing grades to qualify for Honor Roll recognition.

Senior Class Standing

Academic standing is based on a weighted GPA and is reported to colleges in terms of deciles (top 10% is first decile, next 10% is second, etc.) at the beginning of the fall term of the senior year and at the end of the Spring term, once final grades are posted.

Recognition of Honor Graduates

Each high school will honor its highest performing graduates with a seal on their diploma once all final grades are calculated, as follows:

With Highest Distinction	4.00 or greater on a weighted scale
With High Distinction	3.75-3.99 on a weighted scale
With Distinction	3.50-3.74 on a weighted scale

Grades for a Repeated Course

Students who receive a D or above in a course and wish to repeat the course for the purpose of improving their grade or satisfying a course prerequisite may do so provided space is available. Both course attempts appear on the transcript, and the credit appears the first time the course is taken. The original course grade and the repeated course grade are both included in calculations for grade point average.

Students who fail a course in one term may be permitted to repeat that course the following term provided space is available in the second-term course. Seniors who fail a course necessary for graduation during the fall term are not guaranteed a position in that class for the spring term and may forfeit their opportunity to graduate in June. Repeated courses do not count as one of the courses required for VHSL sports eligibility.

Home-School Grades and Credits

Students who transfer to Fauquier County Public Schools from home schooling will receive credits for classes and grades on a Pass or Fail basis. These grades are not averaged in with the A-F grades on transcripts and are not calculated into the GPA or class rank.

Incomplete Grades

Teachers may assign "Incomplete" grades in instances where the required assignments have not been submitted due to unusual but excused circumstances. In such cases, the teacher shall assign a deadline for make-up of the work; however, the work must be completed by the end of the following grading period. Incomplete grades may not be carried over from one academic year to another.

Schedule Changes

Schedule changes are handled through the high school Counseling Department. To avoid the need to request a change in schedule, it is the responsibility of students to read the course information in the *Program of Studies* prior to registration, to ask their school counselor about any courses they do not fully understand, and to attend the elective information sessions held prior to registration. A parent or guardian is required to review and sign the original registration form. Before school ends, students will receive a list of requested courses for the 2021-2022 school year. If a schedule change is necessary, students should make every effort to request the change before the end of the school year. Over the summer, students will receive a final copy of their schedule. If a change is necessary, it must be made in accordance with school counseling deadlines. To request a change, students must fill out a schedule change form, which the parent is required to sign. If there is a scheduling conflict in courses requested, the Counseling Department will use the alternate courses the student selected during registration.

All scheduling conflicts or course changes should be completed before school begins. After school begins, changes will be denied except for academic reasons. The opening days of school are an extremely busy time; therefore, the opportunity for students to meet with counselors is limited. Teacher change requests will not be made without administrative approval.

Dropping and Adding Classes

Students may drop or add a course up to the first day of each term. After that time, any student who elects to drop a course will receive a W/F (withdraw failing), regardless of the performance in the class. The transcript will read W/F. The W/F notation will affect the student's GPA because the class dropped will be counted as a class taken and failed. Dropping an SOL-assessment course to enroll in

the same course after the mid-term period is typically not permitted. Should the student or school counselor want to make such a change after the mid-term, the course change must be approved and signed by the principal. Students may be permitted to change from an AP or Honors course to a Standard Academic course during the first quarter, but only after consultation with the teacher, school counselor, and approval by the parent.

Withdrawing from a Course

A student must complete the full course in order to earn credit. Therefore, no credit will be awarded to students who withdraw from a year-long course before completing both terms. In the four-year high school program, students are able to earn up to 32 credits, which is more than required for graduation. Students are encouraged to take advantage of the many opportunities to enroll in courses beyond the minimum graduation requirements in order to more fully prepare for further education or work.

ADDITIONAL POLICIES

School Transfer Requests

A transfer request for a student to attend a high school out of his or her zone will receive approval by the principal only for purposes outlined in the Fauquier County School Board Policy 7-2.2. Forms for requests will be available in the main office of each school (Form 7-2.2 (A) F1).

Exams

Typically culminating course exams are offered for students at the middle and end of every term (October, December [final term exam], March, and May/June [final term exam]). However, students are encouraged to maintain consistent work habits in all classes throughout the marking period so that when the grading period ends, students' final grades are not contingent on exam grades. In the case of inclement weather, final exams may be cancelled if a weather event requires that school is closed during the examination window. If exams are cancelled, students will receive the term grade earned to that point.

Fee Waivers

Any fees associated with courses offered by Fauquier County Public Schools, such as musical instrument charges, uniforms, AP review guides and manuals, and the cost of art materials may be waived for qualified students. Partial fee waivers may also be available for qualified students who wish to take dual enrollment classes. Any fees associated with courses should not deter students from considering enrollment.

NCAA CERTIFICATION AND VHSL ELIGIBILITY

Certification for College-Bound Athletes

All prospective student athletes who intend to participate in collegiate Division I or II athletics must be certified by the NCAA Initial Eligibility Clearinghouse. NCAA guidelines are subject to change yearly. Students should plan to start the certification process at the end of their junior year. College-bound athletes are encouraged to take Honors, Dual Enrollment, and AP courses; however, all course levels will meet the NCAA guidelines for certification. For detailed information, students should see their school counselor and/or their coach.

A NCAA Division I or Division II membership school may not provide an expense-paid visit to a

prospective student athlete and may not recruit in any way a student-athlete who has not submitted the following documents to the NCAA Initial Eligibility Clearinghouse: completed and signed student release form and fee, official transcript from every high school the student has attended, and ACT or SAT scores.

Eligibility for VHSL Activities

To be eligible for any Virginia High School League (VHSL) sport or activity, students must meet the following requirements during the term they participate:

- The student must be enrolled in at least three subjects.
- The student must have passed at least three subjects for credit the previous term.

If the student repeats a course to improve skills or to meet a grade prerequisite, passing the repeated course does not count as one of the courses required for eligibility. Students who transfer from one high school to another within Fauquier County will forfeit eligibility for 365 days unless the Superintendent grants a waiver of the transfer rule.

RECOMMENDED TESTS FOR COLLEGE-BOUND STUDENTS

Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT)

The PSAT/NMSQT is a standardized test that provides firsthand practice for the SAT. It is given to all 10th grade students in Fauquier County Public Schools at no cost to the student. The PSAT/NMSQT measures critical reading skills, math problem-solving skills, and writing skills, and provides important feedback on strengths and weaknesses on skills necessary for college study. Students in Grade 11 are urged to take the PSAT again, as only students who take the test in Grade 11 are identified for National Merit Scholarships. The PSAT also identifies students for the AP Potential Program.

SAT REASONING TEST

Students in the 11th and 12th grades are encouraged to take the SAT Reasoning Test which measures critical reading, mathematics, and writing skills. A student should begin taking the test by the spring of the 11th grade and may repeat the test several times. Most colleges use the highest critical reading, math, and writing scores obtained, even if the three sub-scores were earned on separate days. The SAT tests are given several times each year in Fauquier County.

Students must register six weeks in advance of the test. Students may register on-line at www.collegeboard.com. Free study and preparation materials are available at www.collegeboard.com and from the School Counseling Office.

ACT Test

The ACT is a standardized test for high school achievement and college admissions. The ACT consists of five tests: English, Mathematics, Reading, Science Reasoning, and an optional test in Writing.

All four-year colleges and universities in the U.S. accept the ACT, but different institutions place different emphases on standardized tests such as the ACT compared to other factors of evaluation such as class rank, GPA, and extracurricular activities. The four main tests are scored individually on a scale of 1–36, and a Composite score is provided which is the whole number average of the four scores.

STEM ACADEMIES

Fauquier County Public Schools is proud to host 3 unique academies to prepare students for STEM careers through hands-on experiences and industry certifications. Students must apply for admission into each program, and may receive medals, certificates, and diploma seals at graduation if all requirements are completed.

The 3 Academies are:

Cybersecurity Academy	Liberty High School
Environmental Studies Academy	Fauquier High School
iSTEM Academy	Kettle Run High School

Any rising 9th grader with an interest in these areas may apply for any of these programs. Transportation is available to allow students to travel between schools.

For more information about the STEM Academies (including the application process), please visit the Academy Programs page on the Fauquier County Public Schools website or visit your school Counseling Office for more information.

CYBERSECURITY ACADEMY

AT LIBERTY HIGH SCHOOL

Key Elements of the Cybersecurity Academy include:

- Cross-curricular courses with a cybersecurity emphasis
- Dedicated lab, co-curricular clubs, competitions, field experiences, and speakers
- Cybersecurity-related extracurricular and co-curricular community activities

To earn the Cybersecurity Academy Honors Medal, students must:

- complete all required courses and maintain a 3.0 overall GPA
- complete 3 suggested electives
- earn 2 different industry certifications
- complete an approved cybersecurity internship, service project, or competitive event involving 40 hours of participation - *suggestions will be provided*

To earn the Cybersecurity Academy Merit Medal, students must:

- complete all required courses and maintain a 2.5 overall GPA
- complete 2 suggested electives
- earn 1 industry certification
- complete an approved cybersecurity internship, service project, or competitive event involving 30 hours of participation - *suggestions will be provided*

To earn the Cybersecurity Academy Certificate, students must:

- complete all required courses and maintain a 2.0 overall GPA
- complete 1 suggested elective
- earn 1 industry certification
- complete an approved cybersecurity internship, service project, or competitive event involving 20 hours of participation - *suggestions will be provided*

ALL Cybersecurity Academy students must maintain a C average and be enrolled in at least one required class each year.

Required Courses for the Cybersecurity Academy:**9th Grade: Cyber Security Fundamentals**

Cybersecurity affects every individual, organization, and nation. This course focuses on the evolving and all-pervasive technological environment with an emphasis on securing personal, organizational, and national information. Students will be introduced to the principles of cybersecurity, explore emerging technologies, examine threats and protective measures, and investigate the diverse high-skill, high-wage, and high-demand career opportunities in the field of cybersecurity.

10th Grade: Computer Systems Technology 1

Students enter the world of computer technology and gain practical experience in assembling a computer system. Students will install, configure, and secure various operating systems. Students will troubleshoot computers and peripherals and use system tools and diagnostic software. They develop skills in computer networking and resource sharing. In addition, students explore the relationships between internal and external computer components. Upon successful completion of the course, students may qualify to take the CompTIA A+ certification exam.

11th Grade: Cyber Security Software Operations

Cybersecurity Software Operations is designed to teach many aspects of computer support and network administration. Students learn networking concepts, from usage to components, and create peer-to-peer network systems and client server networks. Students learn how to install and configure network cards and connect them to networks; to install the operating systems; to create, set up, and manage accounts; to load software; and to establish, implement, and maintain network integrity security plans.

Recommended Electives:

- Turkish 1-2
- Arabic 1-4
- Military Science 1-8
- Digital Applications/Keyboarding
- Computer Information Systems
- Advanced Computer Information Systems
- AP Computer Science
- AP Computer Science Principles
- Computer Math

ENVIRONMENTAL STUDIES ACADEMY

AT FAUQUIER HIGH SCHOOL

Key Elements of the Environmental Studies Program include:

- Cross-curricular courses with an environmental emphasis
- Hands-on experiences at the Fauquier Outdoor Lab, FHS Greenhouse, and external environmental and natural research facilities
- Science-related extracurricular and co-curricular community activities

To earn the Environmental Studies Academy Honors Medal and Board of Education Seal for Excellence in Science and the Environment, students must:

- complete all required courses and maintain a 3.0 overall GPA
- complete 3 different introductory lab sciences and earn a final grade of B or higher
- complete AP Environmental Science and earn a B or higher
- complete laboratory or field-science research and present the research in a formal, juried setting
- complete a minimum of 50 cumulative hours of voluntary community service or extracurricular activities that involve the application of science (i.e. environmental monitoring, protection, management or restoration) by graduation - *suggestions will be provided*

To earn the Environmental Studies Academy Merit Medal, students must:

- complete all required courses and maintain a 2.5 overall GPA
- complete 3 different introductory lab sciences and earn a final grade of C or higher
- complete AP Environmental Science and earn a C or higher
- complete laboratory or field-science research and present the research in a formal, juried setting
- complete a minimum of 30 cumulative hours of voluntary community service or extracurricular activities that involve the application of science. (i.e. environmental monitoring, protection, management or restoration) by graduation - *suggestions will be provided*

To earn the Environmental Studies Academy Certificate, students must:

- complete all required courses and maintain a 2.0 overall GPA
- complete 3 different introductory lab sciences and earn a final grade of C or higher
- complete AP Environmental Science and earn a C or higher
- complete a minimum of 20 cumulative hours of voluntary community service or extracurricular activities that involve the application of science. (i.e. environmental monitoring, protection, management or restoration) by graduation - *suggestions will be provided*

ALL Environmental Studies Academy students must maintain a C average and be enrolled in at least one required class each year.

Required Courses for the Environmental Studies Academy:

Science	Environmental Science for academy students (9 th Grade) Biology for academy students (10 th) Chemistry for academy students (11 th -12 th) Environmental Science AP for academy students (11 th -12 th)
English	Environmental Literature (10 th)
CTE	Introduction to Natural Resources (9 th -12 th)
Math	Computer Science Principles AP (9 th -12 th)

Recommended Courses:

Science	Chemistry AP Biology II: Marine Biology Biology AP
English	AP Seminar* AP Research* <i>students will conduct scientific research</i>
CTE	Horticulture Sciences Greenhouse Plant Production & Management
Math	Advanced Mathematics Elementary Functions or Mathematical Analysis Probability & Statistics or Statistics AP Calculus or Calculus AP
History & Social Sciences	Geospatial Science (JMU) Human Geography AP

Note: Courses with an asterisk () beside them are research based courses recommended for the FESA Honor and FESA Merit designations.*

iSTEM ACADEMY

AT KETTLE RUN HIGH SCHOOL

Key Elements of the iSTEM Academy include:

- Cross-curricular courses with a STEM emphasis
- Workplace readiness skills and certifications
- STEM-related extracurricular and co-curricular community activities

To earn the iSTEM Honors Medal, students must:

- complete all iSTEM course requirements and maintain a 3.0 overall GPA
- complete iSTEM III and participate in the Academy Symposium
- earn 3 of the offered skill certifications
- complete a minimum of 50 cumulative hours of voluntary community service or extracurricular activities that involve the application of STEM – *suggestions will be provided*

To earn the iSTEM Merit Medal, the following requirements must be met:

- complete all iSTEM course requirements and maintain a 2.5 overall GPA
- complete iSTEM III and participate in the Academy Symposium
- earn 2 of the offered skill certifications
- complete a minimum of 30 cumulative hours of voluntary community service or extracurricular activities that involve the application of STEM – *suggestions will be provided*

To earn the iSTEM Certificate, the following requirements must be met:

- complete all iSTEM course requirements and maintain a 2.0 overall GPA
- complete iSTEM III and participate in the Academy Symposium
- earn 1 of the offered skill certifications
- complete a minimum of 20 cumulative hours of voluntary community service or extracurricular activities that involve the application of STEM – *suggestions will be provided*

ALL iSTEM Academy students must maintain a C average and be enrolled in at least one required class each year.

Required Courses for the iSTEM Academy:

iSTEM I: Foundations (9th Grade)

This is an integrated, hands-on, project-oriented, inter-disciplinary introductory engineering, programming and research course for students with a high interest in mathematics and science. This is a one-credit science and technology elective course designed to address national educational standards in STEM fields.

Select TWO: iSTEM II: Air, iSTEM II: Aquatic, and iSTEM II: Terrestrial (10th-12th)

These interdisciplinary courses integrate the study of engineering, computer science, mathematics and scientific principles in aquatic, terrestrial, and air environments. Students will be required to mentor, collaborate, write, present, and solve a host of real-world problems skillfully and creatively. Students will also be prepped for workplace readiness skill certification testing. *All academy students must complete at least two of the three iSTEM II offerings in order to meet academy graduation requirements.*

iSTEM III: Capstone (11th-12th)

Students will demonstrate their knowledge and skills through completion of an independent project to be presented at the Academy Symposium and mentorship of students in iSTEM I and iSTEM II classes.

English 10: Reading and Writing across STEM (10th)

This is a cross-curricular English course designed for a tenth grade student who has an interest in STEM-based careers. In addition to the content outlined in the English 10 curriculum, English 10: Reading and Writing across STEM Disciplines students will be introduced to technical writing, scientific writing and reviews, audience awareness, and more.

Additional Required Courses for the iSTEM Academy:

- Technical Drawing and Design (9th-12th)
- Computer Science Principles AP (9th-12th)

Recommended Courses:

Science	Chemistry AP Physics or Physics AP Environmental Science AP
English	AP Seminar AP Research
CTE	Engineering Drawing and Design Graphic Imaging Computer Animation & 3D Modeling
Math	Advanced Mathematics Elementary Functions or Mathematical Analysis Probability & Statistics or Statistics AP Calculus or Calculus AP
History & Social Sciences	Geospatial Science (JMU) Psychology AP

CAREER CLUSTERS

Successful individuals in all careers should be able to work as part of a team, accept responsibility, read and understand complex information, communicate well in writing and speaking, accurately perform calculations, proficiently use computers to process information, and correctly record and interpret data. A Career Cluster is a grouping of occupations and broad industries based on commonalities. Career clusters include:

AGRICULTURE, FOOD & NATURAL RESOURCES

Food Products and Processing Systems; Plant Systems; Animal Systems; Power, Structural and Technical Systems; Natural Resource Systems; Environmental Service Systems; Agribusiness Systems

ARCHITECTURE & CONSTRUCTION

Design/Pre-Construction; Construction; Maintenance/Operations

ARTS, AV TECHNOLOGY & COMMUNICATIONS

Audio and Video Technology and Film; Printing Technology; Visual Arts; Performing Arts; Journalism and Broadcasting; Telecommunications

BUSINESS, MANAGEMENT & ADMINISTRATION

General Management; Business Information Management; Human Resources Management; Operations Management; Administrative Support

EDUCATION & TRAINING

Administration and Administrative Support; Professional Support Services; Teaching/Training

FINANCE

Securities and Investments; Business Finance; Accounting; Insurance; Banking Services

GOVERNMENT & PUBLIC ADMINISTRATION

Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; Public Management and Administration

HEALTH SCIENCE

Therapeutic Services; Diagnostic Services; Health Informatics; Support Services; Biotechnology Research and Development

HOSPITALITY & TOURISM

Restaurants and Food/Beverage Services; Lodging; Travel and Tourism; Recreation, Amusements and Attractions

HUMAN SERVICES

Early Childhood Development and Services; Counseling and Mental Health Services; Family and Community Services; Personal Care Services; Consumer Services

INFORMATION TECHNOLOGY

Network Systems; Information Support and Services; Web and Digital Communications; Programming and Software Development

LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY

Correctional Services; Emergency and Fire Management Services; Security and Protective Services; Law Enforcement Services; Legal Services

MANUFACTURING

Production; Manufacturing Production Process Development; Maintenance, Installation and Repair; Quality Assurance; Logistics and Inventory Control; Health, Safety, and Environmental Assurance

MARKETING, SALES & SERVICE

Marketing Management; Professional Sales; Merchandising; Marketing Communications; Marketing Research

SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

Engineering and Technology; Science and Mathematics

TRANSPORTATION, DISTRIBUTION, INTRODUCTION TO BUSINESS & MARKETING, & LOGISTICS

Transportation Operations; Logistics Planning and Management Services; Warehousing and Distribution Center Operations; Facility and Mobile Equipment Maintenance; Transportation Systems/Infrastructure Planning, Management and Regulation; Health, Safety, and Environmental Management; Sales and Service.

COMPLETING THE ACADEMIC AND CAREER PLANNING GUIDE

Complete the Planning Guide on the next page in consultation with your family and School Counseling Department.

1. Select a Career Cluster/Path
 - Choose a career cluster/path that closely relates to your interests, skills, values, and strengths.
 - Explore occupations that relate to your skills.
 - Learn what education, skill, and knowledge are required.
2. Decide your diploma type
 - Advanced Studies
 - Standard
3. Choose courses that relate to your career path and diploma choice.

How Can My High School Counselor Help Me?



Academic
Advising



Career and
College
Planning



Paying for
College



Personal or
Social
Issues

20 Questions to Ask your High School Counselor

1. What courses do I need to take to be ready for college?
2. How should I plan my schedule so I'll complete them?
3. Which elective courses do you recommend?
4. Which AP/IB/Cambridge courses should I consider taking?
5. When is the PSAT/NMSQT or Pre-ACT going to be given?
6. How should I study for the SAT or ACT, and is it given at this high school or do I need to go some where nearby?
7. Do you have any college planning sessions scheduled?
8. Do you have college handbooks or other guides that I can browse or borrow?
9. What activities can I do at home and over the summer to get ready for college?
10. What kinds of grades do different colleges require?
11. Are there any college fairs at this school, or nearby?
12. What colleges do other kids from our school go to?
13. What are the requirements or standards for the honor society?
14. Can you put me in touch with recent grads who are going to the colleges on my wish list?
15. Do you have any information to help me start exploring careers?
16. If my colleges need a recommendation from you, how can I help you know me better, so it can be more personal?
17. Are there any special scholarships or awards that I should know about now, so I can work toward them?
18. Can I see my transcript as it stands now, to see if everything is as I think it should be?
19. What forms do I use to apply for financial aid and where I can find them online?
20. How does our school compare to others, in terms of test scores and reputation?

Fauquier County Public Schools

Academic & Career Planning Guide

Student Name and ID: School:							Anticipated Graduation Date: _____	
		Diploma Type					Diploma Recognitions & Seals:	
High School Diploma Goal(s):		<input type="checkbox"/>	Standard	<input type="checkbox"/>	Advanced	<input type="checkbox"/>	Other	
Career Goal(s):								
Post-Secondary Goal(s):		<input type="checkbox"/>	4-Year College/University		<input type="checkbox"/>	2-Year Community College/Technical Program		Military Branch:
		<input type="checkbox"/>	Other:					
	GRADE	English	Mathematics	Science	History & SS	Health & PE	World Lang	Electives
Middle School	7							
	8							
High School	9	English 9		Earth Science	World History I	H & PE 9 (CPR, AED, First Aid)		
	10	English 10		Biology	World History II	H & PE 10 (Driver's Ed)		
	11	English 11			VA & US History			
	12	English 12			VA & US Government			
	Economics and Personal Finance (recommended 11 th Grade) (Virtual course requirements embedded in this program)							

CAREER AND TECHNICAL EDUCATION



General Information

Completers

A Career and Technical Education *completer* is a student who has taken a sequence of state-approved CTE courses and met all requirements for high school. An approved Career and Technical Education sequence is designed to develop occupational competencies required for specific career pathways and continuing education. These concentration sequences are listed at the beginning of each CTE program.

Certifications/Licenses

Completion of certain skill sets and coursework enable students to participate in Virginia Board of Education approved assessments for industry certifications, a state license, or national and/or occupational competency certifications. Students who earn these credentials are eligible to earn verified credits toward graduation requirements. At the beginning of each CTE program is a list of the tests offered by Fauquier County Public Schools. Students earning a Standard Diploma are required to earn a Virginia board-approved Career and Technical Education credential.

Cooperative Education

Certain Career and Technical Education courses have an optional work component. Students in 11th or 12th grade enrolled in these classes may choose to participate in these work experiences. The students must successfully complete a full year of employment in order to receive credit. Partial credit is not awarded. Students who plan to graduate in January are not eligible for this program. One credit is awarded for classroom instruction and one credit is awarded for the work experience. Students may participate in only one Cooperative Education program per school year.

Course Offerings

Agriculture Education

Business and Marketing

Family and Consumer Science

Health and Medical Services

STEM Technology Education

Trade and Industrial Education

Military Science (AJROTC)

AGRICULTURE EDUCATION



All agriculture courses count toward meeting the one-credit graduation requirement for Fine Arts or Career and Technical Education.

The National FFA Organization is the co-curricular organization for students enrolled in agriculture education courses. This co-curricular club provides students with an opportunity to use the skills and knowledge they have acquired in district, state, and national competitions.

Agriculture Education Completer Sequences

Option 1. Applied Agriculture Concepts and one of the following:

- Horticulture Sciences
- Introduction to Animal Systems
- Landscaping I
- Landscaping II

Option 2. Agriculture Business Fundamentals and one of the following:

- Floral Design I
- Floral Design II
- Greenhouse Plant Production and Management
- Introduction to Animal Systems
- Landscaping I
- Landscaping II
- Small Animal Care

Option 3. Introduction to Animal Systems and one of the following:

- Small Animal Care I
- Agriculture Business Fundamentals
- Applied Agriculture Concepts

Option 4. Small Animal Care I and one of the following:

- Agriculture Business Fundamentals
- Introduction to Animal Systems

Option 5. Two of the following:

- Agricultural Business Fundamentals
- Applied Agricultural Concepts
- Agricultural Machinery I
- Agricultural Machinery II
- Agricultural Machinery III

Option 6. Two of the following:

- Agricultural Business Fundamentals
- Floral Design I
- Floral Design II

Cooperative Education

Cooperative Education is a Work-based learning, career preparation method that combines CTE classroom instruction with paid employment that is directly related to the student's plan of study. The school and the employer plan, coordinate, and supervise the instruction and employment so that each contributes directly to the student's career objectives and employability. Students may earn credit toward graduation for cooperative education experiences. Normally students work between 11 and 15 hours per week to achieve a minimum of 280 hours. Cooperative education credit is available in:

- Agricultural Machinery II: Agricultural Power Systems
- Agricultural Machinery III: Agricultural Fabrication & Emerging Technologies
- Agricultural Business Fundamentals
- Introduction to Natural Resources; Ecology & Environmental Management
- Landscaping
- Greenhouse Plant Production & Management
- Floral Design I
- Floral Design II
- Agricultural Business
- Horticulture Sciences

Credentialing Tests Offered in Agriculture Education

- Workplace Readiness Skills for the Commonwealth examination
- National Career Readiness
- Agriculture Mechanics (NOCTI)
- Natural Resource Systems (NOCTI)
- Floriculture (NOCTI)
- Floriculture: Greenhouse (NOCTI)
- Greenhouse Operator
- Horticulture: Landscaping (NOCTI)
- Animal Systems Assessment (NOCTI)

Applied Agricultural Concepts

807305

Credit: 1

Grade: 9-12

Prerequisite: None

This introductory class should be a student's first agriculture class in High School. Areas of instruction include home lawn, garden, and pasture care; agricultural sustainability; basic home/farm maintenance including plumbing, electrical wiring, and carpentry fundamentals; and animal and meat grading and selection. This course emphasizes leadership development activities and participation in FFA activities. Teachers may incorporate additional competencies related to local agriculture.

Agricultural Business Fundamentals 802205
Agricultural Business Fundamentals CO-OP 802225
 Credit: 1
 Grade: 10-12
 Prerequisite: None

Students develop the necessary knowledge, skills, habits, and attitudes for employment in off-farm agricultural businesses. Emphasis is placed on personal financial management practices, consumer choices, financial records, business structures and procedures, and the economics of marketing agricultural products and services. Where training centers are available, cooperative arrangements with local agricultural businesses provide occupational experiences for students. When training centers are not available, simulated experiences may be provided. Leadership training is provided through the FFA.

Introduction to Animal Systems 800805
 Credit: 1
 Grade: 9-12
 Prerequisite: None

Students develop competencies in each of the major areas of the Animal Systems career pathway including animal nutrition, reproduction, breeding, care, and management. Students learn agricultural mechanics applicable to animal systems. As with all agriculture courses, students will be exposed to principles of leadership and opportunities within student organizations along with Supervised Agricultural Experience opportunities.

Small Animal Care 808325
 Credit 1
 Grade 10-12
 Prerequisite: Introduction to Animal Systems

Students learn how to care for and manage *animals, with a focus* on instructional areas in animal health, nutrition, management, reproduction, and evaluation. Course content also includes instruction in the tools, equipment, and facilities for animal care, and provides activities to foster leadership development. FFA and SAE activities are encouraged.

Agricultural Machinery I: Introduction to Power Structural & Technical Systems 801605
 Credit: 1
 Grade: 9-12
 Prerequisite: None

Throughout this introductory-level Agricultural Power course, students will receive instruction in the areas of basic engine principles, power trains, hydraulics, and electrical systems. The course will also address the areas of building structures, metal fabrication, precision agricultural management, and leadership training in FFA.

Agricultural Machinery II: Agricultural Power Systems 801805
Agricultural Machinery II: Agricultural Power Systems CO-OP 801825

Credit: 1 (1 additional credit for CO-OP)
 Grade: 10-12
 Prerequisite: Agricultural Machinery Services I

Instruction in agricultural power systems will focus on increasing the depth of study in power and technical systems. Areas of these systems to be addressed are engines, powertrains, hydraulics, electrical, and fuels. Instruction will also be provided in precision measurement, leadership, career skills, and leadership training in FFA. The cooperative education method is available for this course for an additional credit. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the year.

Agricultural Machinery III: Agricultural Fabrication & Emerging Technologies 801905
Agricultural Machinery III: Agricultural Fabrication & Emerging Technologies CO-OP 801925
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 11-12
 Prerequisite: Agricultural Machinery Services II: Agricultural Power Systems

Students will receive instruction in the areas of agricultural fabrication and emerging technologies. The course content will focus on hot and cold metal fabrication and will also include studies of emerging technologies utilized within the field of agriculture.

Introduction to Natural Resources and Ecology Systems 804015
Introduction to Natural Resources and Ecology Systems Co-Op 804025
 Credit: 1
 Grade: 9-12
 Prerequisite: None

This course serves as the introductory-level course for the Natural Resources Career Pathway. Students will explore the study of natural resources and begin to develop skills and knowledge required for employment in occupations related to forestry, wildlife and natural resources management, conservation, and leadership.

Horticulture Sciences 803415
Horticulture CO-OP 803425
 Credit: 1
 Grade: 9-12
 Prerequisite: None

This course provides students with the necessary skills to work in such areas as floriculture, landscape and design, greenhouse operation, nursery plant production, and turf management. This class provides students with hands-on experience in identifying, propagating, and growing horticultural plants in the greenhouse and land laboratory. Introduction to hydroponics and biotechnology is provided. Students will also explore career opportunities and develop leadership skills through involvement in FFA activities.

Landscaping 803615
Landscaping CO-OP 803625
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 10-12
 Prerequisite: Completion of Horticulture

In this course, students develop the necessary knowledge, skills, habits, and attitudes for entry-level employment and advancement in areas such as landscape design, landscape construction, and landscape maintenance. They receive instruction in sketching and drawing, analyzing a landscape site, designing for function and aesthetics, identifying and selecting landscape plants, purchasing and installing plants, and maintaining the landscape by watering, fertilizing, mulching, pruning, and controlling pests.

Greenhouse Plant Production & Management 803505
Greenhouse Plant Production & Management CO-OP 803525
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 10-12
 Prerequisite: Horticulture Sciences

Students enrolled in this course learn the operating procedures for a greenhouse. Units of instruction include developing plant production facilities, science application in plant production, and identification of plants. Business management and marketing skills are emphasized to prepare students for careers in the greenhouse plant production and management industry. Leadership development is offered through participation in FFA.

Floral Design I 805505
Floral Design I CO-OP 805525
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 10-12
 Prerequisite: None

Course content covers career opportunities, floral design foundations, design applications, and the marketing of floral products. Specific design styles to be examined include mass, mass-line, line, vase, wedding, balloon, holiday, and personal-adornment arrangements. The course also emphasizes leadership activities and opportunities to participate in FFA events.

Floral Design II 805605
Floral Design II CO-OP 805625
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 11-12
 Prerequisite: Grade C or better in Floral Design I

Course content covers historical designs, contemporary designs, oriental designs, seasonal designs, floragraphy and designs for dried arrangements, novelty pieces, special events, and sympathy work. Students also study pricing, advertising design, wire services, delivery processes, professional organizations, sales activities, and opportunities to participate in FFA events.

BUSINESS AND MARKETING



All business and marketing education courses will count toward meeting the one-credit graduation requirement for Fine Arts or Career and Technical Education.

Future Business Leaders of America (FBLA) is the co-curricular organization for business students. DECA, An Association of Marketing Students, is the co-curricular organization for marketing students. These co-curricular clubs provide students with an opportunity to use the skills and knowledge they have acquired in district, state, and national competitions.

Business Education Completer Sequences

Option 1. Two of the following courses:

- Business Law
- Accounting
- Advanced Accounting
- Computer information Systems
- Advanced Computer Information Systems
- Office Administration
- Digital Applications/ Keyboarding
- Entrepreneurship

Option 2. Office Specialist I, II or III and one of the following courses:

- Business Law
- Digital Applications
- Accounting
- Advanced Accounting
- Office administration
- Computer Information Systems
- Advanced Computer Information Systems

Marketing Education Completer Sequences

Option 1. Marketing and two of the following courses:

- Marketing
- Entrepreneurship
- Fashion Marketing
- Advanced Fashion marketing
- Marketing Management
- Sports and Entertainment Marketing
- Sports and Entertainment Management
- Travel and Tourism Marketing

Option 2. Fashion Marketing or Advanced Fashion Marketing and one of the following courses:

- Marketing
- Marketing Management
- Fashion Marketing
- Advanced Fashion Marketing
- Entrepreneurship

Cooperative Education

Cooperative Education is a career preparation Work-Based Learning method that combines CTE classroom instruction with paid employment that is directly related to the student's plan of study. The school and the employer plan, coordinate, and supervise the instruction and employment so that each contributes directly to the student's career objectives and employability. Students may earn credit toward graduation for cooperative education experiences, and they normally work between 11 and 15 hours per week to achieve a minimum of 280 hours. Cooperative education credit is available in:

- Business Law
- Office Specialists III
- Office Administration
- Accounting
- Advanced Accounting
- Computer Information Systems
- Advanced Computer Information Systems
- Digital Applications/Keyboarding
- Economics & Personal Finance
- Marketing
- Fashion Marketing
- Advanced Fashion Marketing
- Entrepreneurship
- Marketing Management
- Sports and Entertainment Management
- Hospitality & Tourism Marketing

Credentialing Tests Offered in Business Education

- Workplace Readiness Skills for the Commonwealth Exam
- Microsoft Office Specialist – MOS

Credentialing Tests Offered in Marketing Education

- Workplace Readiness Skills for the Commonwealth Exam
- Customer Services and Sales Certification Assessment

Business Law 613105
Business Law CO-OP 613125
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 10-12
 Prerequisite: None

Students examine the foundations of the American legal system and learn the rights and responsibilities of citizens and businesses. Students gain knowledge and skills by exploring economic and social concepts related to laws governing business and individuals. Focus areas include contracts, consumer protection, criminal law, tort law, international law, family/domestic law, employment law, cyber law, and careers in the legal profession.

Digital Applications/Keyboarding 661105
 Credit: 1
 Grade: 9-12
 Prerequisite: None

This course is designed for secondary school students to develop keyboarding skills, basic computer operations, application software (word processing, spreadsheets, multimedia applications, databases), career exploration, develop real-life, outcome-driven approach skills for digital citizenship. Students who successfully complete this course may be eligible for a rigorous and relevant industry certification examination. Student skills may be enhanced by participation in work-based learning activities and/or the Future Business Leaders of America (FBLA).

Office Specialist I 674003
 Credit: 1
 Grade: 9-10
 Prerequisite: None

Students complete the Office Specialist sequence identified locally or progress in the sequence until prepared to transfer into other business courses. Students develop skills in areas including keyboarding, word processing, office procedures, and records management. If a fourth year is needed, the teacher should use simulated activities in the following areas: word processing, spreadsheets, databases, telecommunications, desktop publishing, and records management.

Office Specialist II 674103
 Credit: 1
 Grade: 10-11
 Prerequisite: Office Specialist I or Digital Applications.

Students complete the Office Specialist sequence identified locally or progress in the sequence until prepared to transfer into other business courses. Students develop skills in areas including keyboarding, word processing, office procedures, and records management. If a fourth year is needed, the teacher should use simulated activities

in the following areas: word processing, spreadsheets, databases, telecommunications, desktop publishing, and records management. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Office Specialist III 674203
Office Specialist III CO-OP 674223
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 11-12
 Prerequisite: Office Specialist II

Students complete the Office Specialist sequence identified locally or progress in the sequence until prepared to transfer into other business courses. Students develop skills in areas including keyboarding, word processing, office procedures, and records management. If a fourth year is needed, the teacher should use simulated activities in the following areas: word processing, spreadsheets, databases, telecommunications, desktop publishing, and records management. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Office Administration 662105
Office Administration CO-OP 662125
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 11-12
 Prerequisite: Digital Applications/Keyboarding, Office Specialist I.

Students develop and enhance skills in processing and managing information, data, and financial functions while developing and improving communication skills and other vital competencies needed for successful employment as administrative support professionals. Students examine and employ the latest technology and software used in office systems. In addition, students study procedures involved with information processing, procurement, telecommunications, maintaining office systems, organizing and planning functions, supervising employees, and developing employability skills.

Accounting 632005
Accounting CO-OP 632025
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 10-12
 Prerequisite: None

Accounting students study the basic principles, concepts, and practices of the accounting cycle for a service business and a merchandising business. Topics covered include analyzing transactions, journal writing and posting entries,

preparing payroll records and financial statements, and managing cash systems. Business ethics and professional conduct are emphasized. Students learn fundamental accounting procedures.

Advanced Accounting 632105
Advanced Accounting CO-OP 632125
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 11-12
 Prerequisite: Accounting

Students gain knowledge of advanced accounting principles, procedures, and techniques used to solve business problems and make financial decisions. Students work in a technology-integrated environment, using accounting and spreadsheet software to analyze, synthesize, evaluate, and interpret business financial data related to inventory, fixed assets, notes/accounts payable and receivable, implementation of a partnership and a corporation, and other specialized accounting systems. Using authentic workplace scenarios that reflect current industry trends and standards, students analyze financial data and acquire knowledge of business ethics.

Computer Information Systems 661205
Computer Information Systems CO-OP 661225
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 9-12
 Prerequisite: None

Students apply problem-solving skills to real-life situations through word processing, spreadsheets, databases, multimedia presentations, and integrated software activities. Students work individually and in groups to explore computer concepts, operating systems, networks, telecommunications, and emerging technologies and career opportunities related to the information technology field.

Advanced Computer Information Systems 661305
Advanced Computer Information Systems CO-OP 661325
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 10-12
 Prerequisite: Computer Information Systems

Students enhance computer information technology skills through the use of advanced integrated applications to create documents, publications, and websites including complex graphs, customized reports, and multimedia presentations. In addition to implementing programming and executing network activities, students will also practice the maintenance, management, and troubleshooting of systems; legal and ethical issues are explored; preparation is given for industry certifications; employability skills are developed.

Economics & Personal Finance 6120CTE
Economics & Personal Finance CO-OP 612025
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 11-12
 Prerequisite: None

In this course, which satisfies the literacy requirements for graduation, students navigate financial decisions they must face and make informed decisions related to career exploration, budgeting, banking, credit, insurance, spending, taxes, savings, investing, buying/leasing a vehicle, living independently, and inheritance. Development of financial literacy skills and an understanding of economic principles are the basis for responsible citizenship and career success. In addition to developing personal finance skills, students in this course will study occupational skills and concepts in preparation for entry-level employment in the field of finance. Students will take the WISE Exam and complete a 30-hour online experience for graduation.

Marketing 812005
Marketing CO-OP 812025
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 9-12
 Prerequisite: None

Students examine marketing and business principals. Topics will include professionalism in the workplace, product planning and positioning, promotion, pricing, selling, economic issues, and the impact of technology on the marketplace. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events.

Fashion Marketing 814005
Fashion Marketing CO-OP 814025
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 10-12
 Prerequisite: None

This course leads students into the exciting and ever-changing world of fashion. Students gain knowledge of marketing as it relates to the fashion industry. From brick-and-mortar retail establishments, to online retail and social media marketing, students will explore aspects such as trends, technology, the buying process, visual merchandising, the nature of history of fashion designers, and the global impact of the fashion industry on the economy. Academic skills related to the content are part of this course.

Advanced Fashion Marketing 814505
Advanced Fashion Marketing CO-OP 814525
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 11-12
 Prerequisite: Fashion Marketing

This advanced-level course prepares students for a career in the global fashion industry. Students gain deeper knowledge of the field and apply skills in marketing. Students explore sustainability, social responsibility, entrepreneurship, technology applications, buying, portfolio development, and careers. Academic skills related to the content are part of this course.

Entrepreneurship 909305
Entrepreneurship CO-OP 909325
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 10-12
 Prerequisite: None

This course introduces students to the exciting world of creating, owning, and launching their own business. Students will learn concepts and techniques for planning an innovative business and living the entrepreneurial lifestyle.

Marketing Management 813205
Marketing Management CO-OP 813225
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 12
 Prerequisite: None

This course is designed for high school seniors who plan to attend college with a concentration in marketing, business, or management and/or who have plans to manage or own a business. Students will be exposed to all aspects of marketing and management. These skills will translate to small and large businesses, nonprofit organizations, service industries, and government agencies. This course will prepare students for the CLEP examination to earn potential college credit at many accredited colleges and universities across the country.

Sports and Entertainment Marketing 817505
Sports and Entertainment Marketing CO-OP 817525

Credit: 1(1 additional credit for CO-OP)
 Grade: 10-12
 Prerequisite: None

Students develop a thorough understanding of fundamental marketing concepts and theories relating to the sports and entertainment industries. Students will investigate the components of customer service skills, branding, product development, pricing and distribution strategies, business structures, sales processes, social media sponsorships and endorsements, and promotion plans needed for sports and entertainment events. The

course also supports career development skills and explores career options.

Sports and Entertainment Management 817705
Sports and Entertainment Management CO-OP 817725

Credit: 1(1 additional credit for CO-OP)
 Grade: 11-12
 Prerequisite: Sports and Entertainment Marketing

Students build on prior knowledge of sports and entertainment marketing. This course focuses on the principles of management and planning supported by research, financial, and legal concepts. Students plan an event, develop a career plan, and establish a sports, entertainment, or recreation marketing product/business.

Travel and Tourism Marketing 813905
Travel and Tourism Marketing (CO-OP) 813925
 Credit: 1 (1 additional credit for CO-OP)
 Grade: 10-12
 Prerequisite: None

Students gain knowledge of the hospitality and tourism industry, including attractions, lodging, transportation, and food and beverage. Other topics include the history, political, social, and cultural impacts hospitality and tourism have had on local, state, and global environments. Students will develop competencies in the areas of communication, customer service, marketing, industry technology, economics, and management functions, and will be provided with opportunities for hands-on, real-world applications. The cooperative education method is available for this course for an additional credit. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

FAMILY AND CONSUMER SCIENCES



All Family and Consumer Sciences courses will count toward meeting the one-credit graduation requirement for Fine Arts or Career and Technical Education.

Family, Career, and Community Leaders of America (FCCLA) is the co-curricular organization for Family and Consumer Science students. This co-curricular club provides students with an opportunity to use the skills and knowledge they have acquired in district, state, and national competitions.

Family and Consumer Science Completer Sequences

Option 1. Child Development and one of the following courses:

- Life Planning
- Nutrition & Wellness
- Early Childhood Education & Services I
- Early Childhood Education & Services II
- Early Childhood Education & Services III

Option 2. Two of the following courses:

- Child Development
- Early Childhood Education & Services I
- Early Childhood Education & Services II
- Early Childhood Education & Services III

Option 3. Two of the following courses:

- Independent Living
- Introduction to Culinary Arts
- Nutrition & Wellness
- Life Planning

Option 4. Introduction to Interior Design and one of the following courses:

- Independent Living
- Life Planning

Credentialing Tests Offered in Family and Consumer Science

- Workplace Readiness Skills for the Commonwealth

Child Development 823205

Credit: 1

Grade: 10-12

Prerequisite: None

The growth and development of children are studied in this single-block course. Practical experiences in a day-care center or observation of child behavior is an essential part of this course. Emphasis is given to parental responsibility, community resources, and environment.

Early Childhood Education & Services I 828505

Credit: 1

Grade: 11-12

Prerequisite: Grade of C or better in Child Development or recommendation of instructor. All students must complete a program application.

This course combines the study of child growth and development with participation in the planning and operation of a child-care center for three and four-year-olds. Opportunity is provided for students to prepare for careers involving children and for the responsibility of making daily decisions that affect children. Career opportunities that involve working with children are explored such as: social work, education, psychology, child-care, and medicine. Because of a high demand, a Child Care Specialist application must be submitted and the grade point average in the prerequisite course (Child Development 823205) may be considered for enrollment. Applications can be acquired from the counseling department. **Offered only at FHS**

Early Childhood Education & Services II 828605

Credit: 1

Grade: 11-12

Prerequisite: Grade of C or better in Early Childhood Education & Services I

Students prepare for positions in child-care centers as child care attendants, kindergarten aides, or child-care assistants; as foster parents; or as entrepreneurs. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of early childhood education are emphasized. Teachers highlight the basic skills of math, science, and communication when appropriate in the content. Because of high demand, grades in the Prerequisite courses (Child Development 823205 and Child Care Specialist I 828505) may be considered for enrollment. **Offered only at FHS.**

Early Childhood Education & Services III 828705

Credit: 1

Grade: 12

Prerequisite Courses: Child Development, Early Childhood Education I and Early Childhood Education II. Grade C or better.

This course focuses on field experience in Early Childhood Education. Students will work as interns in local elementary schools. This study prepares students for positions as the lead teacher in a childcare center, preschool program or primary classroom. Students will learn all aspects of teaching. Students will apply professional teaching techniques and reflect on the teaching practice. Interns are required to complete at least 90 hours off campus. Grades in the prerequisite courses may be considered for enrollment. Students must provide own transportation. **Offered only at FHS.**

Independent Living 821905

Credit: 1
Grade: 9-12
Prerequisite: None

Students enrolled in this course focus on managing resources to achieve individual goals; making informed consumer choices; creating and maintaining an environment that supports the well-being of individuals; living in a global environment; making decisions related to nutrition, clothing, and housing; and managing a household.

Life Planning 822705

Credit: 1
Grade: 10-12
Prerequisite: None

Life Planning equips students with the skills to face the challenges in today's society. Students will develop a life-management plan which includes Developing Career, Community, and Life Connections; Applying Problem-Solving Processes to Life Situations; Creating and Maintaining Healthy Relationships; Developing Strategies for Lifelong Career Planning; Developing a Financial Plan; Examining Components of Individual and Family Wellness; and Demonstrating Leadership within the Community. Critical thinking and practical problem solving are emphasized through relevant life applications.

Introduction to Interior Design 825505

Credit: 1
Grade: 10-12
Prerequisite: None

The Introduction to Interior Design students explore the influences on the design of interior spaces, investigate careers in the interior design industry, and focus on the technical and soft skills necessary for employment in the field of interior design. Students develop an interior design project that meets specific criteria and includes the elements and principles of design.

Nutrition & Wellness 822905

Credit: 1
Grade: 9-12
Prerequisite: None

Students enrolled in Nutrition and Wellness focus on understanding wellness, investigating principles of nutrition, using science and technology in food management, ensuring food safety, planning menus and preparing food, and exploring careers in the field of nutrition and wellness. Critical thinking and practical problem solving are emphasized.

Culinary Arts I 825005

Credit: 1
Grade: 10-12
Prerequisite: None

The Culinary Arts curriculum provides students with opportunities to explore career options and entrepreneurial opportunities within the food service industry. Students investigate food safety and sanitation, explore culinary preparation foundations, practice basic culinary skills, explore diverse cuisines and service styles, investigate nutrition and menu development, and examine the economics of food. The curriculum places a strong emphasis on science and mathematics knowledge and skills.

Culinary Arts II 827605

Credit: 2
Grade: 10-12
Prerequisite: Culinary Arts I

The Culinary Arts II curriculum provides students with continuing opportunities to acquire a comprehensive knowledge of the food service industry as well as to expand their technical skills. Students practice kitchen safety and sanitation, apply nutritional principles to food preparation and storage, perform a wide range of more advanced food-preparation techniques including garden manager and baking, refine their dining room serving skills, develop menus, perform on-site catered functions, and strengthen their business and math skills. The curriculum continues to place a strong emphasis on science and mathematics knowledge and skills.

HEALTH AND MEDICAL SCIENCES



All Health and Medical Sciences courses will count toward meeting the one-credit graduation requirement for Fine Arts or Career and Technical Education.

Future Health Professionals (HOSA) is the co-curricular organization for Health and Medical Sciences students. HOSA provides students with an opportunity to use the skills and knowledge they have acquired in district, state, and national competitions.

Health and Medical Science Completer Sequence

Option 1:

Both of the following courses:

- Introduction to Health & Medical Sciences
- Nurse Aide

Credentialing Tests Offered in Health and Medical Sciences

- Workplace Readiness Skills for the Commonwealth
- Certified Nurse Aide – CAN

Exploring Physical Therapy

982615

Credit 1

Grade: 10-12

Recommended prerequisite: Intro to Health and Medical Sciences, Nurse Aide, Anatomy or Sports Medicine

This course is designed to provide an introduction to the professions of physical therapy. Students explore the principals and practices of therapists in the health care industry and participate in clinical observation under the direct supervision of a licensed physical therapist. Clinical skills in the areas of physical therapy enable students to gain understanding of rehabilitative care, which is practiced throughout the continuum of care and across the life span of individuals. After successful completion of this course, students may seek higher education for specific degrees/licensure in a variety of fields such as physical therapy, sports medicine, athletic training, chiropractic medicine, biology, or exercise science.

Introduction to Health & Medical Sciences

830205

Credit 1

Grade: 9-12

Prerequisite: None

This course introduces the student to a variety of healthcare careers and develops basic skills required in all health and medical sciences. It is designed to help students understand the key elements of the U.S.

healthcare system and to learn basic healthcare terminology, anatomy and physiology for each body system, pathologies, diagnostic and clinical procedures, therapeutic interventions, and the fundamentals of traumatic and medical emergency care. Throughout the course, instruction emphasizes safety, cleanliness, asepsis, professionalism, accountability, and efficiency within the healthcare environment. Students also begin gaining job-seeking skills for entry into the health and medical sciences field. In addition, instruction may include the basics of medical laboratory procedures, pharmacology fundamentals, biotechnology concepts, and communication skills essential for providing quality patient care.

Nurse Aide

836005

Credit 2

Grade: 12

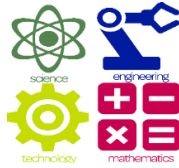
Recommended prerequisite: Introduction to Health and Medical Sciences

Nurse Aide is an occupational preparation course emphasizing the study of nursing occupations as related to the health care system. Students study normal growth and development, simple body structure and function, and medical terminology and are introduced to microbes and disease. They receive advanced skill training in areas such as taking and recording of vital signs; cardiopulmonary resuscitation; and bathing, feeding, dressing, and transporting of patients in hospitals and nursing homes; catheter care, range of motion, bowel and bladder training, care of the dying, selected procedures for maternal and infant care, and admission and discharge procedures. Students learn diseases and body systems as related to advanced clinical care of the acute medical-surgical patient, the chronically ill, and the elderly. On-the-job instruction in a licensed nursing home is part of the course. Upon completion of the nurse aide program, the student is eligible to take the nurse aide certification exam that leads to employment as a certified nurse aide in hospitals and nursing homes.

Requirements: Application, fee for uniform, white shoes, watch with second hand, Two-step TB testing.

Offered only at FHS

STEM/TECHNOLOGY EDUCATION



All STEM/Technology Education courses will count toward meeting the one-credit graduation requirement for Fine Arts or Career and Technical Education.

Technology Students of America (TSA) is the co-curricular organization for STEM/Technology Education students. This co-curricular club provides students the opportunity to apply the skills and knowledge they have acquired in various district, state, and national competitions.

STEM/Technology Education Completer Sequences

Option 1. one of the following courses:

- Technical Drawing & Design
- Architectural Drawing & Design
- Digital Visualization
- Engineering Drawing & Design
- Computer Animation & 3D Modeling

Option 2. Both of the following courses:

- Principles of Technology I
- Principles of Technology II

Option 3. Two of the following courses:

- Technology Foundations
- Technology Assessment
- Technology Transfer

Credentialing Tests Offered in Technology Education

- Workplace Readiness Skills for the Commonwealth
- ADDA Drafting Certification
- Architectural Drafting (NOCTI)
- AutoCAD
- Autodesk Application
- Autodesk Revit Certification

Technical Drawing & Design

843505

Credit: 1

Grade: 9-12

Prerequisite: None

In this foundation course, students learn the basic language of technical design while they design, sketch, and make technical drawings, illustrations, models, or prototypes of real design problems. Students develop spatial ability as they apply mathematical concepts to

visual representations. The course is especially recommended for future engineering and architecture students.

Architectural Drawing & Design

843705

Credit: 1

Grade: 10-12

Prerequisite: Technical Drawing & Design

Students will explore architectural design foundations and increase their understanding of working drawings, construction techniques, and codes regulating building design. They learn the design process and apply the elements and principles of design to architectural projects. Through producing models and illustrations of all aspects of a building, students create architectural design solutions using virtual modeling software.

Engineering Drawing & Design

843605

Credit: 1

Grade: 10-12

Prerequisite: Technical Drawing & Design

Students will create 3D models of products, devices, objects, and assemblies. Students will learn how things are assembled and how they work by animating the designs they create. Design projects include human-powered vehicles, robots, space ships, movie props, mechanical devices, amusement park rides, and deep sea exploration vehicles. Certification tests for Autodesk Inventor and AutoCad software will be offered to students who complete this course.

Computer Animation & 3D Modeling

845905

Credit: 1

Grade: 10-12

Prerequisite: Technical Drawing & Design, and Graphic Imaging I

This course provides students with opportunities to explore the world of 3D modeling, rendering, and animation. Students will learn about character modeling, camera placement, lighting, textures and special effects such as those used in movies and games. Background creation and virtual environments will be added to create videos related to science, space, human motion, real world simulations, disasters, and other visualizations. Rendering and gaming techniques will be used to give students a background in the world of virtual animation. Professional animation software, such as 3D Studio Max, will be used in this class.

Principles of Technology I

981105

Credit: 1

Grade: 10-12

Prerequisite: Algebra I or Algebra I Part 2

Students in this course apply physics and mathematics concepts through a unified systems approach to develop a broad knowledge base of the principles underlying modern technical systems. Students study seven technical principles: force, work, rate, resistance, energy, power, and force transformers, emphasizing how each principle plays a unifying role in the operation mechanical, fluid, electrical, and thermal systems in high-technology equipment. This "principles and systems" approach to studying these technical principles provides a foundation for further education and career flexibility as technology and technical systems advance. Students who complete Principles of Technology I and Principles of Technology II may use these courses to satisfy one science credit in addition to the elective credits.

Principles of Technology II

981205

Credit: 1

Grade: 10-12

Prerequisite: Principles of Technology I

Students continue to apply physics and mathematics concepts through a unified systems approach to expand their knowledge base of the principles underlying modern technical systems. This course focuses on seven technical principles: momentum, waves, energy converters, transducers, radiation, optical systems, and time constants, emphasizing how each principle plays a unifying role in the operation of mechanical, fluid, electrical, and thermal systems in high-technology equipment. This "principles and systems" approach to studying these technical principles provides a foundation for further education and career flexibility as technology and technical systems advance. Students who complete Principles of Technology I and Principles of Technology II may use these courses to satisfy one science credit in addition to the elective credits.

Technology Foundations

840305

Credit: 1

Grade: 9-12

Prerequisite: None

In this beginning course, students acquire a foundation in material, energy, and information, and apply processes associated with the technological thinker. Challenged by laboratory activities, students create new ideas and innovations, build systems, and analyze technological products to learn further how and why technology works. Students will work in the areas of dragester design, structural design, aeorspace, electricity, robotics, automotive and material testing. They work in groups to build and control systems using engineerig design.

Offered only at LHS**Technology Transfer**

840505

Credit: 1

Grade: 9-12

Prerequisite: Technology Foundations

Building upon Technology Foundations, students work with a variety of computers, materials, and systems to improve their skills and knowledge. Groups work together on a project that combines systems such as production, energy, communication, transportation, and other technologies. Thematic activities engage students in community problems where they transfer the technological method to address recycling, space exploration, and housing.

Offered only at LHS**Technology Assessment**

840705

Credit: 1

Grade: 10-12

Prerequisite: Technology Transfer

Technology Assessment is offered as a capstone course. Students use their knowledge and abilities in math, science, and technology to analyze the contributions of technical devices to their homes and the world. Students use information they acquire through library research or computer databases to predict the future. They design futuristic products and use assessment to determine possible results. They also use computer graphics, videotapes, and design portfolios to present their newly created products and systems.

Offered only at LHS

TRADE AND INDUSTRIAL EDUCATION



All trade and industrial education courses will count toward meeting the one-credit graduation requirement for Fine Arts or Career and Technical Education.

SkillsUSA is the co-curricular organization for Trade and Industrial Education students. This co-curricular club provides students with an opportunity to use the skills and knowledge they have acquired in district, state, and national competitions.

Trade and Industrial Education Completer Sequences

Option 1. Two of the following courses:

- Automotive Technology I
- Automotive Technology II
- Automotive Technology III

Option 2. Two of the following courses:

- Automotive Body Repair I
- Automotive Body Repair II
- Automotive Body Repair III

Option 3. All of the following courses:

- Building Trades I (Part I and Part II)
- Building Trades
- Electricity I
- Electricity II

Option 4. Two of the following courses:

- Cosmetology I
- Cosmetology II
- Cosmetology III

Option 5. Two of the following courses:

- Drafting I
- Drafting II

Option 6. Two of the following courses:

- Graphic Imaging Technology I
- Graphic Imaging Technology II
- Graphic Imaging Technology III
- Graphic Imaging Technology IV

Credentialing Tests Offered In Trade and Industrial Education

- Workplace Readiness Skills for the Commonwealth
- Automotive Technician (ASE)
- Collision Repair and Refinishing Technician (ASE)
- Electrical Level One (NCCER)
- Cosmetology (NOCTI)
- Virginia Cosmetology License
- ADDA Architectural Drafting
- AutoDesk Certification
- Fire Fighter I
- Fire Fighter II
- Adobe Certified Associate – ACA
- ICAR Certifications Examinations

Automotive Servicing Online

861098

Credit: 1

Grade: 9-12

Prerequisite: None

This entry-level online course is designed for students interested in automotive technology and/or engineering. Students in this course learn the foundational principles and knowledge of systems and sub-systems of the automobile related to maintenance and light repair. Students will apply math, science, written and verbal communication, and workplace readiness skills to virtual simulations while learning automotive competencies.

Automotive Technology I

850605

Credit: 1

Grade: 10-12

Prerequisite: None

Students are introduced to systems and components of the automobile. In addition, this course will include the study of shop safety, procedures, tools, equipment, steering, suspension, brakes, electrical/electronics, emissions and the certification requirements for ASE. This course is a prerequisite for Automotive Technology I and II. **Offered only at FHS.**

Automotive Technology II

850705

Credit: 2

Grade: 10-12

Prerequisite: Grade of C or better in Automotive Technology I

In this double blocked course, students prepare for an entry-level position in the automotive field. Curriculum will focus primarily on electrical and electronics, and drivability and emissions. Through participation in classroom and lab activities, students will develop and master the knowledge and skills to repair automotive systems. **Offered only at FHS.**

Automotive Technology III Part I	850805
Automotive Technology III Part II	850815

Credit: 2 each

Grade: 10-12

Prerequisite: Grade of C or better in Automotive Technology II

In this two part, double block course, students combine classroom theory with hands-on techniques. Students prepare for an entry-level position in the automotive field with a focus on brakes; steering electrical systems, drivability, and emissions. Through participation in classroom and lab activities, students develop and master the knowledge and skills to repair automotive systems. This is a hands-on class with live work that prepares students to take ASE tests in four areas. Students are encouraged to participate in SkillsUSA and FORD AAA skills competitions. **Offered only at FHS.**

Auto Body Technology I	867605
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Credit: 1

Grade: 10-12

Prerequisite: None

The Auto Body Technology I is a single-block class where students will begin an I-CAR training program. The I-CAR training programs are recognized by most leading vehicle manufacturers. In the introduction class you will receive training in the following areas: collision safety, pollution prevention, hazardous materials, personal safety, refinish safety, customer relations, Mig welding, trim and hardware, plastic repair, restraints, straightening steel, exterior panel repair, and painting basics. This course is a prerequisite for Automotive Body and Repair I and II. **Offered only at FHS.**

Auto Body Technology II	867705
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Credit: 2

Grade: 10-12

Prerequisite: Auto Body Technology I

Auto Body Technology II is a double-block class. In this class students will continue with I-CAR training and prepare for an ASE tests. Students will receive training in the following areas: Painting and Refinishing levels 1-4, Fundamentals of Collision Repair, and Damage Analysis levels 1-6. After completing these modules students will practice all competencies in the lab environment. **Offered only at FHS.**

Auto Body Technology III Part I	867805
Auto Body Technology III Part II	867815

Credit: 2 each

Grade: 10-12

Prerequisite: Auto Body Technology II

In this two-part, double block course, students will combine classroom theory with hands-on techniques. In Auto Body Technology III, students will complete I-CAR training by taking the following programs: brakes, lighting, starting and charging systems, and air conditioning. After finishing these programs and passing the associated tests with a score of 86 or better, students will be eligible to receive their individual platinum certificate. Through participation in classroom and lab activities, students develop and master their knowledge and skills. **Offered only at FHS.**

Electricity I	853305
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Credit: 1

Grade: 9-11

Prerequisite: None

Students develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems. They also study electrical theory; navigate the National Electrical Code Book; select and install conductors; and work with panelboards, switchboards, and generators. Students will take OSHA 10 for certification in this class. **Offered only at FHS.**

Electricity II	853405
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Credit: 2

Grade: 10-12

Prerequisite: Electricity I

Students continue to develop skills in the installation, operations, maintenance, and repair of residential, commercial, and industrial electrical systems. They also study electrical theory and mathematical problems related to electricity; navigate the National Electrical Code Book; select and install conductors; examine lighting, communication, and power systems; and work with conduit and raceways, panel boards, switchboards, grounding systems, and generators. **Offered only at FHS.**

Electricity III	853505
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Credit: 2

Grade: 11-12

Prerequisite: Electricity II

Through hands-on experiences, students continue building skills in the installation, operation, maintenance, and repair of electrical systems, with emphasis on industrial applications. They also study lighting fixtures, overcurrent protection, service equipment, motor controls, transformers, grounding, and the National Electrical Code (NEC) Book. **Offered Only at FHS**

Building Trades I Part I 851505
 Credit: 1
 Grade: 9-12
 Prerequisite: None

Building Trades I teaches the fundamentals of modern residential construction. All trade areas will be studied with a heavier emphasis on carpentry and electrical work. The Building Trades I Part I class prepares students for the modular home construction project in Building Trades I Part II. Basic Technical Drawing is not required, but is highly recommended

Only offered at FHS.

Building Trades I Part II 851605
 Credit: 1
 Grade: 9-12
 Prerequisite: Building Trades I Part I

Building on the fundamentals of modern residential construction introduced in Building Trades I Part I. All trade areas will continued to be studied with a heavier emphasis on carpentry and electrical work. The Building Trades I Part I and Part II classes prepares students for the modular home construction project in Building Trades II. Basic Technical Drawing is not required, but is highly recommended. **Only offered at FHS.**

Cosmetology I 852705
 Credit: 1
 Grade: 10-12
 Prerequisite: None
 Fee: \$25

In this single-block course, students will combine classroom theory with hands-on techniques. The course is designed to expose students to a salon environment and various beginning and intermediate salon services. Students will receive 1.5 hours toward their Virginia State Board hours for each day in this course. Cosmetology students who are seniors will not complete this sequence in one year.

Cosmetology II 852805
 Credit: 2
 Grade: 11-12
 Prerequisite: Grade of C or better in Cosmetology I
 Fee: \$50

In this double-block course, students will combine classroom theory with hands-on techniques. The course is designed to expose students to a salon environment and various beginning and intermediate salon services. Students will receive 3 hours toward their Virginia State

Board hours for each day in this course. Cosmetology II students who are seniors will not complete this sequence in one year.

Cosmetology III Part I 852905
Cosmetology III Part II 852915
 Credit: 2 each
 Grade: 12
 Prerequisite: Grade of C or better in Cosmetology II
 Fee: \$50 for each part

In this double-block, year-long course, students will combine classroom theory with hands-on techniques. The course is designed to expose students to a salon environment and various intermediate and advanced salon services. This is a completer course for students who are interested in entering the cosmetology field. Students will receive 3 hours toward their Virginia State Board hours for each day in this course. Cosmetology III students are not eligible for Virginia Cosmetology Boards unless all competencies and requirements are completed.

Drafting I 853005
 Credit: 1
 Grade: 10-12
 Prerequisite: Technical Drawing & Design

Students explore drafting careers and are introduced to the theory and the manipulative skills necessary to produce and complete accurate drawings based on the ideas and sketches of engineers, architects, and designers. Students begin to focus on performing mechanical drafting and design operations, using CADD and 3D printing.

Drafting II 853115
 Credit: 1
 Grade: 10-12
 Prerequisite: Drafting I

Students will master the theory and manipulative skills necessary to produce complete and accurate drawings, renderings, models, and prototypes of projects using industry standard drafting and design tools. This course is the second of two courses to prepare students to obtain professional drafting certification. Completers of the series will be able to take the professional industry certification test of the software used in the course.

Fire Fighting 870505
 Credit: 2
 Grade: 11-12
 Prerequisite: Student must be 16 years of age by the first day of the class and be a member of a fire department or rescue squad.

In this course, students will learn how the fire department works in emergency situations, gain knowledge to become a firefighter by acquiring the necessary skills for extinguishing house, vehicle, and wood fires. Upon completion of this course, students will be eligible to take the Virginia State Firefighter Exam administered by the Department of Fire Programs. Note: If a student is not a current member of a fire department or rescue squad, the student will be required to join after registering for this course. All students will be transported by FCPS to the Warrenton Rescue Squad. **Offered Off Site.**

Graphic Imaging Technology I 866005
 Credit: 1
 Grade: 9-12
 Prerequisite: None

This course is an introductory course that will focus on graphic art and graphic design. Students will gain a basic understanding of different methods of communication using today's technology to prepare them for this industry. Students will be encouraged to participate in hands-on applications of word processing, web development, illustration, image editing, 2D animation, as well as multimedia production design. Adobe certification will be offered at the end of the course. This course will primarily utilize computers as a tool to complete design projects.

Graphic Imaging Technology II 866105
 Credit: 1
 Grade: 9-12
 Prerequisite: Graphic Imaging Technology I

This course will focus on desktop publishing, advanced 2D animation, and designing a web portfolio. Students will review content from Graphic Imaging I as well as learn ways to integrate that content into their level II designs. Greater emphasis will be placed on planning, mathematics, copyright laws, critical thinking, color theory, design principals and group activity. Adobe certification will be offered at the end of the course. This course will primarily utilize computers as a tool to complete design projects.

Graphic Imaging Technology III 866205
 Credit: 1
 Grade: 11-12
 Prerequisite: Graphic imaging Technology II

This course will focus on multimedia production in the form of animation, traditional and digital photography and web design and development. Students will review content from Graphic Imaging I and II, while learning public speaking, design critique, and the interview process. Adobe certification will be offered at the end of the course. Students will also be encouraged to participate in a mock

interview activity by the end of the course. This course will primarily utilize computers as a tool to complete design projects. **Offered only at FHS.**

Graphic Imaging Technology IV 866305
 Grade: 11-12
 Prerequisite: Graphic Imaging Technology III

This course will prepare students interested in the Graphic Arts industry for employment, apprenticeship, or post secondary education. Students may have an opportunity to work onsite with a real client to gain vital field experience. This course will focus on real world experiences, jobs, projects and deadlines. We will also explore multimedia design in the form of film and film editing in addition to maintaining a website. Adobe certification will be offered at the end of the course. This course will primarily utilize computers as a tool to complete design projects. **Offered only at FHS.**

MILITARY SCIENCE



All Military Science courses will count toward meeting the one-credit graduation requirement for Fine Arts or Career and Technical Education.

The Army Junior ROTC program is an academic course for grades 9-12 of non-military secondary schools. Major subject areas in the curriculum are: leadership, citizenship, communication, history, and life management skills (physical fitness, first aid, self-esteem, health, drug abuse prevention, career opportunities, etc.). Other subjects include map reading, technology, command and staff functions, and the role of the U.S. Army in the nation's defense.

Military Science Completer Sequence

Two of the following courses:

- Army JROTC I
- Army JROTC II
- Army JROTC III
- Army JROTC IV
- Army JROTC V
- Army JROTC VI
- Army JROTC VII
- Army JROTC VIII

Credentialing Tests Offered to Completers in Military Science

Workplace Readiness Skills for the Commonwealth
Armed Services Vocational Aptitude Battery Examination

Military Science I (AJROTC) AR791305
Credit: 1
Grade: 9-12
Prerequisite: None

Students are introduced to the JROTC curriculum, and basic U.S. citizenship rights and responsibilities are established and reinforced. Students learn leadership, history, communication techniques, disciplined study habits,

management skills, first aid, drug abuse prevention, map reading, physical fitness, and workplace readiness skills. Military customs and courtesies, proper uniform wear, and personal appearance guidelines are followed within the leadership lab, drill, and military ceremonies.
Only offered at LHS.

Military Science II (AJROTC) AR791605
Credit: 1
Grade: 9-12
Prerequisite: Military Science I

Students continue with the JROTC curriculum and basic U.S. citizenship rights and responsibilities are established and reinforced. Students learn to function as leaders at the squad level, history, communication techniques, disciplined study habits, management skills, first aid, drug abuse prevention, map reading, physical fitness, and workplace readiness skills. Military customs and courtesies, proper uniform wear, and personal appearance guidelines are followed within the leadership lab, drill, and military ceremonies.
Only offered at LHS.

Military Science III (AJROTC) AR791805
Credit: 1
Grade: 10-12
Prerequisite: Military Science II

Students are introduced to the JROTC curriculum and basic U.S. citizenship rights and responsibilities are established and reinforced. Students learn to function as squad leaders and develop the ability to lead at the platoon level. Additionally, history, communication techniques, disciplined study habits, management skills, first aid, drug abuse prevention, map reading, physical fitness, and workplace readiness skills are emphasized. Cadets will become familiar with staff and command function and duties. Selected individuals will assume the roles of assistant staff officer. Military customs and courtesies, proper uniform wear, and personal appearance guidelines are followed within the leadership lab, drill, and military ceremonies.
Offered only at LHS

Military Science IV (AJROTC) AR791905
Credit: 1
Grade: 10-12
Prerequisite: Military Science III

Students advance in JROTC curriculum and basic U.S. citizenship rights and responsibilities are established and reinforced. Students learn to function as leaders at the platoon level and assume the roles of Platoon Leader and Platoon Sergeant. Additionally, history, communication techniques, disciplined study habits, management skills, first aid, drug abuse prevention, map reading, physical fitness, and workplace readiness skills are emphasized.

Military customs and courtesies, proper uniform wear, and personal appearance guidelines are followed within the leadership lab, drill, and military ceremonies. Cadets can rise to the roles of principal staff officers on the battalion staff. **Offered only at LHS.**

Military Science V (AJROTC) AR792005

Credit: 1

Grade: 11-12

Prerequisite: Military Science IV

Cadets continue to develop leadership techniques with emphasis on assuming command and staff functions, as well as assuming those duties. Character, leadership development and theory, leadership application, foundations of success, wellness, and first aid are also included. Academic areas of geography, earth science, citizenship, and American history are emphasized and reinforced. Service-learning projects and community involvement are also covered at this level.

Offered only at LHS.

Military Science VI (AJROTC) AR792205

Credit: 1

Grade: 11-12

Prerequisite: Military Science V

Cadets continue to develop leadership techniques with emphasis on assuming command and staff functions and duties. Character, leadership development and theory, leadership application, foundations of success, wellness, and first aid are also included. Academic areas of geography, earth science, citizenship, and American history are emphasized and reinforced. Service-learning projects and community involvement are also covered at this level.

Offered only at LHS.

Military Science VII (AJROTC) AR792405

Credit: 1

Grade: 11-12

Prerequisite: Military Science VI

Cadets experience the culmination of their JROTC experience by applying leadership theories and communication skills at the command and staff level in cadet-led classes. Cadets function as Company Commanders, principal staff officers, Battalion Executive Officer, command Sergeant Major, and Battalion Commander. Foundations of success, wellness, and first aid are addressed. Academic areas of geography, earth science, citizenship, and American history are emphasized and reinforced. Service-learning projects are implemented, and community involvement is stressed with emphasis on group dynamics, human relations, and U.S. issues.

Offered only at LHS.

Military Science VIII (AJROTC)

AR792605

Credit: 1

Grade: 11-12

Prerequisite: Military Science VII

Cadets experience the culmination of their JROTC experience by applying leadership theories and communication skills at the command and staff level in cadet-led classes. Cadets function as Company Commanders, principal staff officers, Battalion executive Officer, Command Sergeant Major, and Battalion Commander. Foundations of success, wellness, and first aid are addressed. Academic areas of geography, earth science, citizenship, and American History are emphasized and reinforced. Service-learning projects are implemented and community involvement is stressed with emphasis on group dynamics, human relations and U.S. issues.

Offered only at LHS

ENGLISH



Graduation Requirements

All students enrolled in English 11 will participate in required English end-of-course (EOC) Writing and Reading to earn 2 verified credits in English.

Course Sequencing in English

Students must take their required English courses in this order: English 9, English 10, English 11, and English 12. Students should refer to course prerequisites for details. We strongly recommend that students take only one required English course per school year. If a student needs to repeat a required English course, he/she may take two English courses during the same year but not during the same semester (unless the student is a senior).

English 9	113005
Credit: 1	113033
Grade: 9	
Prerequisite: None	

The ninth-grade student will use multimodal tools to create presentations independently and in small groups. The student will continue to work in collaborative groups assisting with setting rules and working toward consensus. Students will analyze and interpret the social, commercial, and/or political motives behind media messages. The student will continue to expand vocabulary using the structural analysis of roots and affixes to understand complex words. The course continues to emphasize reading comprehension by comparing fiction and nonfiction texts. With fiction texts, students will apply knowledge of literary terms and analyze a variety of genres. There will be an increased emphasis on nonfiction reading, and students will make inferences and draw conclusions using explicit and implied textual evidence. They will plan, draft, revise, and edit while writing in a variety of forms and for a variety of audiences. There is an emphasis on analysis and persuasion while defending a position using counterclaims, reasons, and evidence from credible sources. Students will demonstrate correct use of language, spelling, and mechanics by applying grammatical conventions in writing and speaking. They will apply research techniques and create a product to analyze information gathered from diverse sources, identify misconceptions and bias, and cite

both quoted and paraphrased information using either MLA or APA style.

English 9 Honors

113017

Credit: 1
Grade: 9
Prerequisite: None

This course is recommended for students identified for Gateways services and other students who wish to work at an advanced level. It is an academically challenging course in which students are required to demonstrate comprehension of increasingly more challenging fiction and nonfiction texts and extend understandings through analytical writing and creative, multimodal products. The course will emphasize critical thinking and the synthesis of ideas from multiple texts, citing both quoted and paraphrased information using either MLA or APA style. The student will continue development of an advanced vocabulary including the skillful use of word choice in creating the nuances of tone and purpose. Students will learn pre-advanced placement (pre-AP) strategies that will help them analyze and interpret literary and rhetorical devices, as well as defending their own positions using counterclaims, reasons, and evidence from credible sources. Rhetorical study will also emphasize persuasive techniques in media messages. Emphasis is placed on oral and written communication skills including the ethical and legal guidelines for gathering and using information. A student's success in this challenging course is linked to his/her sense of responsibility and academic commitment.

English 10	114005
Credit: 1	114033
Grade: 10	
Prerequisite: English 9	

The tenth-grade student will continue to become a skilled communicator, working both independently and collaboratively to present viewpoints, work toward common goals, and create multimodal presentations. The student will create media messages and analyze the cause and effect relationships between mass media coverage and public opinion trends. The student will continue development of vocabulary with attention to connotations, idioms, classical allusions, and figurative language. The course continues to emphasize reading comprehension by comparing fiction and nonfiction texts. Students will analyze the cultural and social functions, as well as the universal themes, of fictional texts from different cultures. Students will analyze and synthesize information from nonfiction texts to solve problems, answer questions, and generate new knowledge. They will plan, draft, revise, and edit while writing in a variety of forms and for a variety of audiences with an emphasis on analysis and persuasion. They will learn how to write persuasively through thoughtful analysis of the relationships among claims, reasons, and evidence from reliable sources. Students will expand their

knowledge of grammar as they prepare presentations, write, and edit material, applying the conventions of language. They will apply research techniques and create a product to analyze information gathered from diverse sources, identify misconceptions and bias, and cite both quoted and paraphrased information using either MLA or APA style.

English 10 – Environmental literature 114055

Credit: 1

Grade: 10

Prerequisite: English 9

Environment in Literature is a cross-curricular course designed for a tenth-grade student who has an interest in environmental studies. In addition to the content outlined in the English 10 curriculum, Environment in Literature students will be introduced to multiple genres of contemporary nature writing and environmental literature. Many texts will focus on the natural world and relationships within it. Some topics include, but are not limited to: the role of literature in how we perceive and conceptualize nature, earth as literary setting and stage but also as a relationship between landscape and story, and more. This course can be taken in place of English 10 in order to fulfill the graduation requirement. This course is required for Environmental Studies Students. **Offered at FHS only.**

English 10 – Reading and Writing across STEM Disciplines 114065

Credits: 1

Grade: 10

Prerequisite: English 9

English 10: Reading and Writing across STEM Disciplines is a cross-curricular course designed for a tenth grade student who has an interest in STEM-based careers. In addition to the content outlined in the English 10 curriculum, English 10: Reading and Writing across STEM Disciplines students will be introduced to technical writing, scientific writing and reviews, audience awareness, and more. This course can be taken in place of English 10 in order to fulfill the graduation requirements. **Offered only at KRHS.**

English 10 Honors 114017

Credit: 1

Grade: 10

Prerequisite: English 9 or English 9 Honors

This course is recommended for students identified for Gateways services and other students who wish to work at an advanced level. It is an academically challenging course in which students are required to demonstrate comprehension of increasingly more challenging fiction and nonfiction texts and extend understandings through analytical writing and creative, multimodal products. The course will emphasize critical thinking and the synthesis of

ideas from multiple texts, citing both quoted and paraphrased information using either the MLA or APA style. The student will continue development of an advanced vocabulary including the skillful use of word choice creating the nuances of tone and purpose. Students will learn pre-advanced placement (pre-AP) strategies that will help them analyze and interpret literary and rhetorical devices, as well as defending their own positions using counterclaims, reasons, and evidence from credible sources. Rhetorical study will also emphasize persuasive techniques in media messages. Emphasis is placed on oral and written communication skills including the ethical and legal guidelines for gathering and using information. A student's success in this challenging course is linked to his/her sense of responsibility and academic commitment.

English 11 115005

Credit: 1 **SOL**

115033

Grade: 11

Prerequisite: English 10

The eleventh-grade student continues to build communication skills independently and in collaborative groups. Students will continue to demonstrate the ability to work within collaborative groups to share viewpoints and work toward common goals. They will create persuasive, multimodal presentations that address alternative perspectives. They will create media messages and analyze the cause and effect relationships between mass media coverage and public opinion trends. The student will continue development of vocabulary with attention to connotations, idioms, classical allusions, and figurative language. There is a sustained emphasis on reading comprehension of fiction and nonfiction texts. Students will conduct comparative analyses of multiple texts that address the same topic to determine how authors reach similar or different conclusions. They will examine and analyze fiction texts by American authors describing the contributions of other cultures and identifying prevalent themes and characterizations, which are reflective of American history and culture. Students will continue to use the writing process to write/compose with an emphasis on persuasion/argumentation for multiple purposes and audiences, creating focused, organized, and coherent writing. The eleventh-grade student will demonstrate advanced knowledge of grammatical conventions. The student will produce a research product synthesizing information from primary and secondary sources while maintaining ethical and legal guidelines for gathering and using information.

English 11: Language & Composition AP 119628

Credit: 1 **SOL AP DE**

Grade: 11

Prerequisite: English 10 or English 10 Honors

English 11 AP is designed for students who are interested in college-level content with emphasis on language,

rhetoric, and expository writing. Critical reading and writing with attention to the nuances of language, stylistic distinction, and audience are the backbone of the curriculum. Class work involves extended reading assignments that invite and require revisiting, and writing assignments that must reflect the process of planning, prewriting, composition, and revision. The course focuses primarily on the analysis of non-fiction readings and incorporates works of American literature. Students may be asked to prepare for this course by completing pre-course assignments. **Students have the option of earning dual enrollment (DE) credit for this course if they meet LFCC prerequisites.**

extensive projects. Students may be asked to prepare for this course by completing pre-course assignments.

Students have the option of earning dual enrollment (DE) credit for this course if they meet the prerequisites of the sponsoring institution.

English 12	116005
Credit: 1	116033
Grade: 12	
Prerequisite: English 11	

The twelfth-grade student will continue to demonstrate the ability to work within diverse teams working toward common goals. Students will create persuasive/argumentative multimodal presentations both independently and in collaborative groups. They will create media messages and analyze the cause and effect relationships between mass media coverage and public opinion trends. The student will continue development of vocabulary with attention to connotations, idioms, classical allusions, and figurative language. There is a sustained emphasis on reading comprehension of fiction and nonfiction texts. Students will review multiple texts to identify and evaluate resources to make decisions and solve problems. They will examine and analyze fiction texts from other cultures including British literature. They will evaluate how authors use key elements to contribute to meaning and interpret how themes are connected across texts. Students will conduct comparative analyses of multiple texts that address the same topic to determine how authors reach similar or different conclusions. Students will write to a standard acceptable in both the workplace and postsecondary education. The student will produce a research product synthesizing information from primary and secondary sources while maintaining ethical and legal guidelines for gathering and using information.

English 12: Literature & Composition AP	119518
Credit: 1 AP DE	
Grade: 12	
Prerequisite: English 11 or English 11 AP/DE	

English 12 AP is designed to give high school students a collegiate experience in English. The course provides a unique academic challenge and emphasizes independent learning. Students read and analyze poems, plays, several novels, and essays in a student-centered environment that requires commitment and responsibility. Students work independently and cooperatively to compose prepared papers, journals, and impromptu writings, and to create

ENGLISH ELECTIVES

AP Seminar

221108

Credit: 1
Grade: 10-11
Prerequisite: None

This College Board approved course allows students to research and explore real world issues and learn how to plan and conduct research-based investigations. Students engage in team projects and eventually conduct individual in-depth research. Students learn collaborative teamwork, communication skills, and research skills. Students who successfully complete the course and the subsequent independent research course (AP Research) the following year have the ability to receive the "AP Capstone Diploma" upon successful completion of three other AP exams. Students in the Fauquier Environmental Studies Academy, who wish to earn either the FESA Honor Medal or FESA Merit Medal, have the option of taking this course to assist in satisfying the requirement for research presented in "a formal, juried setting." The AP Research course would need to be successfully completed, as well.

AP Research

011058

Credit 1
Grade: 11-12
Prerequisite: AP Seminar

AP Research allows students to explore an academic topic, problem, or issue of individual interest in greater depth. In the classroom and independently (while possibly consulting with expert advisors in the field), students learn and employ research and inquiry methods to develop, manage, and conduct an in-depth investigation of an area of personal interest. Through this exploration, students design, plan, and conduct a yearlong investigation to address a research question, and the course culminates in an academic paper of 4,000-5,000 words and a presentation with an oral defense. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio.

Creative Writing I

117105

Credit: 1
Grade: 9-12
Prerequisite: None

This course is for the serious student who is interested in writing poetry and prose. Emphasis is placed on allowing students to explore many forms of writing, which may include children's literature, personal narratives, observation writing, historical writing, and various forms of poetry. Emphasis is placed on structure and creativity in writing. Many assignments are produced outside class. Students are encouraged to submit writings to essay contests or publications.

Creative Writing II

117205

Credit: 1
Grade: 10-12
Prerequisite: Creative Writing I

This course is a continuation of Creative Writing I. It is designed as further support for the serious student who is interested in writing poetry and prose. Emphasis is placed on authorship and the trade of writing. Methods used include writing workshops. Many assignments are produced outside class. Students are expected to participate in the publication process, which may include the school's literary magazine.

English SOL Preparation

117703

Credit: 1
Grade: 11-12
Prerequisite: None

This academic support course is for students who need additional work on organizing, developing, and editing a well-structured composition and on reading strategically for a variety of purposes. Instruction and learning activities include lessons that enhance and improve narrative and expository writing; the reading of technical, nonfiction, and fiction writing; and the study of the conventions of sentence formation, usage, and mechanics. Students follow the evaluation rubric used for the English EOC Writing SOL test and the reporting categories for the English EOC Reading SOL test.

Film Study

144605

Credit: 1
Grade: 10-12. Students in grade 9 may be admitted with parent and teacher approval.
Prerequisite: None

In this course students study cinema as an art form. Topics for study include the history of film; similarities and differences among film, theatre, and literature; criteria for evaluating a film; the technology and terminology of film study; and historical contexts of film. Specific requirements include extensive reading, writing, research, and discussion.

Individualized Reading I

118103

Credit: 1
Grade: 9-12
Prerequisite: None

This academic support class is designed to help students become more effective readers by developing cross-disciplinary reading and study skills to improve students' academic success. Through whole-group and small-group instruction and individually designed reading portfolios, students receive explicit lessons on vocabulary development and comprehension strategies that

encourage engagement with the text. Students read both fiction and nonfiction materials. The course is based on each student's individual needs, goals, and interests, with the goal of building reading fluency.

Individualized Reading II **118203**

Credit: 1

Grade: 9-12

Prerequisite: Individualized Reading I

This academic support class is a continuation of Individualized Reading I and is designed to help students become more effective readers by developing cross-disciplinary reading and study skills to improve students' academic success. Through whole-group and small-group instruction and individually designed reading portfolios, students receive explicit lessons on vocabulary development and comprehension strategies that encourage engagement with the text. Students read both fiction and nonfiction materials. The course is based on each student's individual needs, goals, and interests, with the goal of building reading fluency.

Journalism I **120005**

Credit: 1

Grade: 9-12

Prerequisite: Grade of C or better in English course

This course offers an overview of journalism including the role of the press and laws/ethics that pertain to the field. Every phase of reporting and writing the news is covered, including sources for news; how to conduct a successful interview, how to write and organize a news story, and the fundamentals of broadcasting. Sports reporting, editorials, features, and columns are addressed. Writing for the school paper or news website may be required, and students need to complete work after school.

Journalism II **121005**

Credit: 1

Grade: 9-12

Prerequisite: Grade of C or better in previous Journalism course

This course is designed for students who wish to refine skills in feature, editorial, sports writing, and broadcasting if appropriate. In addition to writing for the school newspaper or news website, students learn the mechanics of newspaper production, how to sell and design ads, and how to compose and take a quality photograph. Students may need to complete work after school.

Journalism III

121105

Credit: 1

Grade: 10-12

Prerequisite: Grade of C or better in previous Journalism course

This course is designed for students who want to continue to refine their writing and, if appropriate, their broadcasting skills. Students are required to write an in-depth article. They also learn the elements of successful page or webpage design. They produce pages of the school newspaper using a program such as In Design. They work with Journalism IV students to learn about production and the various staff positions. Students may need to complete work after school.

Journalism IV

121205

Credit: 1

Grade: 10-12

Prerequisite: Grade of C or better in previous Journalism course

This course is designed for students who wish to obtain a position on the newspaper staff. Students refine skills previously learned in other classes, including writing skills, editing skills, and page layout, and design. They also work closely with editors of the school newspaper or news website to allow smooth functioning of school news publications and broadcasts, if appropriate. Students will need to complete work after school.

Journalism V

122035

Credit: 1

Grade: 11-12

Prerequisite: Grade of C or better in previous Journalism course

This course is designed for students who wish to refine advanced skills developed in previous journalism classes and to lead the publication of the school newspaper and news website. Students assume an editor position and are responsible for supervising specific aspects of production and other staff members. Students must demonstrate knowledge and application of professional journalistic ethics in all aspects of managing the publication and broadcast, if appropriate. Students focus on one area including sports writing, feature writing, photojournalism, publication design, or advertising.

Journalism VI

122045

Credit: 1

Grade: 11-12

Prerequisite: Grade of C or better in previous Journalism course

This course is designed as a continuation of Journalism V. Students assume leadership roles with the publication of the school newspaper (and news website) and agree to remain on the staff for the entire school year. Students

continue to refine their leadership, publication, and broadcasting skills. In addition, they organize works for submission to local and national competitions. Students will need to complete work after school.

Media Literacy **106205**

Credit: 1
Grade: 9-12
Prerequisite: None

Students will study the influence of mass media on contemporary American culture. Students will learn to access, analyze, and evaluate media to develop critical thinking skills. One area of focus will be the increased role of social media in today's culture through the examination of ethics, internet safety, and privacy rights. Students will be required to write extensively, read independently, conduct research projects, and create multi-media productions.

Mythology **116505**

Credit: 1
Grade: 10-12
Prerequisite: None

In this course students explore the definition and functions of classical mythology, compare and contrast elements of different mythologies, and study the influence of mythology on various art forms, such as poetry, fiction, drama, and art. Specific requirements include extensive reading, writing, research, discussion, and the creation of hands-on projects.

Photojournalism I **121505**

Credit: 1
Grade: 9-12
Prerequisite: Grade of C or better in previous English course

This course prepares students to design and produce a first-class yearbook. Students are trained in desktop publishing, writing, photo journalism, marketing, design, and public relations. Staff members work independently and cooperatively to create the school yearbook. Due to the extensive amount of work involved in this process, students must be available to stay after school several days throughout the term. Specific after-school requirements may be set by the instructor. Students must be able to conduct interviews and work independently.

Photojournalism II **121605**

Credit: 1
Grade: 9-12
Prerequisite: Grade of C or better in previous Photojournalism course

Extensive writing, editing, page design, marketing, and photography are required in this course. Students will serve

as yearbook staff members throughout the span of this course. Staff members will work cooperatively to help create the school yearbook. Due to the extensive amount of work involved in this process, staff members must be available to stay after school several days throughout the term. Specific after-school requirements may be set by the instructor. Students must be able to work independently.

Photojournalism III **121705**

Credit: 1
Grade: 10-12
Prerequisite: Grade of C or better in previous Photojournalism course

This course extends concepts from Photojournalism II. Students enrolled in this course may be chosen to serve as section editors for the school's yearbook. A section editor's duties include extensive writing, proofreading, page design, photography, and marketing. Additionally, section editors are required to lead and organize section staff meetings and assist in the training of staff members. Editors must be available to stay after school when needed.

Photojournalism IV **122005**

Credit: 1
Grade: 10-12
Prerequisite: Grade of C or better in previous Photojournalism course

This course extends concepts from Photojournalism III. Students enrolled in this course may be chosen to serve as section editors for the school's yearbook. Responsibilities include extensive writing, proofreading, page design, photography, marketing, and theme development. Additionally, section editors are required to lead and organize section staff meetings and assist in the training of staff members. Editors must be available to stay after school when needed. Students may be required to attend local and national workshops and meetings in addition to yearbook staff meetings.

Photojournalism V **122015**

Credit: 1
Grade: 11-12
Prerequisite: Grade of C or better in previous Photojournalism course

This course extends concepts from Photojournalism IV. Students enrolled in this course serve may be chosen as book editors for the school's yearbook. Students are responsible for editing the content of the entire yearbook. Responsibilities include extensive writing, proofreading, page design, photography, marketing, and theme development throughout the entire publication. Additionally, book editors are required to lead and organize yearbook staff meetings and assist in the training of staff members. Editors must be available to stay after school when needed. Students may be required to attend local

and national workshops and meetings in addition to yearbook staff meetings.

Photojournalism VI **122025**

Credit: 1

Grade: 11-12

Prerequisite: Grade of C or better in previous Photojournalism course

This course extends concepts from Photojournalism V. Students may be chosen to serve as editors for the school's yearbook and are responsible for editing the content of the entire yearbook. Responsibilities include extensive writing, proofreading, page design, photography, marketing, and theme development throughout the entire publication. Additionally, book editors are required to lead and organize yearbook staff meetings, assist in the training of staff members, manage the yearbook budget, and plan and implement the distribution of the yearbook. Editors must be available to stay after school regularly. Students may be required to attend local and national workshops and meetings.

Public Speaking **130005**

Credit: 1

Grade: 9-12

Prerequisite: None

This course offers students an opportunity to write and present various types of speeches, oral readings, and debates. Instructional focus is on various oral communication topics, which may include persuasive speaking and oral interpretation of literature. Specific attention is given to quality speech writing, debate preparation, and effective oral presentation of material. Students complete several prepared speeches and debates, one of which may be presented to a selected audience outside of the class.

SAT Critical Reading and Writing - Math Prep **012905**

Credit: 1

Grade: 11-12

Prerequisite: English 9 and 10, Algebra I, Geometry, and Algebra II

The verbal portion of this course is designed to help motivated students develop strategies for improving scores on college entrance exams. The course work includes daily vocabulary work and intensive practice with the multiple-choice writing, grammar and usage, critical reading, and student-written essay in both group and individual formats. Students take several practice SAT tests throughout the course. Students also explore the college application process. A materials fee will be charged.

ENGLISH AS A SECOND LANGUAGE



The courses listed in this section are available specifically for students who have been identified as English learners (EL). They provide access to the general content areas and are specifically designed to meet the linguistic needs of ELs. English as a Second Language (ESL) courses are offered to any student needing assistance in developing English language proficiency. The courses are designed to support content instruction through comprehensible language input and to assist ELs in achieving content standards in preparation for end-of-year SOL tests.

In addition to the courses listed below, assistance may be provided within the regular classroom. "In classroom" assistance will be made available as needed to be determined by the Counseling Department and ESL staff at each high school.

Special Note for Native or Heritage Speakers

A student who is a native or heritage speaker of a language other than English may receive up to two world language credits by demonstrating a minimum proficiency level of novice high in all four language domains as determined by a proficiency assessment administered by the school division. The student may then be placed in a level II or III language course to complete the series of three world language credits required for the Advanced Studies and Advanced Technical Diplomas.

Special Note for ESL Students

ESL students may earn up to two world language credits by successfully completing ESL Content Support in English, ESL Content Support in History and Social Science, ESL Resource, ESL content support in Mathematics and/or ESL Reading.

ESL Content Support in English 571003

Credit: 1
Grade: 9-12
Prerequisite: None

This course is designed to support ESL students who are also enrolled in English 9 or English 10. Special focus is given to understanding vocabulary within context-

embedded material. Emphasis is placed on developing oral, reading, and written communication skills.

ESL Content Support in Social Studies 573003

Credit: 1
Grade: 9-12
Prerequisite: None

This course is designed to support ESL students in World History I, World History II, U.S. History, or U.S. Government. Special focus is given to understanding vocabulary within context-embedded material. This course should be taken before or along with other Social Studies courses to prepare for the End-of-course SOL tests.

ESL Resource 573013

Credit: 1
Grade: 9-12
Prerequisite: None

In this course, emphasis is placed on developing English proficiency through the use of various content-related materials that focus on listening, speaking, reading and writing. This course can be tailored to student language level and content support needs.

ESL Content Support in Mathematics 573103

Credit: 1
Grade: 9-12
Prerequisite: None

This course is designed to reinforce general numeric topics, such as whole numbers, fractions, decimals, and percents, as well as basic geometric concepts, such as perimeter and area. The class is prescriptive in nature, emphasizing hands-on learning. Instruction is scaffolded to make content accessible to English language learners. Class size is limited. Students in this course who have not passed the Grade 8 Mathematics SOL assessment will take this test at the end of the course.

ESL Reading 572003

Credit: 1
Grade: 9-12
Prerequisite: None

This course is designed to help English learners become more effective readers of English. Emphasis is placed on comprehension, vocabulary development, pronunciation, and phonics skills. Students develop oral and silent reading skills. Instruction in this course is differentiated to meet the needs of students at all language levels.

Fine Arts

ART



Graduation Requirements

All art courses will count toward meeting the one-credit Fine Arts requirement for graduation.

Art I **912005**

Credit: 1
Grade: 9-12
Prerequisite: None

Art I is offered to students who have not taken art at the high school level. It focuses on art appreciation, history, and written and verbal critiques as they relate to art/design elements and principles. Students explore design, drawing, painting, print making, commercial design, and three-dimensional activities. A sketchbook is required and maintained by students for both in-class and out-of-class use. Students maintain a portfolio. Student work will be displayed at the discretion of the teacher. This class is a foundation class and is a requirement for all fine arts classes.

Art II **913005**

Credit: 1
Grade: 10-12
Prerequisite: Art I (not Functional Art I)

This course is for students interested in pursuing advancement in art. Students refine critical thinking and artistic skills developed in Art I and have an in-depth exploration of media. Students further develop their skills in figure drawing, perspective, commercial design, print making, mixed media, and 3-dimensional activities. Students continue their investigation of artists, art styles, and art criticism. Students are required to maintain a sketchbook and a portfolio in preparation for advanced art classes. Student work will be displayed at the teacher's discretion.

Art III (2-Dimensional Design) **914005**

Credit: 1
Grade: 10-12
Prerequisite: Art II

This studio course is designed for the serious art student. Students work with advanced techniques in painting, drawing, print making,, and commercial design. The study of artists and periods of art are incorporated into assignments. Students learn to present their work for display. Students are required to maintain a sketchbook and an extensive portfolio. Student work will be exhibited throughout the term.

Art III (3-Dimensional Design) **914035**

Credit: 1
Grade: 10-12
Prerequisite: Art II or Functional Art II

This is a studio course devoted solely to 3-dimensional art forms. This course works in materials such as clay, plaster, wood, stone, paper mâché, fiber arts, basketry, and metals in both additive and subtractive methods. Art history and appreciation are used to enrich student understanding of working in sculpture and pottery. Students will be encouraged to keep a photographic record for their portfolio. Sketchbooks are required and student work will be exhibited throughout the term.

Art IV **914505**

Credit: 1
Grade: 11-12
Prerequisite: Art III (2-Dimensional Design)

This course is designed for the serious art student who would like to continue with art or to prepare for AP Studio Art. Students are expected to be self-directed and self-motivated in order to develop a portfolio. Students are expected to set personal goals as well as work on specific assignments developed to enhance traditional skills. Students work with the teacher to develop an area of concentration for their artwork. Work outside of class may be necessary. Students prepare and display their work and maintain a sketchbook. Depending on enrollment, this class may be offered on-line.

Studio Art AP **914908**

Credit: 1 **AP**
Grade: 11-12
Prerequisite: Art III, Art IV, or Photography II and Portfolio assessment

This class is for the highly motivated art student who strives to earn college-level credits. This class requires a portfolio to be submitted to the college board consisting of 15

images based on your chosen sustained investigation and 5 images of selected works. The students work must demonstrate a self-guided artistic investigation through practice, experimentation, and revision. Students may submit a portfolio in 2D Drawing (mark marking), 2D Design (graphics/photography) or 3D sculpture. Some work must be completed outside of class and students will be responsible for a portion of their materials.

Functional Art I **912035**

Credit: 1
Grade: 9-12
Prerequisite: None

This course is offered to students who are interested in hand crafts. It focuses on crafts, their history and origins, understanding of aesthetics, and the use of the elements and principles of design as they relate to functional art. Critique and self-evaluation are a part of each assignment. The focus is on craftsmanship in the areas of fiber arts, ceramics, jewelry/wearable art, glass-based projects, applied design, and bookmaking. Students maintain a journal, and their work will be displayed throughout the term. A materials fee will be charged. This class may not be substituted for Art I.

Functional Art II **913035**

Credit: 1
Grade: 9-12
Prerequisite: Functional Art I

This is a continuation of Functional Art I. Students focus on more advanced processes including fiber arts, ceramics, glass, jewelry, and bookmaking. Students use elements and principles of design with special emphasis on surface design. Students research specific processes and their origin and history. Students create a journal for self-evaluation, critique, and planning. Student work will be displayed at the teacher's discretion. A materials fee will be charged for this class. This class may be used as a prerequisite for Art III 3-D.

Photography I **919005**

Credit: 1
Grade: 11-12 (10th grade with a successful completion of Art I and a recommendation from the Art teacher)
Prerequisite: None for 11th & 12th grades. Tenth graders need to have completed Art I and have a recommendation from their art teacher.

Photography I is structured to give each student hands-on experience using a manual SLR camera, developing black and white film, and making photographic prints and enlargements in the darkroom. Students learn special darkroom techniques and manipulations. Quality photographic composition is emphasized. School cameras are available for classroom use but having a personal camera is encouraged. A photography portfolio will be

established and student work will be exhibited throughout the term. A materials fee is due at the beginning of the term.

Photography II **919105**

Credit: 1
Grade: 11-12
Prerequisite: Photography I

Photography II is geared toward the serious photography student. Students continue to expand their knowledge of the manual SLR camera, black and white film, and darkroom techniques. Students learn advanced camera control and darkroom manipulations. Students are encouraged to include other processes to expand their photographic experience, which may include computer manipulations. Students continue to maintain a sketchbook/journal and develop their portfolios. A materials fee is due at the beginning of the term.

Photography III **919205**

Credit: 1
Grade: 11- 12
Prerequisite: Photography II and portfolio review

Photography 3 is geared toward the serious photography student with the goal of submitting an AP portfolio, going to an undergrad art school, or pursuing photography as a career. Students continue to expand their knowledge of the manual SLR camera, black and white film, and darkroom techniques. Students learn advanced camera control and darkroom manipulations. Students are encouraged to include other processes to expand their photographic experience, which may include computer manipulations. Students continue to maintain a sketchbook/journal and develop their portfolios. A materials fee is due at the beginning of the term.

Art History AP **915108**

Credit: 1 **AP**
Grade: 11-12
Prerequisite: None

The Advanced Placement offering in Art History is designed to provide the student with an understanding and knowledge of architecture, sculpture, painting, and other art forms within diverse historical and cultural contexts. Students examine and critically analyze major forms of artistic expression from the past and the present from a variety of cultures. While visual analysis is the fundamental tool of the art historian, art history also emphasizes understanding works in context, considering such issues as patronage, gender, and the functions of and effect of works of art. Students will be required to work outside of class. This class may be offered online.

Music



Graduation Requirements

All music courses count toward meeting the one-credit fine arts or Career and Technical Education graduation requirement.

Music Theory I	922505
Credit: 1	
Grade: 10-12	
Prerequisite: None	

This course is open to students who are interested in learning a wide variety of skills, necessary to be a well-educated musician, skills that cannot adequately be taught in a music performance class. This course of study includes musical dictation, scales and intervals, music analysis, vocal and instrumental arranging, compositional techniques, and related computer technology.

Music Theory II	922535
Credit: 1	
Grade: 11-12	
Prerequisite: Grade of C or better in Music Theory I	

This course is an extension of Music Theory I. More independent work is expected at this level. Music writing assignments include longer forms and more complex harmonies than in Music Theory I. Student creativity is encouraged. One major original composition is assigned as a project. These compositions will be performed in concert at school, if possible.

Symphonic Choir	928505
Credit: 1	
Grade: 9-12	
Prerequisite: None	

Symphonic Choir is open to all interested students in any grade. A wide variety of choral literature is studied and performed during the term. Students learn basic singing technique, sight-singing skills, and ensemble skills. Students perform concerts at school, in the community and are invited to participate in county-wide events that are held outside of school hours.

Treble Choir	928015
Credit: 1	
Grade: 9-12	
Prerequisite: Audition Required or by previous teacher recommendation	

Treble Choir provides experiences for students who are proficient in choral singing and who desire to develop their skills to a higher degree. This course stresses a study of various styles of treble (Soprano/Alto) choral literature and music theory, as well as refined ensemble performance. Students perform concerts at school, in the community, and are invited to participate in county- and district-wide events. Students may be expected to devote additional time to preparation and technical instruction as there are frequent opportunities for events to held outside of school hours.

Mixed Choir	928005
Credit: 1	
Grade: 9-12	
Prerequisite: Audition Required or by previous teacher recommendation	

Mixed Choir provides experiences for students who are proficient in choral singing and who desire to develop their skills to a higher degree. This course stresses a study of various styles of mixed (Soprano, Alto, Tenor, Bass) choral literature and music theory, as well as refined ensemble performance. Students perform concerts at school, in the community, and are invited to participate in county- and district-wide events. Students may be expected to devote additional time to preparation and technical instruction as there are frequent opportunities for events to held outside of school hours.

String Orchestra	923805
Credit: 1	
Grade: 9-12	
Prerequisite: Previous experience or previous teacher recommendation	

String Orchestra is open to string players (violin, viola, cello, and double bass) with three or more years of prior experience or with permission of the instructor. A wide variety of string orchestra literature is studied and performed during the term. Students learn basic to intermediate playing technique, sight-reading skills, and ensemble skills. Students perform concerts at school, in the community, and are invited to participate in extra-curricular county-wide events. Note: A rental fee for school-owned instruments is required.

Chamber Orchestra 923905
 Credit: 1
 Grade: 9-12
 Prerequisite: Audition Required or by previous teacher recommendation

Chamber Orchestra provides experiences for students who are proficient on their instruments and who desire to develop their skills to a higher degree. This course stresses a study of various styles of string orchestra literature and music theory, as well as refined ensemble performance. Students perform concerts at school, in the community, and participate in county-wide and district-wide events. Students must devote additional time to preparation and technical instruction as there are frequent opportunities for events outside of school hours. Note: A rental fee for school-owned instruments is required.

Concert Band 923205
 Credit: 1
 Grade: 9-12
 Prerequisite: None

This course provides an opportunity for high school students who were not able to begin band in the 6th grade to learn to play an instrument. Emphasis is on basic music fundamentals on the student's specified instrument. The class may perform concerts at school and in the community, which may require after-school rehearsals. Students are expected to secure their own instruments. A rental fee for school-owned instruments is required.

Symphonic Band 923305
 Credit: 1
 Grade: 9-12
 Prerequisite: None

Students study and perform music literature of grade levels III and IV. Individual performance on a chosen instrument is stressed. At the end of the year, those students who have made sufficient progress are encouraged to audition for Wind Ensemble. Students perform concerts at school and in the community, which may require after-school rehearsals. A rental fee for school-owned instruments is required.

Wind Ensemble 925005
 Credit: 1
 Grade: 9-12
 Prerequisite: Audition Required

Wind Ensemble provides experiences for students who are proficient on their instruments and who desire to develop their skills to a higher degree. This course stresses a study of various styles of band literature and music theory, as well as refined ensemble performance. Students perform

concerts at school, in the community, and participate in the District Festival/Solo and Ensemble. Students must devote much time to preparation and technical instruction; there will be frequent night rehearsals. A rental fee for school-owned instruments is required.

Guitar Ensemble 924505
 Credit: 1
 Grade: 9-12
 Prerequisite: None

Guitar Ensemble is open to any student, grades 9-12, regardless of previous guitar experience. Each student will provide his/her own guitar to be used at school and home. Instruction will include, but not limited to, the following: tuning of instrument, right and left hand positions, 1st position cords (keys of C, G, D, A, am, em), major, minor and chromatic scales, strumming and broken chord patterns, 12-bar blues, reading traditional notation to play simple diatonic melodies, reading guitar, tablature, improvisation, and composition. At least one formal concert will be required each semester with optional performance opportunities offered. A material fee will be collected for purchase of the instruction book.

THEATRE



Theatre I: Introduction 141005

Credit: 1
Grade: 9-12
Prerequisite: None

This course covers basic dramatic principles such as theatre history, stage movement, voice projection, and memorization of dialogue. This course requires students to read several works and write frequently about topics and plays discussed in class. Performance is a major aspect of this course. The performance genres extend to dramatic monologue and short ensemble pieces. Students are expected to attend theatrical productions.

Theatre II: Dramatic Literature & Theatre History 142005

Credit: 1
Grade: 10-12
Prerequisite: Theatre I: Introduction

This course includes the study of theatre after the Renaissance to the present. Topics of study focus on styles of acting and voice and body techniques. Students are expected to attend theatrical productions and participate in theatre on some level. This course requires students to read several works and write frequently about topics and plays discussed in class.

Theatre III: Advanced Theatre Studies 142305

Credit: 1
Grade: 11-12
Prerequisite: Grade of C or better in Theatre II

This course is designed to assist developing theatre artists in honing their craft. The course assists students who intend to pursue the study of theatre at the college level. Topics of study include technical theatre, dramaturgy, auditioning, and an introduction to directing.

Theatre IV: Advanced Performance and Directing 142605

Credit: 1
Grade: 11-12
Prerequisite: Grade of C or better in Theatre III

Theatre IV will help students refine concepts learned and skills acquired in Theatre III while reinforcing principles learned in Theatre I & II. The Theatre IV student will develop an artistic vision and develop a personal aesthetic through advanced research, performance, and evaluation. Students will benefit from exposure to different types of theatrical techniques and opportunities to direct the performance of others (either in scenes or in full production).

Technical Theatre 143505

Credit: 1
Grade: 10-12
Prerequisite: Theatre I or teacher's recommendation

Technical Theatre will introduce the first-year technician to the areas of stagecraft and theatrical production. Students will build, paint, climb ladders, lift things, and handle power tools in this class. Students will be introduced to the following topics: Theatre safety, stage elements, properties, costumes, make-up, set construction, lights, sound, stage management, tools & equipment, and scenic painting. Students must participate backstage once per term. Analysis of the production experience will be intrinsic to the experience of the course.



Virginia and U.S. History is a study of the history of the United States from the perspective of political, social, cultural, economic, and geographical growth. The focus is on American character and institutions. The primary role that Virginia plays in the development of the United States is emphasized through study of important events and people of the commonwealth.

United States History AP **231918**
 Credit: 1 **SOL AP DE**
 Grade: 11
 Prerequisite: World History I and World History II

This dual enrollment course follows a national curriculum developed by the College Board and provides students with an intensive study of American History. The course covers both the AP curriculum and the Virginia SOLs with special emphasis on active class participation and critical analysis of major events and documents in American history. Supplemental readings in addition to the basic text are required and students may be asked to prepare by completing pre-course assignments. This course meets the requirement for History 121 & 122 through Lord Fairfax Community College. Students who do not pay the dual enrollment tuition charge will not receive a college credit from LFCC. AP credit is dictated by college admissions and the College Board.

Virginia & United States Government **244005**
 Credit: 1 **244033**
 Grade: 12
 Prerequisite: VA and US History

Virginia and U.S. Government examines the development and operation of the American system of local, state, and national governments. Principles of democracy are studied through the Constitution and other significant political documents. This course explores topics related to historical, contemporary, and future problems and issues in American politics, including the responsibilities of citizenship, political, and economic theories; the relationship of individuals and government to the rule of law; and the role of Virginia and the United States in the global community. A term paper may be required.

United States Government AP **244518**
 Credit: 1 **AP DE**
 Grade: 12
 Prerequisite: VA and US History

This course follows a national curriculum developed by the College Board and provides students with an intensive study of the development and functioning of government at the state and federal levels. Assignments are designed for the refinement of writing and analysis skills necessary for college entry-level classes. Supplementary readings are required and students may be asked to prepare by completing pre-course assignments. This course meets the requirement for Political Science 211 & 212 through Lord Fairfax Community College. Students who do not pay the dual enrollment tuition charge will not receive a college credit from LFCC. AP credit is dictated by college admissions and the College Board.

Economics Honors **6120HSS**
 Credit: 1
 Grade: 10-12
 Pre-requisite: None

This course addresses basic economics concepts and structures; the role of producers and consumers in a market economy; the price system; the factors that affect income, national economic goals; monetary and fiscal policy; and the role of government in a market economy. Economic concepts are used to interpret the daily news and understand the interdependence of the world's economies. The course emphasizes analyzing real-world situations, economic reasoning, decision making, and problem solving. This course is recommended for students who may want to prepare for AP Economics.

This course meets the Economics and Personal Finance high school diploma requirement. Students will take the WISE exam. This course also meets virtual requirements for graduation with online course components.

HISTORY AND SOCIAL SCIENCE ELECTIVES

Comparative Government AP (Virtual Virginia)

Credit: 1 **AP** 245038
 Grade: 11-12
 Prerequisite: None

This course follows a national curriculum developed by the College Board and provides an in-depth study of the political and economic structures of major nations throughout the world. Countries in Europe, Asia, Africa, and the Americas will be compared to help students develop an expanded understanding of how economic and political systems function. Students engage in critical analysis of regional and global issues. The course includes extensive class discussion based on students' research on major events and trends. Two research papers are required. This course may be offered as a virtual course. AP credit is dictated by college admissions and the College Board.

Economics AP (Macro) 280308

Credit: 1 **AP**
 Grade: 11-12
 Recommended: B in Algebra 1

This course follows a national curriculum developed by the College Board. Students develop critical thinking skills through the understanding, application, and analysis of fundamental economic concepts. Students learn to apply quantitative and mathematical skills to the discipline of economics, test economic propositions empirically, improve their decision-making skills, and apply economic logic to a wide variety of real world and hypothetical situations. It can be used to meet the Economics and Personal Finance diploma requirement but only when taken in the traditional high school classroom setting. This course also meets virtual course requirements for graduation with online course components. This course may be offered as a virtual course. AP credit is dictated by college admissions and the College Board.

Geospatial Science (JMU) 295007

Credit: 1 **DE**
 Grade: 11-12
 Prerequisite: Completion of Algebra I

This Geospatial Technology Seminar course introduces students to Geographic Information Systems (GIS) and Global Positioning Systems (GPS) technology. Students learn to collect, analyze, and display a variety of data to solve real life problems. Students are trained in the latest ESRI ArcMap software in a variety of scenarios. Students will take a different approach to learning by becoming involved in a community-based research project that involves spatial

reasoning and decision-making. All participants will be required to give a final presentation of their projects to local community leaders, the faculty of their home school and JMU (this class is a partnership with JMU). The projects will be focused on using geospatial technologies to explore the local problem, thus potentially bringing business and government entities into the project as partners, and giving participants' skills in this important technological area.

Human Geography AP 221208

Credit: 1 **AP** 221298
 Grade: 9-12
 Prerequisite: None

This course is an introduction to the study of patterns and processes that have shaped human understanding and use of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use. Students will use and think about maps and spatial data, understand and interpret the implications of associations among phenomena in places, recognize and interpret the relationships among patterns and processes, define regions, evaluate the regionalization process, and characterize and analyze changing interconnections among places. This course may be offered as a virtual course. AP credit is dictated by college admissions and the College Board.

Introduction to Psychology 290005

Credit: 1
 Grade: 10-12
 Prerequisite: None

This course focuses on various aspects of behavior and mental processes. It includes an overview of the following areas: history of psychology, research methods, biology of behavior, altered states of consciousness, learning and memory, sensation and perception, stress and adjustment, personality, and psychological disorders.

Psychology AP 290208

Credit: 1 **AP**
 Grade: 11-12 (10th with teacher/counselor recommendation)
 Prerequisite: None

This course follows a national curriculum developed by the College Board. Students study the following areas: research methods, biological bases of behavior, sensation and perception, cognition, motivation and emotion, developmental psychology, social psychology, testing and individual differences, and treatment of psychological disorders. This course requires an understanding of the underlying biological process of many areas of content. Students will need to utilize and apply research to their

understanding of psychology. Extensive outside reading and critical essay writing are required. Students may be asked to prepare by completing pre-course assignments. AP credit is dictated by college admissions and the College Board.

Senior Capstone 299605

Credit: 1
Grade: 12
Prerequisite: None

The purpose of this course is for seniors to synthesize areas of future study in light of the local and global community. The course culminates in a Senior Project, an individualized plan that students envision, enact, and reflect upon over the course of their senior year. The project includes a writing portfolio and a formal presentation. Two main components of the course are the college style of teaching and community service (20 required hours).

Senior Internship 299655

Credit: 1
Grade: 12
Prerequisite: Recommendation from History and Social Science Teacher

The purpose of this course is for seniors to work with local Government Department Heads and agencies as interns, completing assigned projects and agency reviews, and presenting their findings. Interns are required to complete at least 120 hours with a local business, government agency, or community organization. Intern projects will include examination and evaluation of effective leadership styles, agency operation, and agency performance.

Sociology 250005

Credit: 1
Grade: 11-12
Prerequisite: None

This course introduces basic concepts of sociology and presents relevant theories in areas of socialization, group dynamics, gender roles, deviance, minority relations, and community and social institutions (educational, political, economic and family). The class provides opportunities for students to gain a better understanding of their own society and culture, as well as those different from their own. Through the examination of topics such as delinquency, crime, chemical addition, and poverty, students will develop the ability to examine social phenomena objectively to discover and seek solutions.

Special Topics in History

African-American History	Grades: 10-12	243505
American Civil War	Grades: 11-12	299635
Women in History	Grades: 11-12	299905

This suite of courses examines a particular topic in history. They are offered on a rotating basis at FCPS high schools based on student interest and teacher expertise and availability. Students will be required to analyze, collaborate, and communicate in a variety of learning contexts to gain a deeper understanding of issues and eras in history. The special topics have traditionally included: African-American Studies; the American Civil War; and Women in History.

African-American History

This course will survey African American history from precolonial Africa through the present. Students will be introduced to key concepts in African American history from early beginnings in indigenous Africa through the transatlantic slave trade, the Civil War, Emancipation, Reconstruction, the Civil Rights era and into the present. The course, offered in a variety of learning models, will give students an opportunity to explore social events and processes, individuals and agency, documents and institutions; and analyze past and present positions for future implications for African Americans. This course does require students to complete a Capstone project. Students will pursue independent research relative to the content on a question or problem of their choice and produce a learning object that reflects a deeper understanding of African American history.

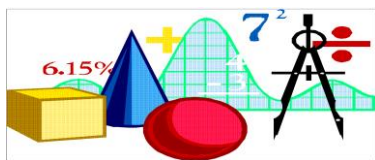
American Civil War

This course examines the scope and consequences of the Civil War with emphasis on the four years of actual fighting. Topics include causes of the war, reasons the North won, military campaigns, the influence of political decisions on military matters, and how the struggle affected various elements of American society, including slaves. A special emphasis is placed on the impact of the war on Fauquier County. This course is one of three "special topics in history" courses. It may be scheduled alternately with the other two by term or by year.

Women in History

Women in History examines history, government, economics, and sociology to provide a complete and interdisciplinary examination of the experiences of women throughout history. Using these areas, students will analyze past and present experiences, use critical thinking skills to create solutions to various domestic and global women's issues, and discuss how our lives today have been shaped by the contributions of women. This course is one of three "special topics in history" courses. It may be scheduled alternately with the other two by term or by year.

MATHEMATICS



Graduation Requirements

There are end-of-course SOL tests associated with Algebra I, Geometry, and Algebra II.

Course Sequencing in Mathematics

The chart included in this section illustrates sample course sequences in mathematics. Other sequences are also possible.

Algebra I Part 1*	313103
Credit: 1	313133
Grade: 9-12	
Prerequisite: None	

This is the first part of a program in which algebra is taught over two terms. The course is designed to meet the needs of students who might experience difficulty in a one-term Algebra I course. This course counts as one elective credit towards Standard and Advanced Studies diplomas, students who take this course must also complete Algebra 1 Part 2. ***Only offered at FHS.**

Algebra I Part 2*	313203
Credit: 1 SOL	313233
Grade: 9-12	
Prerequisite: Successful completion of Algebra I Part 1	

This course is a continuation of Algebra I Part 1. Successful completion of this course indicates that a student has mastered all Algebra I topics. Combined with Algebra I Part 1 this course counts as one mathematics credit. ***Only offered at FHS.**

Algebra I	313005
Credit: 1 SOL	
Grade: 9-12	

Students solve and graph linear and quadratic equations and solve and graph linear inequalities. Students analyze function families algebraically and graphically. Graphing calculators are used as both a tool in solving problems and to verify solutions. Students investigate and analyze characteristics and multiple representations of linear and quadratic functions and analyze data using a curve of best fit.

Geometry Part 1*	314403
Credit: 1	314433
Grade: 9-12	
Prerequisite: Successful completion of Algebra I or Algebra I Part 2	

This is the first part of a program in which Geometry is taught over two terms. The course is designed to meet the needs of students who might experience difficulty in a one-term Geometry course. For the Standard and Advanced Studies Diplomas, students who take this course must also complete Geometry Part 2 to earn a mathematics credit towards graduation. This course counts as one elective credit towards Standard and Advanced Studies Diplomas. ***Only offered at FHS.**

Geometry Part 2*	314503
Credit: 1 SOL	314533
Grade: 9-12	
Prerequisite: Successful completion of Geometry Part 1	

This is the second part of a program in which Geometry is taught over two terms. Successful completion of this course indicates that a student has mastered all Geometry topics. Combined with Geometry Part 1, this course counts as one mathematics credit. ***Only offered at FHS.**

Geometry	314305
Credit: 1 SOL	
Grade: 9-12	
Prerequisite: Successful completion of Algebra I or Algebra I Part 2	

This course includes the study of both plane and solid geometry. Students investigate real-world problems using pictorial representations, computer software, constructions, algebraic and coordinate methods, deductive proofs, and formulas used (e.g. quadrilateral properties, triangle congruence/similarity, right triangle trigonometry, properties and equations of circles, surface area and volume of solid figures).

Geometry Honors	314307
Credit: 1 SOL	
Grade: 9-10	
Prerequisite: Grade of C or better in Algebra I or teacher recommendation	

This course includes the deductive-axiomatic method of proof and inductive/intuitive approaches to geometry. General problem solving techniques, a variety of real-world applications, extensive use of algebraic skills, and the use of related technology are included in the course.

Algebra, Functions & Data Analysis (AFDA) 313405

Credit: 1

Grade: 10-12

Prerequisite: Successful completion of Algebra I

In this course, students study functions and their behaviors, systems of inequalities, probability, experimental design and implementation, and analysis of data. Data is generated by practical applications from science, business, and finance. Students solve problems that require the formulation of linear, quadratic, exponential, or logarithmic equations of a system of equations. Students strengthen conceptual understanding in mathematics and further develop connections between algebra and statistics.

Algebra II 313505

Credit: 1

SOL

Grade: 9-12

Prerequisite: Successful completion of Geometry and Algebra I, or teacher recommendation

This course includes the study of rational, radical, and polynomial expressions and equations. Students analyze function families algebraically and graphically. Nonlinear systems of equations will be solved graphically. Using an appropriate strategy, quadratic equations will be solved over the set of complex numbers. Students work with variations, sequences, series, permutations, and combinations. They analyze data using a curve of best fit, make predictions, and solve real-world problems, including properties of a normal distribution. Students will make connections between and among multiple representations of a function. Graphing calculators are used as tools for investigative and application purposes throughout the course.

Algebra II with Trigonometry Honors 313707

Credit: 1

SOL

Grade: 9-10

Prerequisite: Grade of C or better in Algebra I at Middle School and Geometry Honors; grade of B or better in Algebra I and Geometry

This course is an accelerated pace for Algebra II and also includes an introduction to Trigonometry. Students study many types of functions including linear, quadratic, exponential, logarithmic, rational and irrational algebraic, higher degree, trigonometric and circular functions. Quadratic relations, complex numbers, sequences, series, and systems of linear equations and inequalities are also included. The use of technology, such as graphing calculators, is an integral part of this course.

Advanced Functions & Modeling 313605

Credit: 1

Grade: 12

Prerequisite: Successful completion of (AFDA) Algebra, Functions & Data Analysis, or Algebra II

Advanced Functions and Modeling is a capstone course that focuses on providing students with the instruction to meet or exceed college and career-ready performance expectations. Students do mathematical tasks, work on inquiry-based projects, and solve problems collaboratively while developing decision-making skills, critical thinking, and presentation ability. The course provides students with applied and relevant instruction that supports students' attainment of the rigorous College and Career Readiness Performance Expectations.

Advanced Mathematics 316005

Credit: 1

Grade: 10-12

Prerequisite: Successful completion of Algebra II

This course provides students with a study of trigonometry. Students graph all trigonometric functions and combination functions, prove and verify trigonometric identities, use various angle formulas, and use polar coordinates and equations. In addition, students simplify radical expressions, perform all operations with radical expressions and complex fractions, and solve quadratic equations.

Elementary Functions 316305

Credit: 1

Grade: 10-12

Prerequisite: Successful completion of Advanced Mathematics

In this course students analyze the elementary functions of mathematics: the algebraic, exponential, logarithmic, trigonometric, and circular functions. This course also includes the study of conics, sequences and series; the use of matrices, systems of equations, and inequalities; and an introduction to differential calculus.

Mathematical Analysis Honors 316207

Credit: 1

Grade: 10-12

Prerequisite: Grade of C or better in either Algebra II with Trigonometry Honors or Advanced Mathematics

This course is an in-depth study of polynomial, rational, exponential, and logarithmic functions. Trigonometry and circular functions are reviewed. Vectors, polar equations and parametric equations are used to model and solve application problems. Trigonometric functions, the Pythagorean Theorem, the Law of Sines, and the Law of Cosines are applied to solve practical problems.

Calculus 319905
 Credit: 1
 Grade: 11-12
 Prerequisite: Successful completion of Elementary Functions or Mathematical Analysis

This course includes the study of functions, limits, derivatives, and the technique of differentiation, the definite and indefinite integral, and the techniques of integration, analytic geometry, and applications. This course counts as one elective credit.

Calculus AB AP 317718
 Credit: 1 **AP**
 Grade: 11-12
 Prerequisite: Successful completion of Mathematical Analysis or Elementary Functions

Calculus AB AP is a one-credit course designed to prepare students for the Calculus AB AP exam. The topics include functions, limits, derivatives and the techniques of differentiation, the definite and indefinite integral and the techniques of integration, analytic geometry, and applications.

Calculus BC AP 317738
 Credit: 2 **AP**
 Grade: 11-12
 Prerequisite: Successful completion of Mathematical Analysis or Elementary Functions

Calculus BC AP is a two-credit course designed to prepare students for the Calculus BC AP exam. Topics include functions, limits, derivatives and the techniques of differentiation, the definite and indefinite integral and the techniques of integration, analytic geometry and application, infinite series, conics, plane curves, parametric equations and polar coordinates, vector-value functions, vectors and the geometry of space, and differential equations.

Multivariable Calculus 317808
 Credit: 1
 Grade: 12
 Prerequisite: Grade of C or better in Calculus BC AP and a 3 or better on the Calculus BC AP exam

This course is a continuation of calculus beyond the Calculus BC course. Topics include functions of several variables, multiple integration, vector analysis, first order differential equations with application, and linear differential equations of high order. The final grade in this course receives a weighted value.

Probability and Statistics 319005
 Credit: 1
 Grade: 10-12
 Prerequisite: Successful completion of Algebra II

This course introduces students to basic concepts and techniques for collecting and analyzing data, drawing conclusions and making predictions. Students will design experiments and surveys, explore real life probabilities, and focus on communication and interpretation of results using statistical language and technology. The course will expose students to four broad conceptual themes: (1) exploring data – observing patterns and departures from patterns, (2) planning a study - deciding what and how to measure, (3) anticipating patterns – producing probability and simulations, and (4) statistical inference - confirming models. Students will use multiple representations to present data including written descriptions, numerical statistics, formulas and graphs.

Statistics AP 319208
 Credit: 1 **AP/DE**
 Grade: 10-12
 Prerequisite: Grade of C or better in Algebra II or Algebra II with Trigonometry Honors

In this course students explore data distributions; explore data relationships; design samples and experiments; sample distributions and probability; and make inferences from data using known principles: comparison, measurements, large samples, and regression. Students learn to use confidence intervals, tests of significance, and special cases of normally distributed data.

Introduction to Computer Mathematics 318405
 Credit: 1
 Grade: 9-12
 Prerequisite: Successful completion of Algebra I

This course is an introduction to computer science. Students use computers to solve problems that can be set up as mathematical models. Strategies include defining the problem, developing, refining, and implementing a plan, and testing and revising the solution. The course also includes programming, ranging from simple programs involving only a few lines to complex programs. This course counts as one elective credit toward the Advanced Studies Diploma and one mathematics credit toward the Standard Diploma. Computer Mathematics may be used in conjunction with Algebra I and Geometry to satisfy mathematics graduation requirements if student completes a career and technical concentration.

Computer Science Principles AP 100198
 Credit: 1 **AP**
 Grade 9-12
 Prerequisite: Successful completion of Algebra I

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. The fundamentals of computing, including problem solving, working with data, understanding the Internet, cybersecurity, and programming will help to broaden students' understanding of computer science for use in a diversity of majors and careers.

Computer Science A AP 318538

Credit: 1 **AP**

Grade: 11-12

Prerequisite: Successful completion of Algebra II or Algebra II with Trig Honors and Computer Math or demonstrated proficiency in writing computer programs

Students study a high-level structured language emphasizing algorithms, internal and external documentation covering data types, input/output from or to various devices, decisions, loop functions, procedures, arrays, records and files, and sorting and searching. The major emphasis in Computer Science A is design and implementation of computer-based solutions to problems in several application areas. Students learn how to develop algorithms, select appropriate data structures, and write code fluently using JAVA. This course counts as one mathematics credit.

Computer Science III 320108

Credit: 1

Grade: 11-12

Prerequisite: Successful completion of Computer Science A AP or Computer Science Principles AP or teacher recommendation

In this course students participate in an independent study of a high-level structured language emphasizing algorithms, internal and external documentation, and interface implementation. The major emphasis in Computer Science III is the design and execution of computer-based solutions to problems related to current trends in local and global communities. Students learn how to design usable interfaces, develop applications using popular and state-of-the-art languages.

Discrete Mathematics 315405

Credit: 1

Grade: 10-12

Prerequisite: Successful completion of Algebra II or Algebra II with Trigonometry

This course covers basics of graph theory as well as circuits, cycles, and paths. Conflict-resolution problems are solved using graphs. Other optimization techniques such as linear programming are explored. Students investigate weighted voting techniques and various election methods, learn basic counting principles and utilize these to examine combinations and permutations; analyze and describe the issue of fair division; use Venn diagrams, truth tables and matrices to solve logic problems; and learn scheduling algorithms.

Economics & Personal Finance

6120MTH

Credit: 1

Grade: 11-12

Prerequisite: Successful completion of Algebra I and Geometry

This course presents economic concepts that help students interpret the daily news, understand how interdependent the world's economies are, and anticipate how events will impact their lives. Students learn that their own human capital (knowledge and skills) is their most valuable resource and that investing in education and training improves the likelihood of their future economic success. The standards also help students develop thinking skills that include analyzing real-world situations, economic reasoning, decision making, and problem solving. The course is taught using numerical analysis and mathematics as appropriate. This course meets the requirement for the Economics and Personal Finance high school diploma requirement and students will also take the WISE exam. Sophomores may be admitted only under extenuating circumstances. This course also meets virtual course requirements for graduation with online course components.

SAT Critical Reading and Writing – Math Prep. 012905

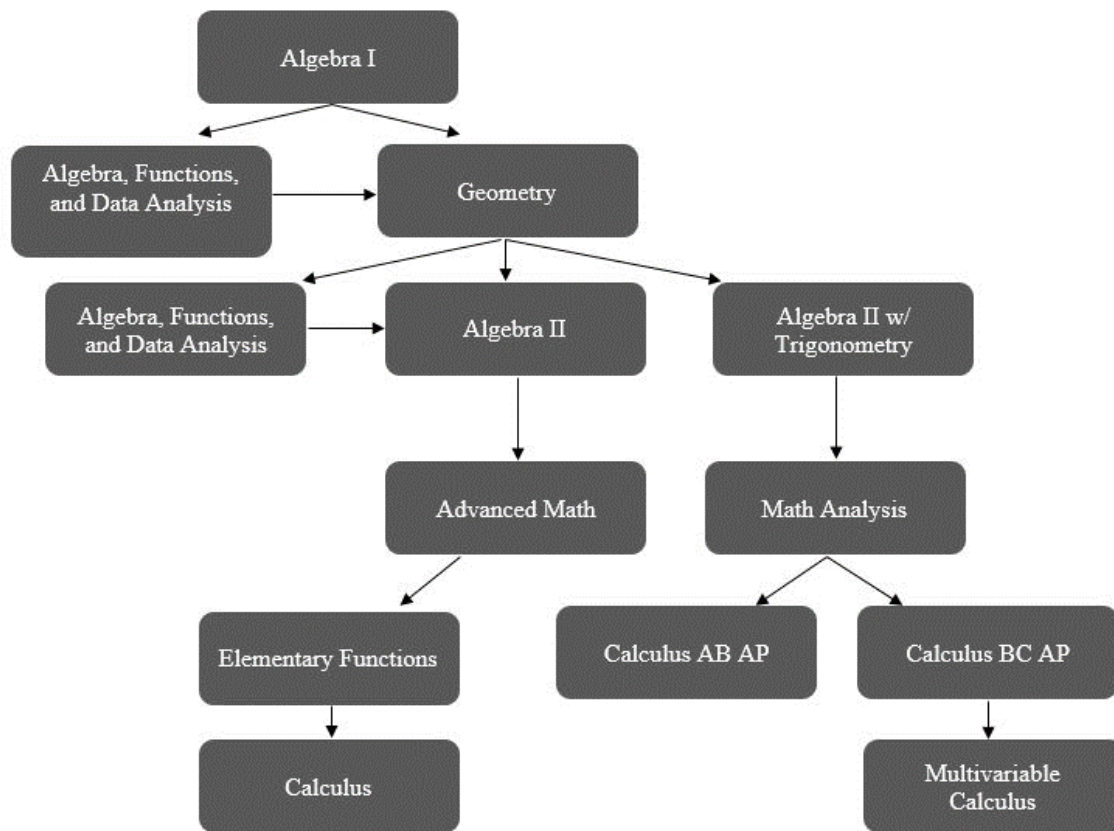
Credit: 1

Grade: 11-12

Prerequisite: English 9 and 10, Algebra I, Geometry, and Algebra II

The mathematics portion of this course is designed to help motivated college bound students develop strategies for improving scores on college entrance exams. The course work reviews basic Algebra I and II and Geometry concepts. It introduces effective problem-solving strategies, identifies important pacing ideas, and provides practice in the SAT question formats of multiple choice and grid-in. The students take several practice SAT tests throughout the course. They also explore the college application process. A materials fee is charged. This course counts as one elective credit.

Recommended Mathematics Sequencing Chart



Some less common but possible scenarios:

Algebra II w/ Trigonometry – Advanced Math

Elementary Functions – Calculus AB AP or Calculus BC AP

Math Analysis – Calculus (non AP)

Additional math courses and prerequisites:

Course Title	Prerequisite (if applicable)
Informal Algebra	
Economics & Personal Finance	
Discrete Mathematics	Algebra II
Computer Mathematics	Algebra I
Computer Science Principles AP	Algebra I
Computer Science A (AP)	Algebra II & Computer Math
Computer Science III	Computer Science A (AP) or Computer Science Principles AP
Probability & Statistics	Algebra II
Statistics AP	Algebra II
SAT – Critical Reading & Writing – Math Prep	Algebra II

PHYSICAL EDUCATION



Graduation Requirements

Fauquier County Public Schools requires a credit in both Physical Education 9 and Physical Education 10 to meet graduation requirements.

Health & Physical Education 9 **730005**

Credit: 1
Grade: 9-12
Prerequisite: None

This course provides students with the knowledge, understanding, and skills to transition from modified versions of movement forms to more complex applications across all types of physical activities. Students demonstrate more specialized knowledge in identifying and applying key movement concepts and principles with an emphasis on the development of efficient body control and movement, desirable social skills, and safety awareness. The health portion of this course integrates a variety of health concepts, skills, and behaviors to plan for their personal, lifelong goals. These include awareness and consequences of risky behaviors, disease prevention, overall wellness, and identification of community health resources. Beginning with first-time ninth grade students in the 2016-2017 school year, requirements for the standard and advanced diplomas shall include a requirement to be trained in emergency first aid, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation.

Health & Physical Education 10 **740505**

Credit: 1
Grade: 10
Prerequisite: Physical Education 9

This course focuses on the proficiency of fundamental movement skills and skill combinations needed to be competent in self-selected physical activities that students are likely to pursue throughout life including outdoor pursuits, fitness activities, selected individual performance activities and net/wall target games. The ability to exhibit responsible personal and social behavior that respects self and others is emphasized. Students are prepared to lead a physically active lifestyle. This course includes the

classroom phase of Driver Education and Health and Family Life Education. In the latter, students will demonstrate health and wellness knowledge and skills.

Advanced Physical Education I **764005**

Credit: 1
Grade: 11-12
Prerequisite: Grade of C or better in Physical Education 10 or teacher recommendation

This advanced course in physical education is designed for students who are interested in physical activity and lifetime values of exercise and sports. Students have the opportunity to improve some of the skills they have learned in previous physical education classes. The course includes non-traditional activities to go along with some of the more conventional sports and games. Possible field trips will be offered as well. Note: There will be a \$25.00 fee to cover the cost of certain activities.

Advanced Physical Education II **764015**

Credit: 1
Grade: 11-12
Prerequisite: Grade of C or better in Advanced Physical Education I

This advanced course in physical education is designed to teach students the value of exercise and physical activity. Students practice skills learned in previous physical education classes and participate in recreational activities that promote healthy life-long fitness.

Life Fitness I **764035**

Credit: 1
Grade: 11-12
Prerequisite: Grade of C or better in Physical Education 10 or teacher recommendation

This course focuses on the practical and functional modes of strength training and body mechanics, history of strength training, nutrition, physiology, kinesiology, cardiovascular conditioning, and related areas. Emphasis is placed on benefits of building a strong body and maintaining good health throughout life. Testing and evaluation is done to challenge students and encourage a positive attitude toward total healthful living. Space and safety concerns may limit enrollment.

Life Fitness II**764055**

Credit: 1

Grade: 11-12

Prerequisite: Grade of C or better in Life Fitness I

This course builds on the knowledge and skills developed in Life Fitness I. Students investigate anatomy, physiological adaptations, nutritional considerations, and other sport-science topics. Emphasis is placed on students developing the ability to design and implement their own strength training program. Students learn basic weight training principles including periodization, specificity, and correct use of variation and rest interval procedures. Students learn how to maintain a level of physical fitness that promotes disease prevention, an active life-style, and longevity.

Life Fitness III**764075**

Credit: 1

Grade: 11-12

Prerequisite: Grade of C or better in Life Fitness II

This course builds on the knowledge and skills developed in Life Fitness II. Students investigate anatomy, physiological adaptations, nutritional considerations, and other sport-science topics. Emphasis placed on students developing the ability to design and implement their own strength training program. Students learn basic weight training principles including periodization, specificity, and correct use of variation and rest interval procedures. Students learn how to maintain a level of physical fitness that promotes disease prevention, an active life-style, and longevity.

Adapted Physical Education**770000**

Credit: 1

Grade: 9-12

Prerequisite: None

This course is designed to give students an alternative to the required physical education course. Students who cannot take an active part in Physical Education 9 or 10 due to medical reasons may be scheduled for this course.

Sports Medicine I (Athletic Training Level 1)**763005**

Credit: 1

Grade: 10-12

Prerequisite: Must complete an application and an interview with the athletic trainer.

This program provides students with skills to prepare for a career in athletic training, physical thereapy, orthopedic sports medicine, or related fields. Students must work a minimum of 30 hours outside of class time as athletic training staff. Students must attend all classroom instruction and lab practical activities. Topics include direct clinical experience, policies and procedures, modality

operations, taping, and examinations. Assignments include: a research paper on Sports Medicine and case reports. Students must sign the Student Training Guidelines. A materials fee may be charged.

Sports Medicine II (Advanced Athletic Training)**763035**

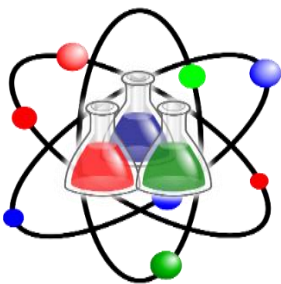
Credit: 1

Grade: 10-12

Prerequisite: Sports Medicine 1 and recommendation of the athletic trainer.

Students must put in 200 hours of clinical and field experience under the direct supervision of the certified athletic trainer. Students must maintain a 3.0 grade average to acquire hours. The advanced student athletic trainer will supervise level 1 student athletic trainers and assist in prevention, emergency care, evaluation, and treatment of athletic injuries. A major paper, four major tests, plus weekly quizzes are required. A fee for materials may be charged.

SCIENCE



Graduation Requirements

Students may take science courses in any sequence provided they have met the prerequisites. Most students take Earth Science during their 9th grade year, Biology in 10th grade, and Chemistry in 11th grade. It is strongly recommended that students planning to attend college take at least four high school science courses to include Biology, Chemistry, and Physics. Students may take more than once science class per year if space is available in their schedule. Students should keep track of the scientific discipline for each course to ensure completion of diploma requirements. The four science disciplines are Earth Science, Biology, Chemistry, and Physics. Courses are listed here by discipline unless otherwise noted.

There are end-of-course SOL tests associated with Earth Science, Biology, and Chemistry that may be used to verify course credits. However, Biology is the high school science test used for federal accountability of schools under the Every Student Succeeds Act (ESSA).

Earth Science	421005
Credit: 1 SOL	421033
Grade: 9-10	421015
Prerequisite: None	

Earth Science is an introductory lab-based course that deals with the disciplines of astronomy, geology, meteorology, and oceanography. Topics include the universe, characteristics of Earth, rocks and minerals, resource use, atmospheric conditions, and weather. Emphasis is placed on acquiring knowledge through laboratory experiences and understanding the process of science.

Earth Science Honors	421017
Credit: 1 SOL	
Grade: 9-10	
Prerequisite: None	

Earth Science Honors is recommended for students who wish to work at an advanced level. The basic topics of Earth Science are covered on an accelerated schedule and emphasis is placed on problem solving, exploring scientific literature, investigative research, data analysis, and laboratory experiences.

Environmental Science	030035
Credit: 1	
Grade: 9	
Prerequisite: None	

Environmental Science is an introductory course covering major concepts from Biology and Earth Science. Topics include: Earth systems, population dynamics, environmental quality, human impact on the environment, and conservation. Students will use current technology and problem-solving techniques to gather and interpret real data. The standard credit earned for Environmental Science may be used as either a Biology OR Earth Science credit to satisfy diploma requirements.

Astronomy (Earth Science II)	426005
Credit: 1	
Grade: 11-12	
Prerequisite: Earth Science (Algebra II recommended)	

Astronomy is for students who have completed an introductory Earth Science course and would like to gain a better understanding of astronomy and the atmospheric sciences. Topics include: stars and constellations, planets, and features of the known universe.

Biology	431005
Credit: 1 SOL	431033
Grade: 10	431015
Prerequisite: None	

Biology is a lab-based course that deals with the basic principles of biological science. Topics include: cells, classification, biochemistry, DNA/Genetics, evolution, and ecology. Emphasis is placed on acquiring knowledge through laboratory experiences and understanding the process of science.

Biology Honors	431017
Credit: 1 SOL	
Grade: 10	
Prerequisite: None	

Biology Honors is recommended for students who wish to work at an advanced level. The basic topics of Biology are covered on an accelerated schedule and emphasis is placed on problem solving, exploring scientific literature,

investigative research, data analysis, and field/laboratory experiences.

Ecology (Biology II) 434005

Credit: 1

Grade: 10-12

Prerequisite: Biology

Ecology is for students who have completed an introductory Biology course and would like to gain a better understanding of living and non-living factors in the environment. Topics include: ecosystems interactions, biogeochemical cycles, water quality, human impact on the environment, and possible solutions for environmental issues.

Anatomy & Physiology (Biology II) 433005

Credit: 1

Grade: 11-12

Prerequisite: Biology and Chemistry

Anatomy is a lab-based course for students who have completed introductory biology and chemistry and would like to gain a better understanding of the human body and its systems. Topics include: individual cell types and tissues, structure and function of major organs, and how organs work together to form organ systems in a functioning organism.

Marine Biology (Biology II Honors) 432017

Credit: 1

Grade: 11-12

Prerequisite: Biology and Chemistry

Marine Biology is recommended for students who wish to work at an advanced level. Students should be prepared to conduct independent laboratory research and present content comprehensively in a variety of forms. In addition, students will conduct research in the areas of statistical analysis of an outdoor ecosystem, marine biology, and genetic engineering.

Environmental Science AP 427008

Credit: 1 **AP**

Grade: 11-12

Prerequisite: Biology and Chemistry (Earth Science recommended)

AP Environmental Science is equivalent to a one semester introductory-level college Environmental Science course. Students are provided with the scientific principles, concepts, and methodologies required to understand the complex interrelationships of the natural world and identify possible environmental risks and solutions. This course follows a national curriculum developed by the College Board and includes both laboratory and field experiences.

Students may be asked to prepare for this course by completing pre-course assignments. The standard credit earned for AP Environmental Science may be used as either a Biology OR Earth Science credit to satisfy diploma requirements.

Biology AP 437008

Credit: 2 **AP**

Grade: 11-12

Prerequisite: Biology and Chemistry

AP Biology is a two-term, two-credit course equivalent to a full year (two semesters) of introductory-level college biology. Students will cultivate their understanding through inquiry-based laboratory investigations and use problem-solving skills for real-world applications. This course follows a national curriculum developed by the College Board. Students may be asked to prepare for this course by completing pre-course assignments.

Chemistry 441005

Credit: 1 **SOL**

Grade: 10-12

Prerequisite: Algebra I

Chemistry is an introductory lab-based course that deals with the basic principles of chemistry. Topics include: atomic theory, chemical bonding, chemical reactions, molar relationships, kinetic molecular theory, and thermodynamics. Emphasis is placed on acquiring knowledge through laboratory experiences and understanding the processes of science.

Chemistry AP 447008

Credit: 2 **AP**

Grade: 11-12

Prerequisite: Chemistry

AP Chemistry is a two-term, two-credit course equivalent to a full year (two semesters) of introductory-level college chemistry. Students will cultivate their understanding through inquiry-based laboratory investigations and use problem-solving skills for real-world applications. This course follows a national curriculum developed by the College Board. Students may be asked to prepare for this course by completing pre-course assignments.

Physics 451005

Credit: 1

Grade: 10-12

Prerequisite: Algebra II (Advanced Mathematics Recommended)

Physics is an introductory lab-based course that deals with the basic principles of physical science. Topics include: mechanics, heat, light, sound, and electricity. Emphasis is

placed on problem solving and acquiring knowledge through laboratory experiences.

Physics I- Algebra Based AP 457308

Credit: 1 **AP**

Grade: 10-12

Prerequisite: Advanced Mathematics or Algebra II/Trig

AP Physics I is an algebra based course equivalent to the first semester of introductory-level college physics. Topics include: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonics, mechanical waves and sound, and introductory circuits. Students will cultivate their understanding through inquiry-based lab investigations and use problem-solving skills for real-world applications. This course follows a national curriculum developed by the College Board. Students may be asked to prepare for this course by completing pre-course assignments.

Physics II-Algebra Based AP 457408

Credit: 1 **AP**

Grade: 10-12

Prerequisites: AP Physics 1 or comparable introductory course/Advanced Mathematics

AP Physics II is an algebra-based course equivalent to the second semester of introductory-level college physics. Topics include: fluid mechanics, thermodynamics, electricity and magnetism, optics, and quantum, atomic, and nuclear physics. Students will cultivate their understanding through inquiry-based lab investigations and use problem-solving skills for real-world applications. This course follows a national curriculum developed by the College Board. Students may be asked to prepare for this course by completing pre-course assignments.

iSTEM I: Foundations 461005

Credits: 1 Technology

Grade: 9-10

Prerequisites: A grade C or better in both Algebra I and Geometry. Students must complete an application.

iSTEM is an integrated, hands-on, project-oriented, interdisciplinary introductory engineering, programming and research course for students with a high interest in mathematics and science. This is a one-credit science and technology elective course designed to address national educational standards in STEM fields. **Offered only at KRHS.**

iSTEM II Course Suite

iSTEM II: Aquatic 461025

iSTEM II: Terrestrial 461035

iSTEM II: Air 461045

Credits: 1 (Science)

Grade: 10-12

Prerequisites: Successful completion of iSTEM I.

These interdisciplinary courses integrate the study of engineering, computer science, mathematics and scientific principles in aquatic, terrestrial, and air environments. Students will be required to mentor, collaborate, write, present, and solve a host of real-world problems skillfully and creatively. Students will also be prepped for workplace readiness skill certification testing. All academy students must complete at least two from the course suite in order to meet academy graduation requirements. **Offered only at KRHS.**

SPECIAL EDUCATION



The courses listed in this section are available specifically for special education students. They provide access to the general curriculum and specially designed curriculum to meet the unique needs of special education students.

Courses to meet the specific diploma types are determined by the Individual Education Program (IEP) for each special education student.

Language Arts 9 151703
Credit: 1
Grade: 9
Prerequisite: None

This course provides an emphasis on the writing process, language and vocabulary skills, and reading of various types of literature. Oral and written communication skills are emphasized. This course also helps students become more effective readers. Instruction is individualized to meet the needs of the student. This course does not count as a credit toward the Standard Diploma.

Language Arts 10 151713
Credit: 1
Grade: 10
Prerequisite: Language Arts 9

This course provides an emphasis on the writing process, language and vocabulary skills, and reading of various types of literature. Oral and written communication skills are emphasized. This course also helps students become more effective readers. Instruction is individualized to meet the needs of the student. This course does not count as a credit toward the Standard Diploma.

Language Arts 11 151723
Credit: 1
Grade: 11
Prerequisite: Language Arts 10

This course provides an emphasis on the writing process, language and vocabulary skills, and reading of various types of literature. Oral and written communication skills are emphasized. This course also helps students become more effective readers. Instruction is individualized to meet

the needs of the student. This course does not count as a credit toward the Standard Diploma.

Language Arts 12 151733
Credit: 1
Grade: 12
Prerequisite: Language Arts 11

This course provides an emphasis on the writing process, language and vocabulary skills, and reading of various types of literature. Oral and written communication skills are emphasized. This course also helps students become more effective readers. Instruction is individualized to meet the needs of the student. This course does not count as a credit toward the Standard Diploma.

Mathematics 9 320003
Credit: 1
Grade: 9
Prerequisite: None

This course focuses on instruction in basic computational skills (addition, subtraction, multiplication, division) of whole numbers, decimals, and fractions. Students will apply basic math skills to consumer issues they will deal with in real life such as taxes and personal/family budget. Instruction will be individualized to meet the needs of the student. This course does not count as a credit toward the Standard Diploma.

Mathematics 10 320013
Credit: 1
Grade: 10
Prerequisite: Mathematics 9

This course focuses on instruction in basic computational skills (addition, subtraction, multiplication, division) of whole numbers, decimals, and fractions. Students will apply basic math skills to consumer issues they will deal with in real life such as taxes and personal/family budget. Instruction will be individualized to meet the needs of the student. This course does not count as a credit toward the Standard Diploma.

Mathematics 11 320023
Credit: 1
Grade: 11
Prerequisite: Mathematics 10

This course focuses on instruction in basic computational skills (addition, subtraction, multiplication, division) of whole numbers, decimals, and fractions. Students will apply basic math skills to consumer issues they will deal with in real life such as taxes and personal/family budget. Instruction will be individualized to meet the needs of the

student. This course does not count as a credit toward the Standard Diploma.

Mathematics 12 320033

Credit: 1
Grade: 12
Prerequisite: Mathematics 11

This course focuses on instruction in basic computational skills (addition, subtraction, multiplication, division) of whole numbers, decimals, and fractions. Students will apply basic math skills to consumer issues they will deal with in real life such as taxes and personal/family budget. Instruction will be individualized to meet the needs of the student. This course does not count as a credit toward the Standard Diploma.

Informal Algebra 313303

Credit: 1 313333
Grade: 9-12
Prerequisite: None

In this academic support course students use algebraic methods to solve problems related to everyday life. Students practice needed basics (such as fractions and decimals) and use integers, formulas, equations, proportions, and graphs as they relate to real-world applications and data analysis. Students also employ technology (particularly calculators) as they study these topics. This course counts as one elective credit.

Personal Living & Finance 312033

Credit: 1
Grade: 10-12
Prerequisite: None

Students apply basic math skills to consumer issues they will deal with in life such as taxes, personal/family budget, managing debt, comparing savings options, and identifying 78 consumer rights and responsibilities. Students will also learn the 21 Workplace Readiness Skills (WRS) for the Commonwealth and take the WRS for the Commonwealth Assessment. Upon passing the WRS assessment, the student would satisfy the graduation requirements for an industry credential and economics and personal finance. This course is strictly for students who have demonstrated a need through their IEP process for a credit accommodation for Economics and Personal Finance (6120 CTE). This Course also meets virtual course requirements for graduation with online course components.

Science 9 461703

Credit: 1
Grade: 9-12
Prerequisite: None

This course provides some of the basic principles of earth science, biology, and ecology. Students experience these disciplines through hands-on laboratory work, field work, computer simulations, and multi-media presentations. Emphasis is placed on how science affects daily living. This course does not count as credit toward the Standard Diploma.

Science 10 461713

Credit: 1
Grade: 10
Prerequisite: Science 9

This course provides some of the basic principles of earth science, biology, and ecology. Students experience these disciplines through hands-on laboratory work, field work, computer simulations, and multi-media presentations. Emphasis is placed on how science affects daily living. This course does not count as credit toward the Standard Diploma.

Science 11 461723

Credit: 1
Grade: 11
Prerequisite: Science 10

This course provides some of the basic principles of earth science, biology, and ecology. Students experience these disciplines through hands-on laboratory work, field work, computer simulations, and multi-media presentations. Emphasis is placed on how science affects daily living. This course does not count as credit toward the Standard Diploma.

Science 12 461733

Credit: 1
Grade: 12
Prerequisite: Science 11

This course provides some of the basic principles of earth science, biology, and ecology. Students experience these disciplines through hands-on laboratory work, field work, computer simulations, and multi-media presentations. Emphasis is placed on how science affects daily living. This course does not count as credit toward the Standard Diploma.

Social Studies 9

299703

Credit: 1

Grade: 9

Prerequisite: None

This course investigates past and present human societies and civilizations and provides a brief study of the history of the United States. Students study important events and people of the state of Virginia as well as the United States. Emphasis is placed on the responsibilities of citizenship, the relationship of individuals and government to the role of law, and the role of Virginia and the United States in the global community. This course does not count as credit toward the Standard Diploma.

Social Studies 10

299713

Credit: 1

Grade: 10-12

Prerequisite: Social Studies 9

This course investigates past and present human societies and civilizations and provides a brief study of the history of the United States. Students study important events and people of the state of Virginia as well as the United States. Emphasis is placed on the responsibilities of citizenship, the relationship of individuals and government to the role of law, and the role of Virginia and the United States in the global community. This course does not count as credit toward the Standard Diploma.

Social Studies 11

299723

Credit: 1

Grade: 11

Prerequisite: Social Studies 10

This course investigates past and present human societies and civilizations and provides a brief study of the history of the United States. Students study important events and people of the state of Virginia as well as the United States. Emphasis is placed on the responsibilities of citizenship, the relationship of individuals and government to the role of law, and the role of Virginia and the United States in the global community. This course does not count as credit toward the Standard Diploma.

Social Studies 12

299733

Credit: 1

Grade: 12

Prerequisite: Social Studies 11

This course investigates past and present human societies and civilizations and provides a brief study of the history of the United States. Students study important events and people of the state of Virginia as well as the United States. Emphasis is placed on the responsibilities of citizenship, the relationship of individuals and government to the role of

law, and the role of Virginia and the United States in the global community. This course does not count as credit toward the Standard Diploma.

Pre-Vocational Skills Level I

789803

Credit: 1

Grade: 9-12

Prerequisite: None

Students investigate daily living skills, personal-social skills and occupational fields within the classroom setting. They examine occupational requirements, explore career pathways, conduct a job search, learn interview skills, and demonstrate positive work traits and attitudes. This course is designed for students who plan to enter the work force after high school. This course does not count as a credit toward the Standard Diploma.

Pre-Vocational Skills Level II

789823

Credit: 2

Grade: 10-12

Prerequisite: IEP Recommendation, completion of Employment Training Level I or II or demonstrated mastery of competencies from Level I or II.

Students participate in a work setting while continuing with their employment training, which is supervised or monitored by school staff during the school day, and may rotate jobs in order to receive a sampling of different job types and work opportunities. The student receives additional classroom instruction when needed. Transportation during the school day is arranged by the school system. This course is recommended for students who require direct supervision. This course does not count as a credit toward a Standard Diploma.

Pre-Vocational Skills Level III

789833

Credit: 2

Grade: 10-12

Prerequisite: IEP Recommendation, completion of Employment Training Level I or II or demonstrated mastery of competencies from Level I or II

Students participate in a work setting while continuing with their employment training, which is supervised or monitored by school staff during the school day, and may rotate jobs in order to receive a sampling of different job types and work opportunities. The student receives additional classroom instruction when needed. Transportation during the school day is arranged by the school system. This course is recommended for students who require direct supervision. This course does not count as a credit toward a Standard Diploma.

Academic Enhancement I 786884

Credit: 1

Grade: 9-10

Prerequisite: None

This course focuses on the improvement of executive functions for ninth and tenth graders. The Executive Functions curriculum is designed to help students plan, organize, make decisions, pay attention, regulate behavior, solve problems, and evaluate decisions. Time management strategies, assessing strengths, goal setting, and study skills are highlighted. The focus of Academic Enhancement is to support students taking collaborative classes and to support those transitioning to High School. Outcomes include improved performance in class and testing achievement. The class also helps provide homework support and extra content area skill practice for students with IEP's who are striving to succeed in academic core classes.

emphasized in real-life activities. Communication skills are developed as well as interpersonal relationships. Instruction will be individualized to meet the needs of the student. This course does not count as credit toward the Standard Standard Diploma.

Academic Enhancement II 786886

Credit: 1

Grade: 11-12

Prerequisite: Academic Enhancement I

This course offers remedial support to eleventh and twelfth grade students preparing for graduation. The support is individually tailored for student needs. It includes remediation for eleventh and twelfth grade students who are required to retake SOL tests in order to graduate with a standard diploma. There is also VMAST preparation and support for students struggling to pass required courses and tests. This class includes an emphasis on test taking strategies, study skills, work completion, and assistance with writing papers. In extenuating circumstances, this course may be approved to serve as a sequential elective as demonstrated by a student's need.

Individualized Reading I 118413

Credit: 1

Grade: 9-12

Prerequisite: None

This course is designed to help students become more effective readers through individually designed reading programs. The course of study is based on each student's individual needs, goals, and interests. Students read a variety of fiction and nonfiction materials. Emphasis is placed on comprehension, vocabulary development, and study skills.

Individualized Reading II 118513

Credit: 1

Grade: 9-12

Prerequisite: None

This course is a continuation of Individualized Reading I and is designed to help students become more effective readers.

Human Relations 780803

Credit: 1

Grade: 9-12

Prerequisite: None

Students participate in an activity-based class to achieve four competencies: increasing self-esteem, improving personal power, learning communication skills, and practicing goal-setting. Specific ways of coping with frustrating and/or stressful situations are included.

Independent Living Skills 789613

Credit: 1

Grade: 9-12

Prerequisite: None

Students earn basic cooking and housekeeping skills as well as techniques to cope with daily life situations. Application of reading, writing, and math skills will be

WORLD LANGUAGE



Course Sequencing in World Language

Students enrolled in a Level I world language course are strongly encouraged to enroll in Level II the following term.

Board of Education Seal of Bi-literacy

Students who attain a high level of proficiency in one or more languages in addition to English may be eligible for the Board of Education Seal of Bi-literacy. See page 10 for further information about this new seal.

Special Note for Native or Heritage Speakers

A student who is a native or heritage speaker of a language other than English may receive up to two world languages by demonstrating a minimum proficiency level of novice high in all four language domains as determined by a proficiency assessment administered by the school division. The student may then be placed in a level II or III language course to complete the series of three world language credits required for the Advanced Studies and Advanced Technical Diplomas.

Special Note for ESL Students

ESL students may earn up to two world language credits by successfully completing ESL Content Support in English, ESL Content Support in History and Social Science, ESL Resource, ESL content support in Mathematics and/or ESL Reading.

Arabic I 501005

Credit: 1
Grade: 9-12
Prerequisite: None

This course is designed to give students an introduction to the target language and culture through a comprehensive approach designed to develop the fundamental communication skills of listening, speaking, reading, and writing. Students will explore traditions, dress, food, holidays and customs in Arabic-speaking countries and compare Arabic cultures with their own environment.

Arabic II 502005

Credit: 1
Grade: 9-12
Prerequisite: Grade of C or better in Arabic I

Students continue to develop their communicative competence by interacting orally and in writing with other Arabic learners and speakers. This course is a continuation of Arabic I with a focus on communicating about students' immediate world and daily activities. Students will read material on familiar topics and write short, directed compositions. Emphasis will be placed on the use of authentic materials to learn about Arabic culture.

Arabic III 503005

Credit: 1
Grade: 10-12
Prerequisite: Grade of C or better in Arabic II

In this course, students continue to develop their communicative competence by interacting orally and in writing with other Arabic learners and speakers, understanding Arabic oral and written messages, and making oral and written presentations in Arabic. They will begin to show a greater level of accuracy when using basic language structures, and they are exposed to more complex features of the language. They will continue to focus on communicating about their immediate world and daily activities. Students will read material on familiar topics and write short, directed compositions. The emphasis will continue to be placed on the use of authentic materials to learn about the Arabic culture.

Arabic IV 504095

Credit: 1
Grade: 10-12
Prerequisite: Grade of C or better in Arabic III

Students in Arabic IV experience, discuss, and analyze stories, poetry, music, paintings, dance and drama in the target language including selections from various literacy genres. Reading and writing for specific purposes enhances the development of language skills.

French I 511005

Credit: 1
Grade: 9-12
Prerequisite: None

French I is designed to give students an introduction to the target language and culture through a comprehensive approach designed to develop the fundamental communication skills of listening, speaking, reading, and writing. Students will explore traditions, dress, food, holidays and customs in French-speaking countries and compare French cultures with their own environment.

French II 512005

Credit: 1

Grade: 9-12

Prerequisite: Grade of C or better in French I

French II is a continuation of the communication skills established in Level I with a focus on the larger cultural/linguistic community, geography, and description of past events. In addition, Level II includes more complex grammatical structures and increased vocabulary development through conversation and dialogues in the target language.

French III 513005

Credit: 1

Grade: 9-12

Prerequisite: Grade of C or better in French II

French III is an expansion of the fundamentals learned in Levels I and II of the target language. Emphasis is placed on fluency through discourse in contemporary social issues. Students further explore the geography and culture of countries where the language is spoken. Students research topics of interest and prepare oral and written reports and projects in the target language.

French IV 514007

Credit: 1

DE

Grade: 10-12

Prerequisite: Grade of C or better in French III

This is the equivalent of a college-level course in French conversation and composition. The goal of the course is to use core topics to refine students' listening and speaking skills, and improve their reading comprehension, grammar and composition through interpersonal, interpretive, and presentational communication. It is designed to provide high school students with a rigorous collegiate experience in the study of French. It incorporates the communicative skills identified by the College Board and selected readings from the AP French Literature reading list to prepare students wishing to enroll in the AP/DE course of studies. Students who successfully complete the class may earn three college credits. Students who do not pay the DE tuition charge will only receive high school credit.

French Language AP 517018

Credit: 1

AP**DE**

Grade: 11-12

Prerequisite: Grade of C or better in French IV (DE)

AP French Language Dual Enrollment (DE) is the equivalent of a more advanced college-level French language course. It is designed to provide high school students with a rigorous collegiate experience in the study of French. It incorporates the communicative skills identified by the

College Board and selected readings from the AP French Literature reading list to prepare students for successful completion of the AP French Language Exam. Students may be asked to prepare by completing pre-course assignments. Students who successfully complete this class may earn three college credits. Students who do not pay the DE tuition charge will only receive high school credit.

Advanced French Literature and Culture 510505

Credit: 1

Grade: 10-12

Prerequisite: Successful completion of French III

Students in Advanced French Literature and Culture will engage in a variety of language activities that further reinforce French language acquisition. Students experience, discuss, and analyze expressive products of culture including music, dance, drama, and selections from various literary genres. Reading and writing for specific purposes will also continue development of language skills. Note: This course is not sequential and may be taken at any time following French III. Students are strongly advised to take this course before the French Language Advanced Placement course.

German I 521005

Credit: 1

Grade: 9-12

Prerequisite: None

German I is designed to give students an introduction to the target language and culture through a comprehensive approach designed to develop the fundamental communication skills of listening, speaking, reading and writing. Students will explore traditions, dress, food, holidays and customs in German-speaking countries and compare German cultures with their own environment.

German II 522005

Credit: 1

Grade: 9-12

Prerequisite: Grade of C or better in German I

German II is a continuation of the communication skills established in Level I with a focus on the larger cultural/linguistic community, geography, and description of past events. In addition, Level II includes more complex grammatical structures and increased vocabulary development through conversation and dialogues in the target language.

German III 523005

Credit: 1

Grade: 10-12

Prerequisite: Grade of C or better in German II

German III is an expansion of the fundamentals learned in Levels I and II of the target language. Emphasis is placed on fluency through discourse in contemporary social issues. Students further explore the geography and culture of countries where the language is spoken. Students research topics of interest and prepare oral and written reports and projects in the target language.

German IV **524005**

Credit: 1

Grade: 10-12

Prerequisite: Grade of C or better in German III

Students in German IV experience, discuss, and analyze stories, poetry, music, paintings, dance, and drama in the target language including selections from various literary genres. Reading and writing for specific purposes enhances the development of language skills. Students are strongly advised to take the Level IV course before taking an Advanced Placement foreign language course.

German Language AP **527008**

Credit: 1 **AP**

Grade: 11-12

Prerequisite: Grade of C or better in German IV

The purpose of this course is to prepare students for the Advanced Placement German Language exam. All previous foreign language coursework is incorporated to provide a comprehensive language base for successful completion of the AP Language exam.

Latin I **531005**

Credit: 1

Grade: 9-12

Prerequisite: None

In Latin I students will focus on reading Latin. Since Latin is primarily a written language, this focus will continue through AP Latin. Latin grammar and vocabulary will be two main building blocks. English derivatives, reading skills, and basic translation skills will contribute as well. In addition to the Latin language study, Latin I students will learn about Roman life and culture with particular attention to daily life in Pompeii, Alexandria, and Roman Britain, as well as travel, slavery, mythology, and ancient geography.

Latin II **532005**

Credit: 1

Grade: 9-12

Prerequisite: Grade of C or better in Latin I

In Latin II, students will continue to develop reading and translation skills in pursuit of the program goal of reading Latin. Latin II continues the grammar and vocabulary

development of Latin I with an emphasis on new verb tenses and voices. Students will expand their knowledge of Roman life and culture through the study of travel, city life, food, entertainment, history, and government.

Latin III **533005**

Credit: 1

Grade: 10-12

Prerequisite: Grade of C or better in Latin II

Latin grammar and vocabulary study continues in Latin III, with the inclusion of the last major verb mood and a variety of subordinate clauses. The focus shifts increasingly to reading for content over reading for skill as students approach the goal of reading Latin. Gladiators and games, weddings and funerals, religion, politics, and the Roman military are parts of Roman life and culture studied in this class.

Latin IV **534005**

Credit: 1

DE

Grade: 10-12

Prerequisite: Grade of C or better in Latin III

This course focuses on the reading of Latin literature. The advanced grammar and vocabulary included in it will help students to read, translate and analyze prose and poetry by a variety of Latin authors, such as Pliny the Younger, Cicero, Vergil, Caesar, Ovid, Catullus, Martial, Plautus and Horace. Students will develop a deeper understanding of the individual readings and of Romans in general through these authors' works.

Latin AP Vergil/Caesar **537008**

Credit: 1

AP

DE

Grade: 11-12

Prerequisite: Grade of C or better in Latin IV

Students will prepare for the AP Vergil exam by reading the complete Aeneid in English and translating the Latin excerpts required by the Advanced Placement Syllabus. Their comprehension of Roman poetry will broaden and deepen as this course focuses on Vergil's epic poem. Roman history, culture, religion, and mythology will also be used to supplement understanding of this poem. Oral and written analysis will also be required as preparation for the AP Vergil exam.

Spanish for Fluent Speakers **551105**

Credit: 1

Grade: 9-12

Prerequisite: None

This course is designed specifically for native or heritage speakers of Spanish with oral proficiency but little or no formal training in the language. The course is designed to

build on the language skills students already possess. The focus of the course is to develop reading and writing skills, although all of four language domains of listening, speaking, reading, and writing will be included. This course will count for a world language credit and students are encouraged to go on to take Spanish IV DE and Spanish AP as appropriate for the Advanced Studies diploma requirement.

Spanish I **551005**

Credit: 1
Grade: 9-12
Prerequisite: None

Spanish I is designed to give students an introduction to the target language and culture through a comprehensive approach designed to develop the fundamental communication skills of listening, speaking, reading, and writing. Students will explore traditions, dress, food, holidays, and customs in Spanish-speaking countries and compare Spanish cultures with their own environment.

Spanish II **552005**

Credit: 1
Grade: 9-12
Prerequisite: Grade of C or better in Spanish I

Spanish II is a continuation of the communication skills established in Level I with a focus on the larger cultural/linguistic community, geography, and description of past events. In addition, Level II includes more complex grammatical structures and increased vocabulary development through conversation and dialogues in the target language.

Spanish III **553005**

Credit: 1
Grade: 9-12
Prerequisite: Grade of C or better in Spanish II

Spanish III is an expansion of the fundamentals learned in Levels I and II of the target language. Emphasis is placed on fluency through discourse in contemporary social issues. Students further explore the geography and culture of countries where the language is spoken. Students research topics of interest and prepare oral and written reports and projects in the target language.

Spanish IV **554007**

Credit: 1 **DE**
Grade: 10-12
Prerequisite: Grade of C or better Spanish III

This is the equivalent of a college-level course in Spanish conversation and composition. The goal of the course is to

use core topics to refine students' listening and speaking skills, and improve their reading comprehension, grammar and composition through interpersonal, interpretive, and presentational communication. It is designed to provide high school students with a rigorous collegiate experience in the study of Spanish. It incorporates the communicative skills identified by the College Board and selected readings from the AP Spanish Literature reading list to prepare students wishing to enroll in the AP/DE course of studies. Students who successfully complete the class may earn three college credits. Students who do not pay the DE tuition charge will only receive high school credit.

Spanish Language AP **557018**

Credit: 1 **AP DE**
Grade: 11-12
Prerequisite: Grade of C or better in Spanish IV (DE)

AP Spanish Language Dual Enrollment (DE) is the equivalent of a more advanced college-level Spanish language course. It is designed to provide high school students with a rigorous collegiate experience in the study of Spanish. It incorporates the communicative skills identified by the College Board and selected readings from the AP Spanish Literature reading list to prepare students for successful completion of the AP Spanish Language Exam. Students may be asked to prepare by completing pre-course assignments. Students who successfully complete the class may earn three college credits. Students who do not pay the DE tuition charge will only receive high school credit

Spanish Literature AP **558008**

Credit: 1 **AP DE**
Grade: 11-12
Prerequisite: Grade of C or better in Spanish IV (DE)

The purpose of this course is to prepare students for the Advanced Placement Spanish Literature exam. Students study literature written by authors recommended by the College Board. Students may be asked to prepare by completing pre-course assignments. They present written and oral literary analyses in preparation for the Advanced Placement Literature exam.

Turkish I **599905**

Credit: 1
Grade: 9-12
Prerequisite: None

This course is designed to give students an introduction to the target language and culture through a comprehensive approach designed to develop the fundamental communication skills of listening, speaking, reading, and writing. Students will explore traditions, dress, food, holidays and customs in the Turkish-speaking world and compare Turkish culture with their own environment. This

course will be offered at LHS in 2021-2022 if staffing/funding permits.

American Sign Language I and II. Students must pay the LFCC tuition fee for this course.

Turkish II **599915**

Credit: 1

Grade: 9-12

Prerequisite: Grade of C or better in Turkish I

Students continue to develop their communicative competence by interacting orally and in writing with other Turkish learners and speakers. This course is a continuation of Turkish I with a focus on communicating about students' immediate world and daily activities. Students will read material on familiar topics and write short, directed, compositions. Emphasis will be placed on the use of authentic materials to learn about Turkish culture. This course will be offered only at LHS in 2021-2022 if staffing/funding permits.

American Sign Language I **599005**

Credit: 1

DE

Grade 9-12

Prerequisite: None

Introduces the fundamentals of American Sign Language (ASL) used by the Deaf Community, including basic vocabulary, syntax, finger spelling and grammatical non-manual signals. In addition, instruction focuses on communicative competence, developing gestural skills as a foundation for ASL enhancement, and introducing cultural knowledge and increasing understanding of the Deaf Community. American Sign Language I is a year-long course. **Note: If offered based on staffing and funding, American Sign Language II, will also be a yearlong course.** Students wishing to complete the world language requirements for the Advanced Studies diploma would need to take two years of another world language in addition to American Sign Language I and II. Students must pass the placement test to be dually enrolled with LFCC and also pay the LFCC tuition fee.

American Sign Language II **599505**

Credit: 1

DE

Grade 9-12

Prerequisite: American Sign Language I

Develops vocabulary, conversational competence and grammatical knowledge as well as introducing increasingly complex grammatical aspects, including those unique to ASL. Students will also discuss culture and literature. Contact with the deaf community is encouraged to enhance linguistic and cultural knowledge. American Sign Language II, if offered during the 2021-2022 school year (based on staffing and funding) will be a yearlong course. **Note:** Students wishing to complete the world language requirements for the Advanced Studies diploma will need to take two years of another world language in addition to

ADDITIONAL COURSES

Teachers for Tomorrow I Teachers for Tomorrow II

011815
011825

Credit: 1

Grade: 11-12

Prerequisite: None for Teachers for Tomorrow I

Teachers for Tomorrow I is the prerequisite for Teachers for Tomorrow II.

Teachers for Tomorrow is offered to Juniors and Seniors interested in pursuing a career in education. The program is designed to create a high school curricular experience designed to foster student interest, understanding, and appreciation of the teaching profession through exposure to a world-class curriculum and hands-on experience that focuses on teaching. Students in this class will complete a three-week field experience allowing them to be fully immersed in a real classroom experience.

Freshman Seminar

012845

Credit: 1

Grade: 9

Prerequisite: None

This academic support course promotes a positive attitude toward school; prepares students for success in school; links students' daily learning to future goals; encourages life-long learning and the practice of social and civic responsibility. The interdisciplinary seminar is taught by teachers from the core areas of English, history and social science, mathematics, and science. It consists of in-depth lessons that use a variety of both innovative and traditional teaching techniques, including long-term projects, cooperative learning activities, and technology. Enrollment has traditionally been limited to students in the Freshman Transition Program.

Academic Coaching

011145

Credit: 1

Grade: 10-12

Prerequisite: None

The purpose of this academic support course is to teach students how to work strategically in multiple content areas. Students learn how to apply organizational, learning, studying, and time management strategies so that they are prepared for classes, ready to take tests, and are able to successfully meet project and assignment deadlines. This course is recommended for a variety of students including student-athletes who need help scheduling and completing homework and class projects, first-time AP students who need assistance managing the demands of rigorous reading and homework assignments, students which have part-time jobs or any student who needs support in organizing, scheduling, and keeping up with their academic responsibilities.

Liberty High School Innovation Grant Pilot Courses

Empower: Open Source Learning 982645

Credit: 1
Grade: 11-12
Prerequisite: None

This course is designed for students to work on projects that interest them to gain skills and knowledge in that particular area. In this course, students will use a variety of resources to learn how to do most anything that interests them. This course gives students a collaborative and creative place to explore and develop skills in an area he/she is interested in (for example, financial management, web design, IT help desk, nutritional wellness, even production, video production, machine tooling, 3D printing, coding, fashion design and repair, etc.) Students will work with community organizations to utilize their skills in a professional way, problem solve and be project based.

Health and PE Fitness Instructor 750005

Credit: 1
Grade: 11-12
Prerequisite: Life Fitness I

This elective course is designed for students who have an interest in pursuing a career in the health and fitness field, specifically through personal training. Upon successful completion of this National Academy of Sports Medicine (NASM) course and passing an off-site industry exam, students have an opportunity to earn a fitness industry credential. The Certified Personal Training credential will allow students to enter the high-demand market of personal training; which is a potential pathway to other careers in fitness such as athletic training, sports medicine, and physical therapy.

Unified PE 982605

Credit: 1
Grade: 9-12
Prerequisite: With Teacher Recommendation

This course is designed for students to experience a variety of activities in physical education, especially those which require teamwork and cooperation. Warm-up stretches, cardio-exercises, and group games are part of the routine. The curriculum is modified to meet the skill sets of the students with disabilities. Other students will participate as mentors for students with disabilities and these experiences will build skills and techniques for working with different populations and help develop leadership skills.

The Senior Experience

116055

Credit: 1
Grade: 12
Prerequisite: English 11

The Senior Experience will offer students a way to “pave their own path” within the English curriculum and standards. Each student, based on their pathway post high school graduation, will propose and tailor their Senior Experience course to fit their needs to be life ready. Students would be required to submit a proposal for approval, apply for and attain either an internship or shadowing opportunity to use as research and reflection, and submit a product addressing each of the Standards of Learning for the English 12 curriculum.

Global Studies

299645

Credit: 2
Grade: 9 SOL
Prerequisite: None

Global Studies is a one-semester survey of World History from Pre-History to the present. This course incorporates the big ideas from both World History I and World History II curricula. This broad approach to World History features the biggest turning points in history while helping students develop their reading, writing, research, technology and public speaking skills. Course content will focus on the causes and effects of the biggest events in human history. This includes the rise of civilization, the development of world religions, global exploration, imperialism and responses to imperialism, industrialization, and the clashing of ideologies in the 20th Century.

Essential Concepts in Algebra and Geometry 319925

Credit: 2
Grade: 9-12 SOL
Prerequisite: None

This year-long course will combine Algebra I and Geometry to provide a more cohesive development of algebraic and geometric skills and concepts. This course will allow students to build their reasoning and sense-making skills; along with focus on the most critical concepts from content and provide students with a deeper understanding of remembering specific techniques that apply to formulas. Students will work to develop a positive math identity which will include feeling empowered by math and as doers of math, seeing multiple purposes for learning math, appreciating why math is important in their lives, and coming to believe they can succeed in math. Students will finish this course with a student-designed portfolio.

Unified Music**921405**

Credit: 1
 Grade: 9-12
 Prerequisite: None

Unified Music is designed for students to experience a wide variety of musical topics, especially those which require teamwork and cooperation. Students learn topics in music appreciation, basic singing technique, music literacy skills, and participate in music and movement activities. Students perform concerts at school and sing in the community when invited. The curriculum is modified to meet the skill sets of students with disabilities. Students without disabilities will participate as mentors for students with disabilities: experiences will give them skills and techniques for working with different populations and help them develop leadership skills.

Peer Tutoring I**980715**

Credit: 1
 Grade: 10-12
 Prerequisite: None

Students enrolled in Peer Tutoring I are responsible for operating the schools peer tutoring center. They will learn a variety of pedagogical approaches and practice leadership skills that will serve them in their future professions. In addition to tutoring, students will strengthen their own knowledge in areas such as study habits, resume writing, and research skills. Students will tutor in the peer tutoring center itself as well as have opportunities to be “hired” by individual teachers to work with classes.

Peer Tutoring II**980725**

Credit: 1
 Grade: 10-12
 Prerequisite: Peer Tutoring I

Students in Peer Tutoring II apply the knowledge they gained in Peer Tutoring I to take on an enhanced leadership role in the peer tutoring center. They will contribute to managing center operations, mentoring new tutors, and heightening school-wide academic achievement. They will make at least one significant contribution to the wider peer tutoring community; for example, by presenting at a conference or publishing a scholarly article.

Peer Tutoring III**980735**

Credit: 1
 Grade: 10-12
 Prerequisite: Peer Tutoring II

Building on the leadership skills they established in Peer Tutoring II, tutors in Peer Tutoring III apprentice with a sponsor teacher for the duration of the school year, engaging in a deep study of the educators approach to instruction in his or her academic field. These seniors will also work with a consistent group of clients on an ongoing basis. They will report on their learning via regular reflection logs, and both create a portfolio of their learning across their three years as a tutor, and innovate a permanent learning tool for the benefit of the school.

Student Run Help Desk**011805**

Credit: 1
 Grade: 10-12
 Prerequisite: None

This elective course is designed for students who have an interest in technology, are tech-savvy, and want real work experience like working at an “Apple Genius Bar”. LHS Help Desk curriculum strives to give students real world learning opportunities through providing technology support and developing an individual learning endeavor (ILE). You will be the Tech Help Desk for your peers and teachers at Liberty High School.

Data Science**319945**

Credit: 1
 Grade: 10-12
 Prerequisite: Algebra 1

This course will introduce students to the main ideas in data science through free tools such as Google Sheets, Python, Data Commons, and Tableau. Students will learn to be data explorers in project-based units, through which they will develop their understanding of data analysis, sampling, correlation/causation, bias and uncertainty, probability, modeling with data, making and evaluating data-based arguments, the power of data in society, and more! At the end of this course students will have a portfolio of their data science work to showcase their newly developed abilities. The curriculum will be adaptable so that teachers can bring in datasets or use what is provided to find data sets most relevant to their students.

Medical Assistant I 011855

Credit: 1

Grade: 11-12

Prerequisite: Intro to Health and Medical Sciences

This course is designed for students who have an interest in pursuing a career in the medical field. This is part one of two courses. Medical Assistant I allows students to develop entry-level skills and techniques to increase their knowledge base so they may enter the health care field. Some of these skills and knowledge base areas include administrative and clinical medical assisting. Students gain foundational knowledge in basic anatomy and physiology, medical ethics, medical asepsis, terminology, medical mathematics, and legal responsibilities. Additionally, students explore medical assisting career pathways through Health Occupations Student Association (HOSA) and potential on-the-job clinical instruction and/or observation in a healthcare facility.

Medical Assistant II 011865

Credit: 1

Grade: 11-12

Prerequisite: Intro to Health and Medical Sciences

This course is designed for students who have an interest in pursuing a career in the medical field. This is the second part of a two-part course. Students further develop medical-assisting skills and techniques skills and techniques learned in Medical Assistant I. They learn management of patient records, cardiopulmonary resuscitation, care and use of equipment, collection and analysis of laboratory specimens, special diagnostic testing, basic diseases and disorders, basic knowledge of treatment and medication. In addition, they will acquire job preparedness skills. Additionally, students explore medical assisting career pathways through Health Occupations Student Association (HOSA) and potential on-the-job clinical instruction and/or observation in a healthcare facility. Students will take the NOCTI assessment will have the option to take the Certified Medical Assistant (AAMA) certification at the end of the course.

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