

2024-2025 Program of Studies



**Stafford County
Public Schools**

Inspire | Empower | Excel

#ELEVATESTAFFORD



Dear Stafford County Families,

Welcome to Stafford County Public Schools, where we Inspire and Empower every student so that they are Prepared to Excel. Our work together as parents, guardians, educators, administrators, and business partners helps ensure that students are receiving an innovative education that truly prepares them for life after high school.

The information in the following pages provides connections between classes offered in our schools and community industries, helping our students create a roadmap to graduation. Our curriculum aligns with the Virginia Board of Education's rigorous instructional Standards of Learning (SOL) by refining and strengthening core skills, concepts, and knowledge in English, mathematics, science, and history. All Stafford Schools courses reflect the state SOL. In addition, all students must meet the state graduation requirements included in this program of studies.

This year, we have also enhanced our Program of Studies to expand high school career & technical offerings, announce the launch of Specialty Centers at each of our high schools, and refocus middle school programs on developing our students socially and academically. The aim of these changes are to engage our students in exciting new opportunities and to better prepare them for life after high school.

Our 2024-2025 Program of Studies provides a listing of available course offerings (required and elective) and suggested sequencing. Students should discuss course selections with their school counselor and parent/guardian(s).

I look forward to partnering with you on your child's journey to success.

Sincerely,

A handwritten signature in black ink that reads "Thomas W. Taylor".

Thomas W. Taylor, Ed.D., M.B.A
Superintendent

School Board Members

Ms. Susan Randall, Chair
George Washington District

Ms. Patricia Healy, Vice-Chair
Rock Hill District

Ms. Maya Guy
Aquia District

Dr. Sarah Chase

Falmouth District

Ms. Maureen Siegmund
Garrisonville District

Dr. Elizabeth Warner
Griffis-Widewater District

Ms. Alyssa Halstead
Hartwood District

Vision

Prepared to Excel

Mission

Inspire and empower every student.

Values

Students, Integrity, Respect, Community, Opportunity, Excellence

Goals

Goal 1	Goal 2	Goal 3	Goal 4
Ensure meaningful post-secondary outcomes for every student, prepared for life after graduation.	Support high expectations for academic performance and expand opportunities for every student.	Ensure every student, staff, and family member receives a safe, engaging, and welcoming environment in our schools.	Support and invest in all staff.

C5W for ALL CENTURY LEARNERS



What skills should a graduate from Stafford School have?

Communication

All Century Learners express and exchange our thoughts and ideas effectively using oral, written, and nonverbal communication skills in a variety of contexts. We engage in discussion and debate, ask thoughtful, respectful questions, and listen actively to others.

Collaboration

All Century Learners engage positively with others to achieve common goals. We actively participate in this process through deliberation, encouragement, flexibility, reflection, responding to constructive criticism, and honoring the strengths in others and in ourselves.

Critical Thinking

All Century Learners engage in inquiry, experimentation, and problem solving. We research and use credible sources and methods to evaluate, justify our thinking, and develop solutions for real world challenges.

Creativity

All Century Learners develop and use inventive and imaginative processes to construct innovative ideas and original work. We consider issues from a variety of perspectives and look for solutions that demonstrate improvement, new understandings, and divergent thinking.

Citizenship

All Century Learners strive to make a positive impact in our community and the world through acts of service and by demonstrating compassion, empathy, respect, and integrity. We celebrate diversity, honor our environment, and participate in our democracy.

Wellness

All Century Learners seek balance in a safe environment by attending to physical, emotional, and intellectual needs. We strive to be resilient and self-aware, and to make healthy, conscious choices in the best interest of ourselves and others.

Acknowledgements

Development of the 2024-2025 Program of Studies would not be possible without the experience, expertise, and collaboration among Stafford Schools central and school-based staff.

Editorial Notation

Technical and editorial changes to the Program of Studies may be authorized by the Superintendent.

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SCHOOL CONTACTS



Elementary School Contact Information

SCHOOL	PRINCIPAL	TELEPHONE
<u>Anne E. Moncure Elementary</u>	Greg Machi	(540) 658-6300
<u>Anthony Burns Elementary</u>	Caroline Goddard	(540) 658-6800
<u>Conway Elementary</u>	JR Raybold	(540) 361-1455
<u>Falmouth Elementary</u>	Sallie Burch	(540) 373-7458
<u>Ferry Farm Elementary</u>	Alissa Fraser	(540) 373-7366
<u>Garrisonville Elementary</u>	Alexis White	(540) 658-6260
<u>Grafton Village Elementary</u>	Michael Sidebotham	(540) 373-5454
<u>Hampton Oaks Elementary</u>	Susan Weiderhold	(540) 658-6280
<u>Hartwood Elementary</u>	Brian Raska	(540) 752-4441
<u>Kate Waller Barrett Elementary</u>	Rachel Novak	(540) 658-6464
<u>Margaret Brent Elementary</u>	Scott Elchenko	(540) 658-6790
<u>Park Ridge Elementary</u>	Keana Butler	(540) 658-6320
<u>Rockhill Elementary</u>	Terri Rivero	(540) 658-6360
<u>Rocky Run Elementary</u>	Nick Roman	(540) 286-1956
<u>Stafford Elementary</u>	Stefanie Sanders	(540) 658-6340
<u>Widewater Elementary</u>	Karen Bingham	(540) 658-6380
<u>Winding Creek Elementary</u>	Rebecca Wardlow	(540) 658-6400

Middle School Contact Information

SCHOOL	PRINCIPAL	TELEPHONE
A.G. Wright Middle	Carly Hegna	(540) 658-6240
Dixon-Smith Middle	Andrew Bathke	(540) 899-0860
Edward E. Drew Middle	Amy Ivory	(540) 371-1415
H.H. Poole Middle	Robert Bingham	(540) 658-6190
Rodney Thompson Middle	Mike Archambault	(540) 658-6420
Shirley C. Heim Middle	Matthew Hills	(540) 658-5910
Stafford Middle	Andrew Grider	(540) 658-6210
T. Benton Gayle Middle	Katie Werner	(540) 373-0383

High School Contact Information

SCHOOL	PRINCIPAL	TELEPHONE
Brooke Point High School	Joseph Murgo	(540) 658-6080
Colonial Forge High School	Gregory Daniel	(540) 658-6115
Mountain View High School	Stephanie Sullivan	(540) 658-6840
North Stafford High School	Dashan Turner	(540) 658-6150
Stafford High School	Chelsea Tryon	(540) 371-7200
Phoenix Center for Innovative Learning	William Boatwright	(540) 286-8985

TIER 1 7:30 A.M. - 2 P.M.		TIER 2 8:25 A.M. - 2:55 P.M.		TIER 3 9:20 A.M. - 3:50 P.M.		EARLY CHILDHOOD EDUCATION		
All High Schools:	1 Elementary School:	16 Elementary Schools:	KWBES	All Middle Schools:	RTMS	North Star:	Rising Star:	
	BPHS		RES		MBES			SHMS
	CFHS		Phoenix Center		MES			DSMS
	MVHS		CES		PRES	SMS		
	NSHS		FFES		RRES	TBGMS		
	SSHS		GES		SES	HHPMS		
		GVES	FES					
		HOES	WCES					
		HES	WES					
						Morning Half Day 7:37 - 10:45 a.m.	Morning Half Day 9:23 a.m.-12:30 p.m.	
						Afternoon Half Day 11 a.m. - 2:07 p.m.	Afternoon Half Day 12:45 - 3:52 p.m.	
						Whole Day 7:37 a.m. - 2:07 p.m.	Whole Day 9:23 a.m.-3:52 p.m.	

General Information



General Information

Graduation Requirements

The [graduation requirements](#) for students who entered the ninth grade for the first time in 2018-2019 and beyond are prescribed by the Virginia Board of Education in section [8VAC20-131-51](#) of the [Standards of Accreditation \(SOA\)](#). Students must meet the requirements that correspond to the year in which the student first entered ninth grade.

Students entering the ninth grade for the first time in the fall of 2018 and beyond will be required to satisfy graduation requirements for one of three diplomas: (1) a 22-credit Standard Diploma; (2) a 26-credit Advanced Studies Diploma; or (3) an Applied Studies Diploma. See the corresponding sections below for information regarding required standard and verified units of credit.

The Applied Studies Diploma is established for certain students who have a disability and who are not able to meet the credit requirements for a Standard Diploma. Student eligibility for this diploma is determined by the Individualized Education Plan (IEP) team, the student, and the parent/guardian(s). The Applied Studies Diploma is for students whose disabilities require a unique program of study.

Standard and Verified Units of Credit

A standard unit of credit is awarded for a successfully completed course. 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 SOL assessment or a substitute assessment approved by the Virginia Board of Education. Schools may award standard units of credit via waiver of the 140-clock-hour requirement based on criteria set forth in [Regulation 3609-R](#).

Standard Diploma Requirements

Course Area	9th Graders for the First Time in Fall of 2018 and Beyond	
	Standard Credits	Verified Credits
English	4	2
Mathematics ¹	3	1
Lab Science ^{2, 6} – Earth Science, Biology, one additional Science course	3	1
History ^{3, 6} – World History to 1500/World Geography or World History after 1500/World Geography, Virginia/United States History, and Virginia/United States Government	3	1
Health and Physical Education	2	
World Language, Visual and Performing Arts or Career & Technical Education ⁷	2	
Economics and Personal Finance	1	
Electives ⁴	4	
TOTAL	22	5

¹Courses completed to satisfy this requirement shall include at least two different course selections from among: Algebra I; Geometry; Algebra, Functions and Data Analysis; Algebra II or other mathematics courses above the level of Algebra II. The Board shall approve courses to satisfy this requirement. An approved [computer science](#) course credit earned by students may be considered a mathematics course credit.

²Courses completed to satisfy this requirement shall include course selections from at least two different science disciplines: earth sciences, biology, chemistry or physics or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board shall approve courses to satisfy this requirement. An approved [computer science](#) course credit earned by students may be considered a mathematics course credit.

³Courses completed to satisfy this requirement shall include US and Virginia History, US and Virginia Government, and one

course in either world history or geography or both. The Board shall approve courses to satisfy this requirement.

⁴Courses to satisfy this requirement shall include at least two sequential electives. More information is provided in the [Guidance Document Governing Certain Provisions of the SOA \(8VAC-20-131\)](#).

⁵Students may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics or other areas as prescribed by the Board in 8 VAC 20-131-110.

⁶Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for (1) the student selected verified credit and (2) either a science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the Board of Education as an additional test to verify student achievement.

⁷Pursuant to Section 22.1-253.13:4, *Code of Virginia*, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education. An approved [computer science](#) course credit earned by students may be considered a career and technical course credit.

Students seeking a Standard Diploma must also:

- complete an Advanced Placement (AP), Honors, Dual Enrollment (DE), International Baccalaureate (IB) course, high quality work-based learning experience, or a career and technical education credential approved by the Virginia Board of Education;
- successfully complete a virtual learning course. This course can be fully online or a blended online learning experience. In Stafford Schools, this requirement is satisfied through the Economics and Personal Finance curriculum in grades 10-12; and
- be trained in emergency first aid, cardiopulmonary resuscitation, and the use of an automated external defibrillator, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. In Stafford Schools, this requirement is included in the Health and Physical Education curriculum in grades 9 and 10.

Advanced Studies Diploma Requirements

Course Area	9th Graders for the First Time in Fall of 2018 and Beyond	
	Standard Credits	Verified Credits
English	4	2
Mathematics ¹	4	1
Lab Science ^{2, 6} – Four (4) courses from among three of these Lab Science areas: Earth Science, Biology, Chemistry, and Physics	4	1
History ^{3, 6} – World History to 1500/World Geography, World History after 1500/World Geography, Virginia/United States History, and Virginia/United States Government	4	1
Health and Physical Education	2	
World Languages (3 years of one language or 2 years each of two languages, 2+2 option)	3 (or 4)	
Economics and Personal Finance	1	
Electives ⁴	3 (or 2)	
Fine Arts or Career and Technical Education ⁷	1	
TOTAL	26	5

¹Courses completed to satisfy this requirement shall include at least three different course selections from among: Algebra I; Geometry; Algebra, Functions and Data Analysis; Algebra II or other mathematics courses above the level of Algebra II. The Board shall approve courses to satisfy this requirement. An approved [computer science](#) course credit earned by students may be considered a mathematics course credit.

²Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines: earth sciences, biology, chemistry or physics or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board shall approve courses to satisfy this requirement. An approved [computer science](#) course credit earned by students may be considered a mathematics course credit.

³Courses completed to satisfy this requirement shall include U.S. and Virginia history, U.S. and Virginia government, and two courses in either world history or geography or both. The Board shall approve courses to satisfy this requirement.

⁴Courses to satisfy this requirement shall include at least two sequential electives. More information is provided in the [Guidance Document Governing Certain Provisions of the SOA \(8VAC-20-131\)](#). A student's first three world language credits may not be used to meet the sequential requirements.

⁵Students may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics or other areas as prescribed by the Board in 8 VAC 20-131-110.

⁶Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for (1) the student selected verified credit and (2) either a science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the Board of Education as an additional test to verify student achievement.

⁷Pursuant to Section 22.1-253.13:4, *Code of Virginia*, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education. An approved [computer science](#) course credit earned by students may be considered a career and technical credit.

Students seeking an Advanced Studies Diploma must also:

- complete an Advanced Placement (AP), Honors, Dual Enrollment (DE), International Baccalaureate (IB) course, high quality work-based learning experience, or a career and technical education credential approved by the Virginia Board of Education;
- successfully complete a virtual learning course. This course can be fully online or a blended online learning experience. In Stafford Schools, this requirement is satisfied through the Economics and Personal Finance curriculum in grades 10-12; and
- be trained in emergency first aid, cardiopulmonary resuscitation, and the use of an automated external defibrillator, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. In Stafford Schools, this requirement is included in the Health and Physical Education curriculum in grades 9 and 10.

Work-Based Learning Requirement

Work-Based Learning (WBL) consists of school-coordinated workplace experiences that are related to each student's career goals and/or interests, are integrated with instruction, and are performed in partnership with local businesses and organizations. WBL experiences enable students to apply classroom instruction in a real-world business or service-oriented work environment. The Virginia Department of Education (VDOE) recognizes 12 WBL experiences including apprenticeship, cooperative education, clinical experience, entrepreneurship, externship, internship, job shadowing, mentorship, school-based enterprise, service learning, and youth-registered apprenticeship.

WBL experiences reinforce Virginia's 5 C's—critical thinking, collaboration, communication, creative thinking, and citizenship—by allowing students to apply these skills in a real-world business or service-oriented work environment.

- Collaboration: Work with community members, peers, and mentors
- Communication: Write and present proposals; make requests and get permissions; publicize and present final projects
- Citizenship: Understand laws and regulations; seek to improve the community; increase community awareness
- Creativity: Publicize/advertise projects; solve problems; present findings
- Critical Thinking: Develop a project to meet a community need or solve a community problem

Stafford Schools currently support work-based learning experiences for students in the following ways:

- Embedded within a Career and Technical Education (CTE) course: If a work-based learning (WBL) experience is embedded within the course curriculum, it will be identified with ▲ in the Program of Studies.

- Earn one elective credit toward graduation: Students have the opportunity to earn one additional elective credit toward graduation by completing 280 hours in one of the following work experiences: internship, entrepreneurship, or youth-registered apprenticeship. The work experience must be related to a current course. Students may complete work experience outside of school hours.
- Career and Technical Student Organizations (CTSOs): Co-curricular student organizations are supported in conjunction with CTE courses and include Distributive Education Clubs of America (DECA), Future Business Leaders of America (FBLA), Family Career and Community Leaders of America (FCCLA), Future Farmers Association (FFA), Health Occupation Student Association (HOSA), SkillsUSA, and Technology Student Association (TSA).

Students' knowledge, skills, and attitudes are enhanced by participation in supervised, authentic experiences. WBL experiences are valuable because they help students develop careers beyond their secondary and postsecondary education.

Applied Studies Diploma

This diploma is intended for students with an Individualized Education Plan (IEP) who require a unique educational program and do not meet the requirements of other diplomas. The student's IEP team and parent/guardian(s) determine eligibility and participation in this diploma program. For a student to earn an Applied Studies Diploma, the student must complete the requirements of his or her IEP.

NOTE: This program of studies contains accurate graduation requirements as of the publish date. State graduation requirements for each diploma are available on the [Virginia Department of Education website](#).

Other Diplomas and Certificates

The Virginia Board of Education allows for other diplomas and certificates, including high school equivalency. These options are outlined in Stafford's Policy Manual [3608-R](#).

Graduation Seals for Exemplary Performance

Students who demonstrate outstanding achievement may be eligible for one of the following Virginia Department of Education's graduation seals:

The **Governor's Seal** will be awarded to students who complete the requirements for an Advanced Studies Diploma, with an average grade of "B" or better, and successfully complete college-level coursework that earn the student at least nine transferable college credits in Advanced Placement (AP), Dual Enrollment (DE), Cambridge, or International Baccalaureate (IB) courses.

The **Virginia Board of Education Seal** will be awarded to students who complete the requirements for a Standard Diploma or Advanced Studies Diploma with an average grade of "A."

The **Career and Technical Education (CTE) Seal** is awarded to students who:

- earn a Standard or Advanced Studies Diploma and complete a prescribed sequence of courses in a career and technical education concentration or specialization that they choose and maintain a "B" or better average in those courses;
- OR pass an examination or an occupational competency assessment in a career and technical education concentration or specialization that confers certification or occupational competency credential from a recognized industry, trade or professional association;
- OR acquire a professional license in that career and technical education field from the Commonwealth of Virginia.

The Board of Education shall approve all professional licenses and examinations to satisfy these requirements. See The [Path to Industry Certification](#) for the current approved licenses and examinations.

The **Seal for Science, Technology, Engineering, and Mathematics (STEM)** is awarded to students who earn either a Standard Diploma or an Advanced Studies Diploma and satisfy all Math and Science requirements for the

Advanced Studies diploma with a “B” average or better in all course work, and

- successfully complete a 50 hour or more work-based learning opportunity in a STEM area, and
- satisfy all requirements for a CTE concentration (a concentration is a coherent sequence of two or more state-approved courses as identified in the course listing within the CTE Administrative Planning Guide); and
- pass one of the following:
 - (a) a Board of Education CTE STEM-H credential examination, or
 - (b) an examination approved by the Board that confers a college-level credit in a STEM field.

The **Seal for Excellence in Civics Education** is awarded to students who earn either a Standard Diploma or an Advanced Studies Diploma and meet each of the following criteria:

- Complete Virginia and United States History and Virginia and United States Government courses with a grade of “B” or higher.
- Have good attendance and no disciplinary infractions as determined by local school board policies.
- Complete 50 hours of voluntary participation in community service or extracurricular activities, such as volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate; participating in Boy Scouts, Girl Scouts or similar youth organizations; participating in Junior Reserve Officer Training Corps (JROTC); participating in political campaigns, government internships, Boys State, Girls State or Model General Assembly; or 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 **Seal of Biliteracy** is awarded to students who earn a Board of Education-approved diploma and:

- pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level; and
- demonstrate proficiency at the intermediate-mid level or higher in one or more languages other than English as demonstrated through an assessment from a list approved by the Superintendent of Public Instruction.

The **Seal for Excellence in Science and the Environment** is awarded to students 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; and
- 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.

The **Governor’s STEM Academies Seal** is awarded to students who meet the requirements for the Advanced Studies or Standard Diploma and successfully complete the Stafford Academy for Technology (STAT) program.

The **Commonwealth Governor’s School Diploma Seal** is awarded to students who meet the requirements for the Advanced Studies or Standard Diploma and the requirements of the Commonwealth Governor’s School program.

The **International Baccalaureate (IB) Programme Seal** is awarded to students who meet the requirements for the Advanced Studies Diploma and successfully complete course requirements for the International Baccalaureate Programme.

The **Advanced Placement (AP) Capstone Seal** is awarded to students that fulfill the requirements of the Advanced Studies Diploma and earn scores of 3 or higher in the assessments associated with both AP Capstone courses (Research and Seminar) and on four additional AP exams of their choosing.

State Standards of Learning and Growth Assessments

The Standards of Learning (SOL) for Virginia Public Schools establish minimum expectations for what students should know and be able to do at the end of each grade or course in English, mathematics, science, history/social science, and other subjects. SOL tests in reading, writing, mathematics, science and history/social science measure the success of students in meeting the Virginia Board of Education's expectations for learning and achievement.

Each year, students in kindergarten through high school take state assessments, based on state and federal requirements to measure achievement, individual student growth, and to identify students who may be in need of additional support to succeed. In addition, some of the required end-of-year secondary assessments are used to verify a standard unit of credit awarded to a student.

The Virginia Board of Education requires students to earn a certain number of verified credits in order to graduate. A verified credit may also be earned by passing an approved substitute assessment. Students enrolling as ninth graders in 2018 and beyond must earn five verified credits for either the Standard or Advanced Studies Diploma. Additionally, federal guidelines require that all students be tested in high school in reading, math, and science at least once during their high school career. As a state and federal requirement, there are no exemptions to taking SOL assessments. Once a student has earned the required number of verified credits in a content area, they will not take additional SOL assessments in that content area unless required to meet federal testing requirements. Once a student earns a passing score, the student may not retake a test to achieve a higher score. High school students have multiple opportunities to take SOL tests and earn the required verified credits needed for graduation.

Elementary School Standards of Learning and Growth Assessments

Elementary Grade Level	Virginia Standards of Learning or Growth Assessment	Administration - Time of Year
Grade 3	Grade 3 Reading Growth Assessment Grade 3 Reading Grade 3 Mathematics Growth Assessment Grade 3 Mathematics Grade 3 Science Performance Assessments Grade 3 Social Studies Performance Assessments	Beginning and Middle End Beginning and Middle End Throughout Throughout
Grade 4	Grade 4 Reading Growth Assessment Grade 4 Reading Grade 4 Mathematics Growth Assessment Grade 4 Mathematics Virginia Studies	Beginning and Middle End Beginning and Middle End End
Grade 5	Grade 5 Reading Growth Assessment Grade 5 Reading (includes the Integrated Reading and Writing component) Grade 5 Mathematics Growth Assessment Grade 5 Mathematics Grade 5 Science (cumulative assessment - grade 4 and 5 science standards) Grade 5 History and Writing Performance Assessments	Beginning and Middle End Beginning and Middle End End Throughout

Middle School Standards of Learning and Growth Assessments

Middle School Course	Virginia Standards of Learning or Growth Assessment	Time of Year
Grade 6 English	Grade 6 Reading Growth Assessment Grade 6 Reading	Beginning and Middle End
Grade 6 Mathematics	Grade 6 Mathematics Growth Assessment Grade 6 Mathematics	Beginning and Middle End
6 Extended Mathematics	Grade 6 Mathematics Growth Assessment Grade 6 Mathematics	Beginning and Middle End
Grade 6 History	Grade 6 History Performance Assessments	Throughout
Grade 7 English	Grade 7 Reading Growth Assessment Grade 7 Reading	Beginning and Middle End
Grade 7 Mathematics	Grade 7 Mathematics Growth Assessment Grade 7 Mathematics	Beginning and Middle End
7 Extended Mathematics	Grade 8 Mathematics Growth Assessment Grade 8 Mathematics	Beginning and Middle End
Grade 7 Civics and Economics	Grade 7 Civics and Economics	End
Grade 8 English	Grade 8 Reading Growth Assessment Grade 8 Reading (includes the Integrated Reading and Writing component)	Beginning and Middle End
Grade 8 Mathematics	Grade 8 Mathematics Growth Assessment Grade 8 Mathematics	Beginning and Middle End
Grade 8 Physical Science	Grade 8 Science (cumulative assessment - grade 6-8 science standards)	End
Honors Algebra I	Algebra I*	End
Honors Geometry	Geometry*	End

*High school Standards of Learning assessment that may be used to verify a standard unit of credit, as required by Virginia graduation requirements.

High School Standards of Learning Assessments

State SOL assessments are administered upon completion of the courses listed in the following tables for Standard and Advanced Studies Diplomas if a student has not previously passed an SOL assessment in the content area. Students must obtain a verified credit from one course in each core content area to meet graduation requirements.

English 11	History	Science	Mathematics
Reading, Literature/Research (includes the Integrated Reading and Writing component) Writing	World History to 1500 AD World History 1500 AD to present Virginia and US History	Earth Science Biology Chemistry	Algebra I Geometry Algebra II

Screening and Other Assessments

State-required Screening Assessments

State law and administrative code require certain screening assessments for all students.

Virginia Language and Literacy Screening System (VALLSS)

VALLSS, previously named PALS, is a screening system that measures students' knowledge of several essential literacy fundamentals: language comprehension, decoding and encoding, processing skills, and print concepts. VALLSS provides a direct means of matching literacy instruction to specific literacy needs and provides a means of identifying those students who are relatively behind in their acquisition of these fundamental literacy skills.

VALLSS is used with students in K-4 to identify students at risk of reading difficulties. These assessments are designed to measure students' knowledge of important literacy fundamentals. They can be used as a diagnostic tool to provide teachers with explicit information to help guide their teaching.

For more information, please visit the University of Virginia's [Virginia Literacy Partnerships](#) website.

Virginia Kindergarten Readiness Program

The [Virginia Kindergarten Readiness Program](#) (VKRP) assessment measures mathematics, self-regulation, and social skills to complement Virginia's state-wide assessment of literacy using the Phonological Awareness Literacy Screening. This assessment is required of all Pre-Kindergarten and Kindergarten students.

ACCESS for English Language Learners

The [ACCESS for ELLs®](#) test is an English language proficiency assessment based on the Model Performance Indicators (MPIs) of the WIDA English language development (ELD) standards for students K-12. The ACCESS for ELLs® test assesses social and instructional English used within the school context as well as academic English associated with language arts, mathematics, science, and social studies across the four language domains of listening, speaking, reading, and writing. The ACCESS for ELLs® test is administered annually to EL students in grades K-12 to monitor their progress in acquiring English proficiency.

Other Assessments

Stafford Schools has identified additional screening assessments that may be used to monitor student ability, achievement, and growth. Assessments listed in this section are subject to change.

NWEA Measures of Academic Progress (MAP) - Growth

The [NWEA MAP Growth](#) assessment provides teachers with accurate, actionable evidence to help inform instructional strategies regardless of how far students are above or below grade level. In addition, it assists teachers in finding common areas of need among their students, identifying students who could benefit from intervention and or extension, and determining which instructional strategies are generating the most academic growth. This assessment is administered in grades 2-8.

Assessing Mathematics Concepts (AMC)

[AMC assessments](#) focus on important core concepts identified as “Critical Learning Phases” that must be in place if children are to understand and be successful in mathematics. This assessment series is based on the premise that teachers can provide more effective instruction and ensure maximum learning for each of their students when they are aware of the essential steps that children move through as they develop an understanding of foundational mathematical ideas. AMC is a continuum of nine assessments. Select AMC assessments are administered in Kindergarten and Grade 1 classrooms. Additional assessments can be used by teachers in grades 2 and 3 to support and monitor mathematical learning.

Cognitive Abilities Test (CogAT)

The CogAT is a multiple-choice assessment that measures reasoning skills using verbal, quantitative, and nonverbal questions. The CogAT is administered to all students in second grade for gifted identification. Students transferring into Stafford Schools after 2nd grade will be assessed in 6th grade or by referral.

PSAT/NMSQT

The PSAT/NMSQT assessments are administered to monitor student achievement compared to their peers nationally. It is also commonly used to monitor student growth and to identify students with the potential to take more rigorous coursework in high school. This assessment is administered to all students in grades 8-11. In addition, for 11th grade students, it serves as the National Merit Scholarship Qualifying Test.

English for Speakers of Other Languages Services

The English for Speakers of Other Languages (ESOL) program guarantees equal educational access for English Learners (ELs). ESOL teachers work in collaboration with the classroom teachers to provide EL support that promotes achievement in the grade level content areas (language arts, math, science, and social studies). EL services build upon the unique cultural and linguistic attributes students bring to the learning community while growing their English proficiency in the four language domains (listening, speaking, reading, and writing).

During online registration or at your local school, if a language other than English is indicated on the registration form, an appointment will be made to provide students with an English language screener called the WIDA screener. The screener is administered at Stafford County Schools' Welcome Center. The test assesses four areas: reading, writing, speaking, and listening. Based on the results of the screener, recommendations for ESOL services may be made. The results of the screener will be sent directly to the school of record. The schools will send home a letter informing families of the recommendation for ESOL services, the student's English Language Proficiency Level (ELP), and the services they will receive at the school.

Elementary Services

ESOL teachers work in collaboration with the classroom teachers to provide English language support that promotes achievement in the grade level content areas (language arts, math, science, and social studies). Services for English Learners build upon the unique cultural and linguistic attributes students bring to the learning community while growing their English proficiency in the four language domains (listening, speaking, reading, and writing). Stafford Schools Elementary ESOL Department provides three types of ESOL services: English language development (pull out), content classes with integrated ESL support (co-teaching), for students who exit the ESOL program (4.4 and above on WIDA Access). monitoring and consultation for 2 years, and dual language instruction (currently being piloted at Widewater Elementary School).

Secondary Services

Middle school students receive their ESOL services through either content-based instruction, where the ESOL teachers work collaboratively with the content teacher or through English Language Development (ELD) courses taught by the ESOL teacher. The ELD courses offered at the middle school level are Content Language Development, Reading and Writing for English Learners, and Math Concepts for English Learners. The goal of these courses is to accelerate English language development and provide background knowledge in the core academic subject areas. These courses are further described in this document.

High school offers several ELD courses taught by an ESOL teacher, as well as co-taught courses to support ELs at different proficiency levels. At the highschool level a variety of ELD courses are offered to accelerate English language development, through teaching academic vocabulary, and providing content background knowledge to help students be successful in their content courses. These courses include English for Academic Purposes, foundational courses and English Language Concept courses covering the languages of math, language arts, science and social studies,, ESOL Algebra Readiness, and ESOL Environmental Science. All of these courses are described in this document.

Gifted Education Services

Gifted education services provide a cohesive continuum of appropriately challenging and differentiated educational experiences at the school, district, and community levels for identified students at all grade levels. Eligibility for the gifted program is determined by prescribed criteria established by the school division and approved by the Commonwealth of Virginia.

Gifted resource teachers (GRTs) support and provide appropriately challenging academic learning opportunities through a variety of services including working directly with students, families, and classroom teachers. GRTs collaborate, co-teach, and coach with classroom teachers to develop and provide appropriate learning experiences and environments to meet the academic, artistic, creative, social, and/or emotional needs of advanced students and students who have been identified as gifted.

At the elementary level, gifted students are clustered with other like-minded peers and receive pull-out services to extend and accelerate academically as well as develop social and emotional skills; differentiated instruction is embedded in the curriculum as students practice and develop their C5W skills, including critical thinking, creativity, and problem-solving. The goal is to enrich and accelerate instruction to provide academic and social-emotional growth opportunities for all students.

At the secondary level, gifted resource teachers extend and enrich the curriculum for gifted students and conduct progress monitoring for students' academic, social, and emotional needs. Gifted resource teachers collaborate with classroom teachers to provide appropriately challenging academic learning through a variety of services, including working directly with teachers, students, and families. Middle school students are clustered, as possible with intellectual, like-minded peers to facilitate and support differentiation in the classroom and independent study opportunities are available. High school students may choose to take a number of challenging college courses within specified programs of study, or may choose to take challenging courses of interest. .

Special Education Services

Special education services are available to identified students from ages 2-21 inclusive. Eligibility for special education is determined by criteria that is established by state and federal regulations under the Individuals with Disabilities Act, also known as IDEA.

All students, including students with disabilities, can access the courses outlined in this program of studies. Additionally, there are specialized classes and supports that are only available to students with disabilities as outlined by their Individualized Education Plan (IEP).

If you suspect your child has a disability, please reach out to the principal or designee of the building to discuss next steps. Additionally, if school staff suspect a disability, the school will contact the parent to discuss next steps.

Transfer Students

Principals have the authority to place students in the appropriate grade level and these would generally follow the prior year's placement by an accredited private school and have the authority to award credit for courses that align with Stafford Schools offerings through the Program of Studies. For courses that do not readily align, it is recommended that the course description and student objectives are requested and reviewed prior to awarding credit.

Stafford Schools recognize that different school divisions, states, and countries utilize various grading scales and courses. As students transfer into the division, official transcripts are requested from the sending school. Grades are transcribed for incoming students based on the letter grade earned at the previous school. This letter grade is used to calculate the grade point average based on the Stafford Schools quality point scale. Transfer students will receive weighted credit for only those Advanced Placement, Dual Enrollment, and/or International Baccalaureate courses previously taken for which an equivalent weighted course is offered in our schools.

Pertinent Stafford Schools regulations are included in [Stafford Schools Board Policy](#) (3600s section - Testing and Student Assessment).

Military Student Transfer Students

The [Interstate Compact on Educational Opportunity for Military Children](#) ensures a uniform treatment of military children regarding educational opportunities as they transfer between school districts and states. Therefore, Stafford Schools will provide comparable services to students based on their educational needs and may perform subsequent evaluations to ensure appropriate placement.

Grading and Reporting

Elementary Grading and Reporting

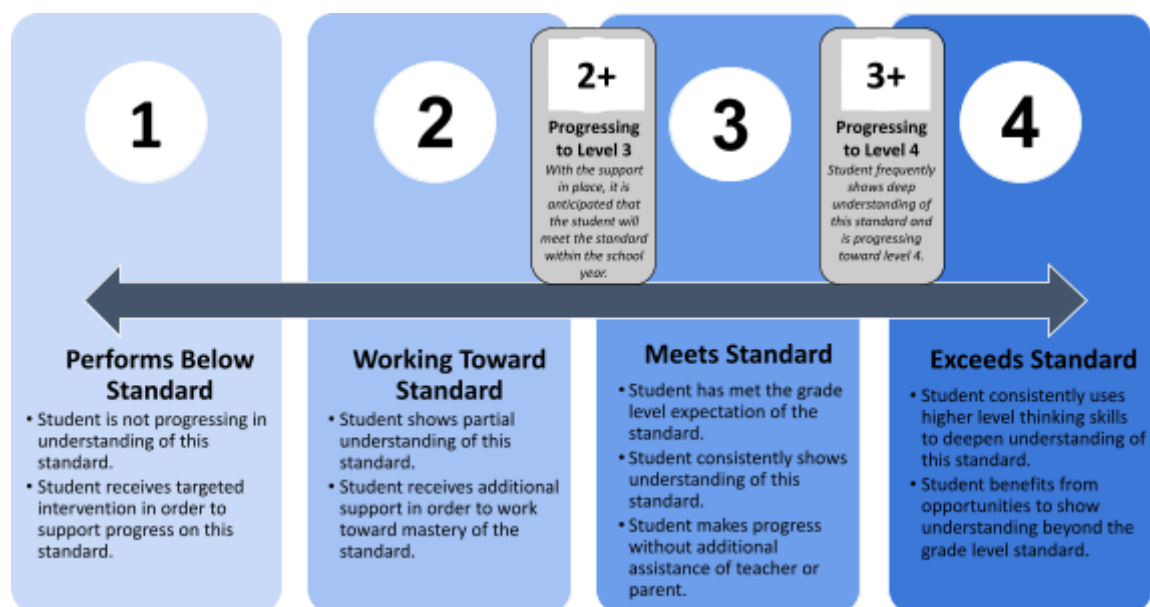
Stafford Schools provides feedback on academic growth and achievement to elementary students and parents/guardians through a standards-based grading system. A standards-based system measures and reports a student's progress according to how the student is performing on expected standards. It provides more detailed information about what a student is learning and can demonstrate in each content area. The following measures are used to report student progress:

Grades K-5 (Academic Subjects)

- 4 = Exceeding standard
- 3+ = Progressing to level 4
- 3 = Meeting standard
- 2+ = Progressing to level 3
- 2 = Working toward standard
- 1 = Performing below standard

Grades K-5 (Life Readiness Skills)

- 3 = Meeting expectations
- 2 = Working toward expectations
- 1 = Performing below expectations



Secondary Grading Scale and Grade Point Average Calculation

Stafford Schools Secondary 10-Point Grading Scale			
Grade	Range	Quality Points	Weighted Quality Points
A+	98-100	4.5	5.5
A	93-97	4.25	5.25
A-	90-92	4.0	5.0
B+	87-89	3.5	4.5
B	83-86	3.25	4.25
B-	80-82	3.0	4.0
C+	77-79	2.5	3.5
C	73-76	2.25	3.25
C-	70-72	2.0	3.0
D+	67-69	1.5	2.5
D	63-66	1.25	2.25
D-	60-62	1.0	2.0
F	0-59	0	0

Grade Point Average (GPA) is the average of the quality points earned by a student as they complete high school credit courses. For example, a student who earned 2 As, 3 Bs, 2 Cs, and a D+ in eight, one-credit classes would earn 24.25 quality points. The sum of the quality points is divided by the total number of credits attempted (eight in this case); therefore earning a 3.03125 GPA ($24.25/8 = 3.03125$).

Course Retakes and Grade Replacement

Any student choosing to replace a high-school credit-bearing course may do so by repeating the course. Students retaking a course with a passing grade may only do so with principal approval. The replacement grade received shall be used to calculate the GPA for the repeated course. Original and replacement course grades will be listed on the student's transcript. The original grade will be recorded with a CR tag indicating "Course Repeat" and will not be factored into the calculation of the student's GPA.

Weighted Grades

Students electing to take Advanced Placement (AP), Dual Enrollment (DE), or International Baccalaureate (IB) courses receive weighted credit for successfully completing these courses. Weighted grades will be designated by a (#) and do not apply to honors-level courses.

Please note the following:

- In AP, DE, or IB courses, students earn an additional Quality Point in their GPA (i.e. a grade “A+” is awarded 5.5 grade quality points).
- All other courses, including honors-level courses, are awarded 4.5 grade quality points for an “A+.”
- Students who wish to concurrently enroll in a college or university and receive high school credit for the course will receive a weighted grade for only those courses which are equivalent to those weighted courses listed in this catalog. Prior approval by the principal is required for any concurrent enrollment in a college or university. Certain student eligibility requirements apply.

NOTE: Students transferring into Stafford Schools will receive weighted grades for only those AP, DE, IB, and Project Lead The Way (PLTW) courses previously taken for which an equivalent weighted course is offered in our schools. All students will have their grade point averages computed using the same weighted grade criteria.

Successful Course Completion

Sequential courses may recommend “successful” completion of related coursework. “Successful” completion related to course placement is generally defined as a grade of “C” (score of 70 or better). Each student’s motivation, interests, and circumstances should be considered when selecting courses. It is important to note that some courses and programs may have specific requirements or prerequisites.

Student Absenteeism and Make-up Work

Regular school attendance is expected for all students. *Code of Virginia* § 22.1-254 requires that all children who have reached their fifth birthday on or before September 30 and who have not yet reached their eighteenth birthday must attend school. This requirement does not apply to any child who has obtained a high school diploma, its equivalent, a certificate of completion, or who is exempted pursuant to the provisions of the law.

Students are responsible for communicating with the teacher on the day they return to class to schedule the make-up of missed work. Once the summative assessment has been administered for that marking period/term, the window for the acceptance of make-up work shall be closed and no make-up work shall be accepted for a grade. High school and middle school students taking high school level courses are expected to communicate with their teacher upon their return to school. Upon their return to school, students are expected to turn in any work that was due on the day(s) of the absence. Teachers have discretion in determining classroom make-up work deadlines prior to the summative assessment and may assign penalties for work that is not completed or turned in past the assigned due date.

Full-time Virtual Instruction

Students in grades 6-12 may request full-time virtual instruction at no cost through [Virtual Virginia](#), a program of the Virginia Department of Education (VDOE). Students must receive school approval based on division criteria developed from the VDOE Guidelines for Successful Full-time Virtual Students. Homeschool students that wish to take advantage of the full-time virtual learning option through Virtual Virginia will be required to enroll in their zoned Stafford school. To be considered “full-time,” a student must be enrolled in at least five one-credit virtual courses or the equivalent. Homeschooled students also may enroll in two virtual courses at no cost.

Students approved for virtual learning may enroll in [Virtual Virginia courses](#) based on a plan to meet state graduation requirements. Fees associated with dual enrollment courses through Virtual Virginia will be the responsibility of the parent/guardian.

Full-time students in Virtual Virginia courses will receive instruction through a combination of synchronous and asynchronous learning. Students will be required to attend live sessions four times per week and complete lessons and assignments independently. Full-time virtual students will be provided a computer and necessary instructional materials.

All full-time virtual instruction students and a parent/guardian will be required to sign a contract agreeing to abide by expectations intended to promote academic success in order to remain in the program.

Elementary School Program



**Stafford County
Public Schools**

Inspire | Empower | Excel

Elementary School Program

The purpose of elementary school is to provide a foundational education that equips young children with fundamental academic knowledge and essential life skills. It aims to foster intellectual, social, and emotional development, preparing students for future learning and helping them become responsible, well-rounded individuals who can contribute positively to their communities and society at large.

Stafford Schools' Framework for Student Learning and Stafford Profile of a Graduate guides our dedicated educators to deliver high quality curriculum through evidence-based instruction. Our classrooms are designed to engage students in critical thinking, communication, collaboration, and creativity in an environment that is supportive of their unique learning and social-emotional needs. We assess student progress using a multi-faceted approach to determine those needs, and provide in-time intervention, practice, and enrichment.

Pre-Kindergarten

The Early Childhood program builds skills through integrated learning experiences centered around themes, with much opportunity for student choice, engagement with concrete materials and exploration.

Literacy

The Virginia Early Learning and Development Standards-Birth to Five and the Head Start Early Learning Outcomes Framework guide the literacy goals of our early childhood program. Through play, conversation, and intentional learning activities, students develop listening and communication skills that set the foundation for success in kindergarten and beyond. Students learn to identify letters and their corresponding sounds, segment and blend sounds in words, rhyme, and count syllables in words. Students learn that print is meaningful, and they expand their vocabulary and background knowledge through thematic read alouds and experiential learning. Starting with scribbling and drawing, students learn to utilize writing tools and to coordinate their eyes, hands, and brains to create meaningful print that communicates a message.

Mathematics

Students develop skills in comparing quantities and numbers, counting to 20 and beyond, recognizing quantities and learning numerals 0-10 and above. Students develop an understanding of number relationships and solving problems using addition and subtraction of small quantities. They develop geometric thinking and spatial reasoning, including shape identification. Students learn to sort, classify, recognize and create simple repeating patterns. Students describe, compare, and measure lengths, weights, area and volume with objects in their environment.

Science

Students learn through their senses, and are taught about the natural and physical world, developing skills in describing and recording, testing questions and ideas with simple experimentation.

History and Social Sciences

Students learn about themselves, other people, different families, communities and cultures. They learn about differences and similarities and the ways that people interact, including relationships and connections.

Approaches to Learning

Students develop skills in being curious learners, taking initiative, using their creativity and imagination. They learn to focus and pay attention, build their working memory, develop flexibility in thinking and adapting to changes, controlling their bodies and inhibiting responses, managing their behaviors and actions, persisting and problem solving, and develop critical thinking skills through why and how questions, all of which build their executive function and cognitive self regulation skills.

Social Emotional Learning

Students learn a positive concept and awareness of self. They learn self-confidence through classroom responsibilities and successes, becoming more independent and autonomous. Students develop relationships with adults and peers. They learn to recognize, see and name emotions in themselves and others, to express their emotions appropriately and to communicate their feelings, needs and wants. Students learn strategies to regulate their emotions and practice showing care and concern for others as they build empathy skills. Students learn to interact with others in play and work, with strategies for sharing toys, tools and cooperatively achieving goals. Students learn strategies for solving social interaction problems.

Physical Development, Health and Self Care

Students learn to explore their environment physically, developing large muscle strength and control. They learn to take care of their daily health needs, developing healthy habits in care of their bodies, eating, resting and sleeping. They learn safe behaviors.

Music

Elementary general music is a time of exploration as students develop musical understanding and gain foundational skills in music-making. A sequential course of study within a comprehensive music education program is provided that progresses in complexity by grade level. Students understand personal responses, and the responses of others, to the many forms of musical experience. Through music, students connect knowledge and skills from a variety of academic areas to areas of creation and performance as well as critical thinking skills. Voice and expression through individualized instruction and group opportunities is provided in the elementary music program, with accessibility to student ensembles such as chorus, Orff, recorders, and ukulele. In these ensemble experiences, students develop the ability to work collaboratively to achieve common artistic goals, while preparing for a lifelong engagement with music.

Visual Arts

The Visual Arts Curriculum provides for a sequential course of study within a comprehensive visual arts education program that progresses in complexity by grade level. Students develop ideas through a creative process as well as critical thinking skills to evaluate information that is conveyed visually. They connect knowledge and skills from a variety of academic areas to areas of creation, design, and execution. Students develop individual expression and the ability to work collaboratively to achieve common artistic goals, while preparing for a lifelong engagement with the art.

Kindergarten

Literacy

Students in kindergarten develop skills in communication, reading, and writing that lay the foundation for success in future years. Explicit, systematic instruction in phonological awareness and phonics provides students with practice in distinguishing the sounds that make words and builds the association between sounds and the letters that represent them. As students learn consonant and short vowel sounds with the corresponding letter spelling, they practice blending sounds together smoothly to read words. Students also develop writing skills, learning to print letters of the alphabet and segment sounds in words to spell them. Students expand listening and speaking vocabularies through read-alouds of fiction and nonfiction texts centered around themes that build student knowledge of the world around them.

Mathematics

The kindergarten standards place emphasis on developing the concept of number by counting; combining, sorting, and comparing sets of objects; recognizing, describing, and creating simple repeating patterns; and recognizing shapes and sizes of figures and objects. Students will investigate measurement through direct comparisons, explore the concept of fractions with sharing, collect data, and create graphs. Students will also begin to develop skills in communicating mathematical ideas, representing their understanding with objects and pictures, and thinking critically about given situations. These processes are critical to future mathematical development.

Science - *Using My Senses to Understand My World*

In science, kindergarten students use their senses to make observations of the characteristics and interactions of objects in their world. Students study the characteristics of water and the basic needs of living things. They also study the relationship between the sun and Earth through shadows and weather. They determine how their actions can change the motion of objects and learn how they can make a difference in their world. Throughout the elementary years, students will develop scientific skills, supported by mathematics and computational thinking, as they learn science content. In kindergarten, students will develop skills in posing simple questions, conducting simple investigations, observing, classifying, and communicating information about the natural world.

Social Studies - *Focus on the Community*

The standards for kindergarten students focus on the local community and include an introduction to basic history and social science skills. During the course of their first year in school, students learn about their community, including basic concepts related to history, patriotism, national symbols, good citizenship, geographic location, economics, and the importance of following rules and respecting the rights and property of other people.

Music

Kindergarten serves as the foundation for musical understanding and provides a pathway to future music instruction. Students will learn musical knowledge, skills, and understanding through singing, playing instruments, listening, and moving. Students identify people who create music and examine how music is a part of personal and community events. Creative ideas will be shared while students recognize and express personal responses evoked by musical experiences.

Visual Arts

Kindergarten art serves as a foundation for further visual arts instruction. Emphasis is placed on cognitive, affective, sensory, and motor development and the appropriate manipulation of materials. Students will begin to recognize basic art concepts and use art as a means for creative expression. Students will become aware of art from other time periods, places, and people. Students come to understand that works of art are developed using a creative process.

Physical Education

In the elementary years, students develop maturity and adaptability in the use of fundamental motor skills and patterns that are then further refined and combined during the middle school years.

Elementary students establish basic musculoskeletal vocabulary and use simple concepts as they develop their movements. They become aware of health-related fitness components (aerobic capacity, muscular strength and endurance, flexibility, and body composition), engage in a variety of physical activities, and develop a basic fitness plan. It is expected that elementary students recognize and use rules and procedures, focus on safety, respect similarities and dissimilarities, and cooperate with others. They will also understand the basic nutrition and fitness concepts of energy balance.

Health Education

The intent of Health Education for elementary school students is to assist students to become health literate, self directed learners with the ability to identify accurate health products and services, and learn how to create and maintain a safe and healthy environment for themselves and their family members.

This is accomplished by demonstrating

- the knowledge and skills to make healthy decisions that reduce health risks and enhance the health of oneself and others;
- the ability to access, evaluate, and use health information, products, and services that influence health and wellness in a positive manner; and
- the use of appropriate health practices and behaviors to promote a safe and healthy community when alone, with family, at school, and in other group settings.

Library

The Elementary Library Media Center (LMC) is a place where all students have the opportunity to expand their horizons both academically and individually. The LMC in our elementary schools provide students with access to rich and robust information through check-out, school-specific curriculum support, and lessons centered around developing literacy and critical research skills. Our students are able to delve into topics that interest them with printed media, digital resources, STEM education, and other immersive applications that help provide students with core 21st Century skills. Both students and faculty alike utilize technological resources which positively impacts instruction inside the Library and within each classroom. In Stafford Schools, we center our mission on the National School Library Standards which prepare all students to be successful in the next phase of their life, college, careers, and within their communities.

Science, Technology, Engineering, Arts, and Mathematics (STEAM)*

Students will be provided with learning experiences that integrate and apply science, technology, engineering, arts, and mathematics content. Students will investigate and solve real-world problems while engaging in meaningful, purposeful, and relevant hands-on inquiry-based, problem-based and/or project-based learning experiences. Applied computer science concepts and skills will be introduced and developed. *Where staffing and capacity allow, STEAM may be offered as an additional resource class.

First Grade

Literacy

Students in first grade continue to develop foundational skills in communication, reading, and writing that are essential for success in future years. Explicit, systematic instruction in phonological awareness and phonics provides students with practice in distinguishing the sounds that make words and builds the association between sounds and the spellings that represent them. Students learn all 44 sounds in the English language along with the ways to represent and spell those sounds. Students practice blending individual spelling sounds together smoothly to read words correctly and automatically. Students also develop writing skills, learning to segment sounds in words and represent them with the corresponding spellings. Students write in a variety of forms using complete sentences to communicate ideas. Students also expand listening and speaking vocabularies through reading alouds of fiction and nonfiction texts centered around themes that build student knowledge across content areas.

Mathematics

In first grade, students use critical thinking and connections to build a deeper understanding of concepts from Kindergarten. The first-grade standards place emphasis on counting, comparing, and ordering sets of up to 110 objects; recognizing and describing simple repeating and growing patterns; and tracing, describing, and sorting plane figures. Students' understanding of numbers is expanded through recognizing and describing part-whole relationships for numbers up to 10, solving story and picture problems using addition and subtraction within 20; using nonstandard units to measure; and organizing and interpreting data. Fractional concepts will be expanded through sharing scenarios involving halves and fourths. Students will build their mathematical vocabulary and practice communicating with peers as well as representing their mathematical ideas with objects and pictures.

Science - *How I Interact with My World*

In first-grade science, students become aware of factors that affect their daily lives. Students continue to learn about the basic needs of all living things and that living things respond to factors in their environment, including weather and the change of season. They continue the examination of matter by observing physical properties and how materials interact with light. Throughout the elementary years, students will develop scientific skills, supported by mathematics and computational thinking, as they learn science content. In first grade, students will develop skills in posing simple questions, conducting simple investigations, observing, classifying, and communicating information about the natural world. Students are introduced to the engineering design process.

Social Studies - *Focus on the Commonwealth of Virginia*

The standards for first-grade students include an introduction to the lives of leaders in the history of Virginia and their contributions to the Commonwealth. Students continue to develop basic map skills. They study the economic concepts of goods and services, consumers and producers, and making economic choices. Students learn to apply the traits of a good citizen and recognize that communities in Virginia have local governments. They learn that communities include people who have diverse ethnic origins, customs, and traditions, who make contributions to their communities, and who are united as Americans by common principles.

Music

Instruction in first grade emphasizes the language and production of music and focuses on the continued development of skills in singing, playing instruments, listening, moving, and responding to music. Emphasis is placed on performing simple rhythms and developing aural skills related to pitch, musical form, and instrument identification. Students investigate how people participate in music in everyday life. Students identify collaboration and communication skills in music and describe personal ideas and emotions evoked by music. Students continue to explore the concept of a creative process to develop music ideas.

Visual Arts

Fine motor skills and eye-hand coordination development continue in first grade art. Students will begin to perceive spatial relationships, identify primary colors, and distinguish line variation. The standards continue to emphasize ways that art communicates ideas, opinions, and emotions. Art production focuses on increased communication, creative

thinking, and the depiction of stories, poems, ideas, and themes. Students explore why people have different responses to works of art.

Physical Education

In the elementary years, students develop maturity and adaptability in the use of fundamental motor skills and patterns that are then further refined and combined during the middle school years.

Elementary students establish basic musculoskeletal vocabulary and use simple concepts as they develop their movements. They become aware of health-related fitness components (aerobic capacity, muscular strength and endurance, flexibility, and body composition), engage in a variety of physical activities, and develop a basic fitness plan. It is expected that elementary students recognize and use rules and procedures, focus on safety, respect similarities and dissimilarities, and cooperate with others. They will also understand the basic nutrition and fitness concepts of energy balance.

Health Education

The intent of Health Education for elementary school students is to assist students to become health literate, self directed learners with the ability to identify accurate health products and services, and learn how to create and maintain a safe and healthy environment for themselves and their family members.

This is accomplished by demonstrating

- the knowledge and skills to make healthy decisions that reduce health risks and enhance the health of oneself and others;
- the ability to access, evaluate, and use health information, products, and services that influence health and wellness in a positive manner; and
- the use of appropriate health practices and behaviors to promote a safe and healthy community when alone, with family, at school, and in other group settings.

Library

The Elementary Library Media Center (LMC) is a place where all students have the opportunity to expand their horizons both academically and individually. The LMC in our elementary schools provide students with access to rich and robust information through check-out, school-specific curriculum support, and lessons centered around developing literacy and critical research skills. Our students are able to delve into topics that interest them with printed media, digital resources, STEM education, and other immersive applications that help provide students with core 21st Century skills. Both students and faculty alike utilize technological resources which positively impacts instruction inside the Library and within each classroom. In Stafford Schools, we center our mission on the National School Library Standards which prepare all students to be successful in the next phase of their life, college, careers, and within their communities.

Science, Technology, Engineering, Arts, and Mathematics (STEAM)*

Students will be provided with learning experiences that integrate and apply science, technology, engineering, arts, and mathematics content. Students will investigate and solve real-world problems while engaging in meaningful, purposeful, and relevant hands-on inquiry-based, problem-based and/or project-based learning experiences. Applied computer science concepts and skills will be introduced and developed. *Where staffing and capacity allow, STEAM may be offered as an additional resource class.

Second Grade

Literacy

Students in second grade continue to develop essential skills in communication, reading, and writing. Explicit, systematic instruction in phonological awareness and phonics provides students with ongoing practice with the 44 sounds in the English language along with the ways to represent and spell those sounds. Students begin to master more complex spellings for consonants and long vowel sounds, blending sounds together in both single syllable and multisyllabic words to read fluently. Students also deepen writing skills, segmenting sounds in more complex words and representing them with corresponding spellings. Students expand writing to express thoughts with more elaboration and detail. Students build knowledge, develop vocabulary, and demonstrate comprehension of fiction and nonfiction texts centered around themes from different content areas.

Mathematics

The second-grade standards extend the study of number and spatial sense to include three-digit whole numbers and solid geometric figures. Students will continue to learn, use, and gain proficiency in addition and subtraction within 20. Students will begin to use U.S. Customary units to measure length and weight; predict and use simple probability; and create and interpret pictographs and bar graphs. Students will work with a variety of patterns and will develop an understanding of equality. Communication and representation of mathematical thinking becomes increasingly important in second grade as the content develops in complexity. Students will make sense of these concepts by applying critical thinking and making connections among mathematical ideas.

Science - *Change Occurs All Around Us*

Science in second grade builds on the previous understandings of forces, water, weather, and plants and animals, as students explore these concepts through the lens of change. They examine how water changes phase, how visible and invisible forces change motion, how plants and animals change through their life cycles, and how weather changes the Earth. Students also examine how change occurs over a short or long period of time. Throughout the elementary years, students will develop scientific skills, supported by mathematics and computational thinking, as they learn science content. In second grade, students will develop skills in posing simple questions, planning and conducting simple investigations, observing, classifying, and communicating information about the natural world. Students engage in more aspects of the engineering design process.

Social Studies - *Focus on the United States of America*

The standards for second-grade students include an introduction to the lives of Americans and their contributions to the United States as well as the heritage of the American Indians, past and present. Students continue developing map skills and demonstrate an understanding of basic economic concepts. The students will identify selected American individuals who have worked to improve the lives of American citizens. The students will recognize that the United States is a land of people who have diverse ethnic origins, customs, and traditions, who make contributions to their communities, and who are united as Americans by common principles.

Music

Students continue developing musical skills and concepts in singing, playing instruments, listening, performing, responding with expression, creating/composing, and moving with a focus on fine motor skills.. Emphasis is placed on ensemble playing, notating pitches and rhythms, and identifying instruments. Students investigate how people experience music in everyday life and explore how music evokes personal ideas and emotions.

Visual Arts

Continued development of motor skills and observational abilities occurs in second grade art as students begin to illustrate those observations and realize narrative qualities in art. Students build an expanding vocabulary while describing their work and the work of others. Students focus on applying a creative process for artmaking and expanding their creative thinking, collaboration, and communication skills. Finally, students express ideas using an increasing variety of art materials, skills, techniques, and processes.

Physical Education

In the elementary years, students develop maturity and adaptability in the use of fundamental motor skills and patterns that are then further refined and combined during the middle school years.

Elementary students establish basic musculoskeletal vocabulary and use simple concepts as they develop their movements. They become aware of health-related fitness components (aerobic capacity, muscular strength and endurance, flexibility, and body composition), engage in a variety of physical activities, and develop a basic fitness plan. It is expected that elementary students recognize and use rules and procedures, focus on safety, respect similarities and dissimilarities, and cooperate with others. They will also understand the basic nutrition and fitness concepts of energy balance.

Health Education

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This is accomplished by demonstrating

- the knowledge and skills to make healthy decisions that reduce health risks and enhance the health of oneself and others;
- the ability to access, evaluate, and use health information, products, and services that influence health and wellness in a positive manner; and
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Science, Technology, Engineering, Arts, and Mathematics (STEAM)*

Students will be provided with learning experiences that integrate and apply science, technology, engineering, arts, and mathematics content. Students will investigate and solve real-world problems while engaging in meaningful, purposeful, and relevant hands-on inquiry-based, problem-based and/or project-based learning experiences. Applied computer science concepts and skills will be introduced and developed. *Where staffing and capacity allow, STEAM may be offered as an additional resource class.

Third Grade

Literacy

Students in third grade continue to develop essential skills in communication, reading, and writing. Explicit, systematic instruction in phonics provides students with ongoing practice to master complex spellings for consonants and vowel sounds, blending sounds together in multisyllabic words to read fluently. Instruction begins to shift from phonics to word analysis, providing students with practice using prefixes, suffixes, and root words to identify and read meaningful parts of words. Students use the writing process to plan, draft, revise, and edit writing in a variety of forms, expressing connected and developed ideas in a paragraph. Students build knowledge, develop vocabulary, and deepen comprehension through close reading of complex text centered around content-integrated units of study.

Mathematics

The third-grade standards place emphasis on developing an understanding of, and solving problems that involve multiplication and division through 10×10 (fluency and automatic recall is not expected until the end of fourth grade). Students will apply knowledge of place value and the properties of addition and multiplication as strategies for solving problems. Concrete models and pictorial representations will be used to introduce addition and subtraction with fractions and the concept of probability as the measurement of chance. Students will use standard units (U.S. Customary and metric) to measure temperature, length, and liquid volume. Properties of shapes, points, line segments, rays, angles, vertices, and lines will be explored and students will identify polygons with 10 or fewer sides, combine and subdivide polygons, and name the resulting polygon(s). Students will continue to develop more sophisticated ways to communicate and represent their mathematical thinking. Problem solving, reasoning, exploration, and connections are essential components of instruction so that students develop a deep understanding of concepts.

Science - *Interactions in Our World*

The focus of science in third grade is interactions in our world. Students continue their study of forces and matter by learning about simple machines and by examining the interactions of materials in water. They also look at how plants and animals, including humans, are constantly interacting with both the living and nonliving aspects of the environment. This includes how adaptations satisfy the life needs of plants and animals and the importance of water, soil, and the sun in the survival of plants and animals. Throughout the elementary years, students will develop scientific skills, supported by mathematics and computational thinking, as they learn science content. In third grade, students will develop more sophisticated skills in posing questions and predicting outcomes, planning and conducting simple investigations, collecting and analyzing data, constructing explanations, and communicating information about the natural world. Students begin to use the engineering design process to apply their scientific knowledge to solve problems.

Social Studies - *Focus on Ancient World Cultures*

The standards for third-grade students include an introduction to the heritage and contributions of the peoples of ancient China, Egypt, Greece, Rome, and the West African empire of Mali. Students continue developing map skills and demonstrate an understanding of basic economic and civics concepts. Students will examine the social, cultural, and political characteristics of major ancient world cultures. Students will recognize that many aspects of ancient cultures served as the foundation for modern governments, customs, traditions, and perspectives.

Music

Building mastery in the areas of music literacy, including singing, playing instruments, listening, moving, and creating/composing music is emphasized in third grade. In particular, students develop skills for appropriate singing habits and instrumental ensemble performance. Musical understanding through the study of rhythm, musical form, and melodic notation. Students explore music from different periods of music history and reflect on ways that music has value to people and communities.

Visual Arts

Through observing and recording details, students' work will become more complex. The curriculum emphasizes learning through a creative process that involves brainstorming, problem solving, planning, and self-assessment.

Students explore and identify historical and cultural influences of artwork while also investigating the integral role of art and architecture within various cultures. Through imaginative, expressive, and collaborative strategies, students continue to create personal works of art.

Physical Education

In the elementary years, students develop maturity and adaptability in the use of fundamental motor skills and patterns that are then further refined and combined during the middle school years.

Elementary students establish basic musculoskeletal vocabulary and use simple concepts as they develop their movements. They become aware of health-related fitness components (aerobic capacity, muscular strength and endurance, flexibility, and body composition), engage in a variety of physical activities, and develop a basic fitness plan. It is expected that elementary students recognize and use rules and procedures, focus on safety, respect similarities and dissimilarities, and cooperate with others. They will also understand the basic nutrition and fitness concepts of energy balance.

Health Education

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Fourth Grade

Literacy

Students in fourth grade continue to deepen skills in communication, reading, and writing. Students practice word recognition at higher levels, reading multisyllabic words fluently using knowledge of syllable types and word analysis skills (prefixes, suffixes, and root words). Students use the writing process to plan, draft, revise, and edit writing in a variety of forms, communicating well-developed ideas in a paragraph. Students build knowledge, develop vocabulary, and deepen comprehension through close reading of increasingly complex text centered around content-integrated units of study.

Mathematics

The fourth-grade standards place emphasis on multiplication and division with whole numbers and solving problems involving addition and subtraction of fractions and decimals. Students will develop fluency with multiplication through 12×12 and the corresponding division facts as they become proficient in multiplying larger numbers. Students will apply knowledge of place value and the properties of addition and multiplication as strategies for solving problems. Students also will refine their estimation skills for computations and measurements. Students will identify and describe representations of points, lines, line segments, rays, and angles, including endpoints and vertices. Students will describe and compare characteristics of plane and solid figures. Concrete models and pictorial representations will be used to solve problems involving perimeter and area, patterns, probability, and equivalence of fractions and decimals. Students will continue to develop more sophisticated ways to communicate and represent their mathematical thinking. Problem solving, reasoning, exploration, and connections are essential components of instruction so that students develop a deep understanding of concepts.

Science - *Our Place in the Solar System*

Our solar system is a grand place, and in fourth grade science, students learn where we fit in this solar system. Starting with the solar system, and then moving to the planet Earth, the Commonwealth of Virginia, and finally their specific ecosystems, students examine how features of plants and animals support life. They also explore how living things interact with both living and nonliving components in their ecosystems. Throughout the elementary years, students will develop scientific skills, supported by mathematics and computational thinking, as they learn science content. In fourth grade, students will continue to develop skills in posing questions and predicting outcomes, planning and conducting simple investigations, collecting and analyzing data, constructing explanations, and communicating information about the natural world. Students continue to use the engineering design process to apply their scientific knowledge to solve problems.

Social Studies - *Virginia Studies*

The standards for Virginia Studies allow students to develop a greater understanding of Virginia's rich history, from the cultures of its native peoples and the founding of Jamestown to the present. Geographic, economic, and civic concepts are presented within this historical context. Students will develop the skills needed to analyze, interpret, and demonstrate knowledge of important events and ideas in our history and will understand the contributions made by people of diverse cultural and ethnic backgrounds. Students will use geographic tools to examine the influence of physical and cultural geography on Virginia history. Ideas that form the foundation for political institutions in Virginia and the United States also will be included as part of the story of Virginia.

Music

Fourth grade learning emphasizes a deeper understanding of musical concepts during which students expand on the use of a creative process as they reflect on the process, create music, and revise work based on feedback. Advanced techniques in singing and instrumental techniques, as well as an expansion of understanding rhythmic and harmonic techniques, and using a system for improved melodic and rhythmic sight-reading is also explored. Students use an expanding music vocabulary to explain personal preferences for musical works and performances.

Visual Arts

The elements of art (e.g. color, form, line, shape, space, texture, value) and principles of design (e.g. balance, contrast, emphasis, movement, pattern, proportion, rhythm, unity, variety) as tools for visual communication, creative

expression, and production continue to be emphasized in fourth grade art. Further application of student skills include an awareness of proper proportion and illusion of depth on a two-dimensional surface. Students examine influences of art of the past on contemporary culture. Students will explore a continued range of art tools and subject matter as they engage in the creative process.

Physical Education

In the elementary years, students develop maturity and adaptability in the use of fundamental motor skills and patterns that are then further refined and combined during the middle school years.

Elementary students establish basic musculoskeletal vocabulary and use simple concepts as they develop their movements. They become aware of health-related fitness components (aerobic capacity, muscular strength and endurance, flexibility, and body composition), engage in a variety of physical activities, and develop a basic fitness plan. It is expected that elementary students recognize and use rules and procedures, focus on safety, respect similarities and dissimilarities, and cooperate with others. They will also understand the basic nutrition and fitness concepts of energy balance.

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Fifth Grade

Literacy

Students in fifth grade continue to deepen skills in communication, reading, and writing. Students practice word recognition at higher levels, reading multisyllabic words fluently using knowledge of syllable types and word analysis skills (prefixes, suffixes, and root words). Students use the writing process to plan, draft, revise, and edit writing in a variety of forms, communicating well-developed ideas in multiple paragraphs. Students build knowledge, develop vocabulary, and deepen comprehension through close reading of increasingly complex text centered around content-integrated units of study.

Mathematics

The fifth-grade standards place emphasis on number sense with whole numbers, fractions, and decimals. This focus includes concepts of prime and composite numbers, identifying even and odd numbers, and solving problems using order of operations for positive whole numbers. Students will develop proficiency in the use of fractions and decimals to solve practical problems. Students will collect, display, and analyze data in a variety of ways and solve probability problems, using a sample space, a tree diagram, or the Fundamental Counting Principle. Students will also solve problems involving volume, area, and perimeter. Students will be introduced to expressions with a variable. Students will solve problems using strategies including place value and the properties of addition and multiplication. All of these skills assist in the development of the algebraic concepts needed for success in the middle grades. Students will continue to develop more sophisticated ways to communicate and represent their mathematical thinking. Problem solving, reasoning, exploration, and connections are essential components of instruction so that students develop a deep understanding of concepts.

Science - *Transforming Matter and Energy*

Grade five science takes a deeper dive into foundational concepts in physical science, and students begin to make connections between energy and matter. Students explore how energy is transformed, and learn about electricity, sound, and light. They also learn about the composition of matter, and explore how energy can change phases of matter. They apply an understanding of force, matter, and energy when they explore how the Earth's surface changes. Students continue to develop scientific skills and processes as they pose questions and predict outcomes, plan and conduct investigations, collect and analyze data, construct explanations, and communicate information about the natural world. Mathematics and computational thinking gain importance as students advance in their scientific thinking. Students continue to use the engineering design process to apply their scientific knowledge to solve problems.

Social Studies - *United States History to 1865*

Students will use skills for historical and geographical analysis to explore the early history of the United States and understand ideas and events that strengthened the union. The standards for this course relate to the history of the United States from pre-Columbian times until 1865. Students will continue to learn fundamental concepts in civics, economics, and geography as they study United States history in chronological sequence and learn about change and continuity in our history. They also will study documents and speeches that laid the foundation for American ideals and institutions and will examine the everyday life of people at different times in the country's history through the use of primary and secondary sources.

Music

Fifth Grade serves as a synthesis of all previously learned music knowledge and concepts. Students use increasingly complex rhythms and meters to continue to read, write, and compose music. They develop choral skills, including singing in two- and three part harmony. Students explore and perform a variety of music styles and develop personal criteria to be used for describing and analyzing musical performances.

Visual Arts

In fifth grade art, students use their knowledge and skills to solve problems creatively. Students gain fluency in understanding and applying elements of art and principles of design as they relate to artistic expression and

communication. Through artistic choices, students communicate personal ideas, images, and themes. They also improve application of critical thinking skills when interpreting, describing, analyzing, and judging art.

Physical Education

In the elementary years, students develop maturity and adaptability in the use of fundamental motor skills and patterns that are then further refined and combined during the middle school years.

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Middle School Program



**Stafford County
Public Schools**

Inspire | Empower | Excel

Middle School Program

The purpose of middle school is to develop social, emotional, organizational, and interpersonal skills in students. Students will learn challenging curricula and learn to recognize the value of learning. Students are encouraged to explore a variety of subjects and electives in order to build knowledge and confidence in their abilities.

Stafford Schools' Framework for Student Learning and Stafford Profile of a Graduate guides our dedicated educators to deliver high quality curriculum through evidence-based instruction. Our classrooms are designed to engage students in critical thinking, communication, collaboration, and creativity in an environment that is supportive of their unique learning and social-emotional needs. We assess student progress using a multi-faceted approach to determine those needs, and provide in-time intervention, practice, and enrichment.

Course Information, Planning, and Registration

Counselors work with students and their parents/guardians to select courses in English, mathematics, science, history, and electives based on a student's learning needs, academic achievement, and interests. Each middle school has an elective program based on available staffing, facilities, and enrollment. At registration time, information will be provided regarding semester elective choices, required courses, and how many weeks each elective class will meet.

At registration time, students select core courses and electives for the upcoming school year. The course descriptions in this catalog contain information about what is taught in the course, the grade level at which the course is offered, and any requirements needed to take the course. Students select electives from fine and performing arts, career and technical education, and world language.

Each middle school offers a comparable elective program, but course design may vary from school-to-school based on facilities and available staffing. Courses with low enrollment may not be offered during a given year. In addition, courses are subject to possible cancellation due to financial constraints. In the event that courses are canceled, sufficient notice will be provided to allow for the selection of other courses. Students will identify alternative courses during the registration process, in the event changes must be made.

High School Credit Earned Prior to the 9th Grade

When students complete credit-bearing high school courses through an accredited institution before entering ninth grade, credit(s) will be counted toward meeting the units required for graduation. Students are encouraged to take advantage of this option and may earn credit for Algebra I, Geometry, world language or other high school courses as appropriate to their needs. It is possible to enter high school with one or more units of credit toward graduation requirements. If applicable, the student must take the Standards of Learning assessment for the credit-bearing course.

Occasionally, students may not demonstrate a desired degree of success in advanced courses taken prior to high school. Parents/guardians may request, in writing, no more than thirty (30) days following the posting of final year-end grades, that a credit-bearing course taken before entering high school be removed from their child's academic high school transcript.

Students for whom a credit-bearing course is deleted must repeat the course in its entirety if the course is a requirement for graduation. If an end-of-course SOL test is applicable, the student will not be required to retake the end-of-course test if a passing score was achieved. Please consult your child's counselor for additional information. This provision does not apply to courses taken while enrolled in grades 9-12.

Intervention and Enrichment

Middle schools will have dedicated time in the schedule for intervention and enrichment. The intervention support is designed to meet student's needs by accelerating student learning through addressing gaps in knowledge, understanding, and skills. Intervention and enrichment opportunities are designed to address the cognitive, physical,

emotional and social development, and well-being of middle school students. In addition, these experiences promote the division's emphasis on all-century skills (C5W) of *communication, collaboration, critical thinking, creativity, citizenship, and wellness* to prepare students for success.

Sample Middle School Student Schedules

Grade 6 Sample Schedule

PERIOD	X DAY	Y DAY
1 (68 minutes)	English Language Arts	English Language Arts
2 (68 minutes)	Mathematics	Mathematics
3 (68 minutes)	United States History: 1865 to the Present	Grade 6 Science
4 (68 minutes)	Health and Physical Education	Elective
5 (68 minutes)	Elective	Elective
*Friday Only - 6 (40 minutes)	FLEX	FLEX

See table in Mathematics Courses section for course options.

Elective options can be viewed in the section titled Elective Course options.

*FLEX will be offered one day per week at the discretion of school administration. On FLEX days, class lengths will be modified.

Grade 7 Sample Schedule

PERIOD	X DAY	Y DAY
1 (68 minutes)	English Language Arts	English Language Arts
2 (68 minutes)	Mathematics	Mathematics
3 (68 minutes)	Civics and Economics	Grade 7 Life Science
4 (68 minutes)	<div style="text-align: center;"> Required Elective: Pathways to Success (semester) <hr style="border-top: 1px dashed black;"/> Elective (semester) </div>	Health and Physical Education
5 (68 minutes)	Elective	Elective
*Friday Only - 6 (40 minutes)	FLEX	FLEX

See table in Mathematics Courses section for course options.

Elective options can be viewed in the section titled Elective Course options.

*FLEX will be offered one day per week at the discretion of school administration. On FLEX days, class lengths will be modified.

Grade 8 Sample Schedule

PERIOD	X DAY	Y DAY
1 (68 minutes)	English Language Arts	English Language Arts
2 (68 minutes)	Mathematics	Mathematics
3 (68 minutes)	World Geography	Grade 8 Physical Science
4 (68 minutes)	Health and Physical Education	Elective
5 (68 minutes)	Elective	Elective
*Friday Only - 6 (40 minutes)	FLEX	FLEX

See table in Mathematics Courses section for course options.

Elective options can be viewed in the section titled Elective Course options.

*FLEX will be offered one day per week at the discretion of school administration. On FLEX days, class lengths will be modified.

MIDDLE SCHOOL OFFERINGS



Courses with low enrollment, or those requiring special facilities or teachers with special skills, may not be offered at all schools or during a given school year. In some courses, students must meet the necessary background requirements to enroll. Individual course requirements are included within course descriptions.

English Courses

The English curriculum is designed to prepare students to read with comprehension, think critically, and communicate effectively. To provide for individual learning needs, differentiated instruction is offered at each grade level.

ENGLISH

1109 Grade 6

1110 Grade 7

1120 Grade 8

A series of sequential courses designed to further develop students' foundational and critical literacy skills. Instructional activities are based on the Virginia Standards of Learning and develop students' proficiency in multimedia literacies, written communication, reading, research, critical thinking, and analysis skills. Students will explore a variety of text genres, make comparisons between diverse texts, and apply learning to authentic contexts.

History and Social Science Courses

Social Studies, at the middle school level, is intended to build on the skills and foundational understandings from elementary school. There is one SOL Exam in the 7th grade to test student understanding of Civics and Economics. US History II and World Geography will use performance assessments. After completing the middle school social studies sequence of courses, students will have the knowledge, skills, and abilities to achieve success in high school.

2354 GRADE 6 UNITED STATES HISTORY: 1865 TO THE PRESENT

This course continues the study of United States history from 5th grade and explores the historical development of people, places, and patterns of life from 1865 to the present day. Topics explored are US growth and economic development, US participation in WWI, WWII, and the Cold War, the expansion of civil and political rights, and major technological advancements. Through this study, the students learn fundamental concepts in civics, economics, and geography in the context of U.S. History.

2357 GRADE 7 CIVICS AND ECONOMICS

This course focuses on the structure and functions of government institutions at the national, state, and local levels. The student will foster patriotism, gain a respect for the law, and develop a sense of civic duty. The role of the citizen in the American political and economic systems will be explored. Students will take the Civics and Economics Standards of Learning test.

2359 GRADE 8 WORLD GEOGRAPHY

The focus of this course is the study of the world's peoples, places, and environments with an emphasis on world regions. The knowledge, skills, and objectives of the course are centered on the world's population and cultural

characteristics, landforms and climates, migration and settlement patterns, as well as economic development. Particular emphasis is placed on students' applying geographic concepts and skills to their daily lives.

Mathematics Courses

Sample Middle School Mathematics Course Sequences

6th Graders in 2024-2025

6th Grade	7th Grade	8th Grade
Pre-Algebra 6	Pre-Algebra 7	Algebra I
Pre-Algebra Intensified	Algebra I	Geometry

7th Graders in 2024-2025

7th Grade	8th Grade	9th Grade
Pre-Algebra 7	Algebra I	Geometry
Algebra I	Geometry	Algebra II

8th Graders in 2024-2025

8th Grade	9th Grade	10th Grade
Math 8	Algebra I	Geometry
Algebra I	Geometry	Algebra II
Geometry	Algebra II	Pre-calculus

Mathematics instruction in grades six through eight focuses on the development of number sense, with emphasis on rational and real numbers. Rational numbers play a critical role in the development of proportional reasoning and advanced mathematical thinking. Students develop an understanding of integers and rational numbers using concrete, pictorial, and abstract representations. Flexible thinking about rational number representations is encouraged when students solve problems. Proportional reasoning is the key to making connections to many middle school mathematics topics. The content of the middle school mathematics standards is intended to support the following five process goals for students: becoming mathematical problem solvers, communicating mathematically, reasoning mathematically, making mathematical connections, and using mathematical representations to model and interpret practical situations.

3110 PRE-ALGEBRA 6

This course includes all of the Grade 6 Mathematics Standards of Learning and select content from the Grade 7 Mathematics Standards. This course focuses on the development of problem-solving skills and the acquisition of mathematical vocabulary and symbols that promote higher levels of critical thinking and analysis. Students perform single-step and multistep problems involving operations with rational numbers. Students determine equivalency, compare, and order decimals, fractions, and percents. Students solve problems involving area and perimeter and begin to graph in a coordinate plane. In addition, students use the data cycle by applying it to circle graphs and histograms as well as develop concepts regarding measures of center. Students solve linear equations in one variable, and represent proportional relationships using two variables. In addition, students solve problems involving experimental and theoretical probability, compare and contrast the properties of quadrilaterals, and evaluate algebraic expressions. Students enrolled in this course take the Grade 6 Mathematics Virginia Standards of Learning test.

3116 PRE-ALGEBRA 6 INTENSIFIED

Background: *Selection for this course is based on a set of criteria including previous SOL tests, a NWEA MAP Growth assessment, and teacher recommendation.*

This course includes all of the Grade 6, Grade 7, and Grade 8 Mathematics Standards of Learning. This course is designed for students who have a solid foundation in performing operations with rational numbers and can learn material at an accelerated pace. This course focuses on the development of problem-solving skills and the acquisition of mathematical vocabulary and symbols that promote higher levels of critical thinking and analysis. Students perform operations with rational numbers, recognize decimals, fractions, and percents as ratios, and gain a foundation in the understanding of and operations with integers. Students use the data cycle by applying it to circle graphs, histograms, scatterplots, and boxplots as well as develop concepts regarding measures of center. Additionally, students develop an understanding of proportional reasoning, representing linear equations in a variety of ways, solving multi-step linear equations and inequalities, and the concept of slope as a rate of change. Students also solve problems involving volume and surface area of more complex three-dimensional figures, apply transformations to geometric shapes, as well as verify and apply the Pythagorean Theorem. Students enrolled in this course take the Grade 8 Mathematics Virginia Standards of Learning test.

3111C PRE-ALGEBRA 7

This course includes the remaining Grade 7 Mathematics Standards not taught in Pre-Algebra 6 and all of the Grade 8 Mathematics Standards. This course focuses on the development of problem-solving skills and the acquisition of mathematical vocabulary and symbols that promote higher levels of critical thinking and analysis. Students continue to develop proficiency in operations with rational numbers and solving problems in context. Additionally, they represent and compare rational numbers using exponents, scientific notation, and square roots. Students develop an understanding of proportional reasoning, representing linear equations in a variety of ways, solving multi-step linear equations and inequalities, and the concept of slope as a rate of change. Students use the data cycle by applying it to histograms, scatterplots, and boxplots. In addition, students solve problems involving volume and surface area of more complex three-dimensional figures, apply transformations to geometric shapes, as well as verify and apply the Pythagorean Theorem. Students enrolled in this course take the Grade 8 Mathematics Virginia Standards of Learning test.

3112 GRADE 8 MATHEMATICS

This course continues to build on the concepts needed for success in high school level Algebra, Geometry, and Statistics. This course focuses on the development of problem-solving skills and the acquisition of mathematical vocabulary and symbols that promote higher levels of critical thinking and analysis. Students develop an understanding of proportional reasoning, making connections among representations of linear equations, and solving multi-step linear equations and inequalities. In addition, students solve problems involving volume and surface area of more complex three-dimensional figures, apply transformations to geometric shapes, and verify and apply the Pythagorean Theorem creating a foundation for further study of triangular relationships in Geometry. Students represent data and apply the data cycle and extend the application to boxplots and scatterplots. Students enrolled in this course take the Grade 8 Mathematics Virginia Standards of Learning test.

3130H HONORS ALGEBRA I

High School Credit-1

Background: *Selection for this course is based on a set criteria including successful completion of Pre-Algebra 7 and a passing score on the Grade 8 Mathematics SOL test.*

This advanced course requires students to use algebra as a tool for representing and solving a variety of contextual problems. Students use tables and graphs to interpret algebraic expressions, equations, and inequalities and to analyze behaviors of functions. Additionally, students use a transformational approach to graphing functions and writing equations when given the graph of the equation in order to build a strong connection between algebraic and graphic representations of functions. Computers and graphing calculator technologies are incorporated into the curriculum: 1) to allow students opportunities to explore concepts, 2) to provide visual models to support the learning of algebraic concepts, and 3) as powerful tools for solving and verifying solutions to equations and inequalities. Mathematical communication and reasoning are emphasized throughout the course. Students enrolled in this course take the EOC Algebra I Virginia Standards of Learning test.

3143H HONORS GEOMETRY

High School Credit-1

Background: *Selection for this course is based on a set criteria including successful completion of Honors Algebra I and a passing score on the Algebra I SOL test.*

This advanced course is designed for students who have successfully completed the standards for Algebra I. It includes an emphasis on developing reasoning skills through the exploration of geometric relationships including properties of geometric figures, trigonometric relationships, and mathematical proofs. There is an emphasis on two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. Computers and graphing calculator technologies are incorporated into the curriculum to allow students opportunities to explore concepts, engage in inquiry-based learning, provide visual models to support the learning of geometric concepts, and to use as powerful tools for solving and verifying solutions to equations and inequalities. Mathematical communication and reasoning are emphasized throughout the course. Students enrolled in this course will take the EOC Geometry Virginia Standards of Learning test.

Science Courses

Science classes at the middle school level provide students with basic content knowledge in earth, space, biological and physical sciences. The Virginia Science Standards of Learning test given in Grade 8 covers content from all three grades. Becoming familiar with the tools and methods of science to understand the natural world is an important component of the coursework at each grade level. Both science content and methodology are designed to help students be successful in their high school science courses.

4105 GRADE 6 EARTH SCIENCE

This course focuses on students transitioning from elementary to middle school. The science standards support that transition as students examine more abstract concepts, providing a foundation in the disciplines of science. They explore the characteristics of their world, from the Earth's placement in the solar system to the interactions of water, energy, air, and ecosystems on the Earth. As students more closely examine the use of resources, they also consider how their actions and choices affect future habitability on Earth. Students continue to develop scientific skills and processes as they pose questions and predict outcomes, plan and conduct investigations, collect and analyze data, construct explanations, and communicate information about the natural world. Mathematics and computational thinking gain importance as students advance in their scientific thinking. Students continue to use the engineering design process to apply their scientific knowledge to solve problems.

4115 GRADE 7 LIFE SCIENCE

This course emphasizes a more complex understanding of change, cycles, patterns, and relationships in the living world. Students build on basic principles related to these concepts by exploring the cellular organization and the classification of organisms; the dynamic relationships among organisms, populations, communities, and ecosystems; and change as a result of the transmission of genetic information from generation to generation. Students build on their scientific investigation skills through more independent identification of questions and planning of investigations. Students evaluate the usefulness and limits of models and support their conclusions using evidence. Mathematics, computational thinking, and experience in the engineering design process gain importance as students advance in their scientific thinking.

4125 GRADE 8 PHYSICAL SCIENCE

This course stresses an in-depth understanding of the nature and structure of matter and the characteristics of energy. Major areas covered by the standards include the particle nature of matter, the organization and use of the periodic table; physical and chemical changes; energy transfer and transformations; properties of longitudinal and transverse waves; electricity and magnetism; and work, force, and motion. The standards continue to build on skills of systematic investigation with a clear focus on variables and repeated trials. Validating conclusions using evidence and data becomes increasingly important at this level. Mathematics, computational thinking, and experiences in the engineering design process gain importance as students advance in their scientific thinking. Students enrolled in this course will take the Grade 8 Science Standards of Learning test.

Health and Physical Education Courses

Students participate in a health and physical education class each year. Students perform a variety of physical activities, learn the benefits of achieving and maintaining a physically active lifestyle and how to achieve good health for a lifetime. Instruction in family life education is included in these year-long courses.

7110 GRADE 6 HEALTH AND PHYSICAL EDUCATION

Students combine fundamental skills into more complex movement forms with modified games, dance/rhythms, and recreational activities. Activities include cooperative and competitive small-group games to develop skills and tactical understanding. Students practice to improve skill performance and fitness. Students assess their health-related fitness status and set reasonable and appropriate goals for development, maintenance, and improvement of their overall fitness. Activities emphasize self-improvement, participation, cooperation, respect for others, and sportsmanship. Students solve problems and make responsible decisions as they work together. Students are encouraged to adapt responsible behaviors that lead to a physically active lifestyle at school and outside the school environment. Health education includes 6th Grade Health Units, Character Playbook (Everfi), Nutrition, Social/Emotional Health and Violence Prevention, Safety and Injury Prevention, and Family Life Education.

7120 GRADE 7 HEALTH AND PHYSICAL EDUCATION

Students continue to develop competence in modified versions of games/sports, dance/rhythms, and recreational activities. Recreational pursuits are emphasized, broadening lifetime physical activity options. Students relate the importance of physical activity to health. They create plans for improving personal fitness. Students continue to develop responsible personal and social behaviors by demonstrating decision-making skills, conflict-resolution skills, appropriate etiquette, and respect for others. Students achieve and maintain personal fitness standards and set reasonable and appropriate goals for improvement or maintenance of health-related fitness. Health education covers wellness and healthy living, violence prevention, safety and prevention of injury, mental and emotional health, disease of the body, alcohol, tobacco, and other drugs, and family life education.

7200 GRADE 8 HEALTH AND PHYSICAL EDUCATION

Students demonstrate competence in skillful movement in modified and more complex dynamic game/sport situations, dance/rhythm activities, and recreational activities. Students demonstrate mature responsibility as they show respect for others, make reasoned and appropriate choices, resist negative peer pressure, and exhibit fair play. Students set goals, track progress, and participate in physical activities to improve health-related fitness. They develop a repertoire of abilities across a variety of games/sport and recreational pursuits and begin to develop competence in specialized versions of lifetime games, sports, and dance activities. Health education covers the topics of wellness and healthy living, violence prevention, safety and prevention of injury, mental and emotional health, body systems, alcohol, tobacco, and other drugs, and family life education.

English Learner Courses

In addition to their core content classes, students identified as English Learners (ELs) may take the following courses designed to enhance their language acquisition in reading and writing, as well as develop academic vocabulary for content areas. All EL courses may not be offered at all schools due to enrollment and staffing availability.

5712 CONTENT LANGUAGE DEVELOPMENT FOR ENGLISH LEARNERS

Grades 6, 7, or 8

Background: *Selection for this course is based on a set criteria including WIDA assessments and teacher recommendation.*

This course is designed for WIDA Proficiency Level 1 - 2. The goal of the course is to promote language acquisition while helping students build their literacy skills. Students will develop content specific vocabulary in the core areas of language arts, math, science, and social studies as aligned with the Virginia Standards of Learning and the WIDA ELD Framework.

5713 READING AND WRITING STRATEGIES FOR ENGLISH LEARNERS

Grades 6, 7, or 8

Background: *Selection for this course is based on a set criteria including WIDA assessments and teacher recommendation.*

This course is designed for Proficiency Level 3.0-4.3. Students will develop their literacy skills to become more mature readers and more proficient writers. Students will learn and apply a variety of reading and writing strategies while continuing to develop English Language Proficiency. The course will utilize Virginia Standards of Learning in Language Arts in grades 6-8 and WIDA Standard for Language Arts.

5733 MATH CONCEPTS FOR ENGLISH LEARNERS

Grades 6, 7, or 8

Background: *Selection for this course is based on a set criteria including WIDA assessments and teacher recommendation.*

This course is designed to build background knowledge, mathematical language, basic number sense, and computation skills in newcomer English learners in grades 6-8 with WIDA Proficiency Levels 1-2. The goal of the course is to promote language acquisition while helping students build their mathematical skills. Students will develop content specific vocabulary in the core area of middle school mathematics as aligned with the Virginia Standards of Learning and the WIDA Language Standard of Mathematics.

Elective Courses

Students and their parents/guardians should read elective course descriptions carefully. Each course description indicates the grade level at which the course may be taken, the topics studied in the course, and any background needed for the course. Some electives may not be offered at all schools due to enrollment, available staff, budget, and facilities. Elective courses are 18 weeks (1 semester) or 36 weeks (a full year). The length of the course is noted in each course description.

Required Elective

9069 PATHWAYS TO SUCCESS ▲ (18 weeks)

Grade 7

Pathways to Success provides experiences to help students explore career pathways within the 17 identified career clusters by investigating through self-discovery and project-based learning activities. Self-assessments will allow students to discover their interests, strengths, and explore various pathways in high school and beyond for developing an "Academic and Career Plan." This course meets the state's regulatory requirement to provide a career investigations course during middle school.

▲ = Work-Based Learning

Visual and Performing Arts Courses

Visual Arts

9103 BEGINNING STUDIO ART (18 weeks)

Grades 6, 7, or 8

In this course, students learn the characteristics of visual art through a wide range of subject matter, symbols, meaningful images, and visual expressions. In classroom discussions, students use an expanding art vocabulary while describing personal work and the work of others. Students classify two-dimensional and three-dimensional images and construct a three-dimensional form. An introduction of color theory, including identifying and constructing a simple color wheel, is a part of this course.

9105 INTERMEDIATE STUDIO ART (18 weeks)

Grades 7 or 8

Background: *Successful completion of Beginning Studio Art*

This course teaches the development of visual perception and recording from direct observation, memory, and imagination. Students prepare and develop an idea or theme by collecting and organizing visual resources. In classroom discussions, students use expanding art vocabulary to describe the use of texture, pattern, shape, line, and color. Students apply the basic rules of perspective, proportion, value, and color theory. Students also manipulate distance, size, and placement to create three-dimensional effects on a two-dimensional plane.

9115 ADVANCED STUDIO ART (18 weeks)

Grade 8

Background: *Successful completion of Intermediate Studio Art*

This course refines a student's ability to select and control the use of materials, tools, and techniques in their own work to develop, express, and modify ideas, intention, and feeling that were previously developed. Students will continue to understand the visual language of art, expanding art vocabulary while describing their own work and the work of others. Artwork should reflect increased manual and creative skills in addition to expanded knowledge of the use and application of the elements of design. Students use simple perspective systems for symbolizing what they are rendering. Students also manipulate proportion, value, and color to create realistic or expressive images.

9180 BEGINNING DIGITAL ART (18 weeks)**Grades 6, 7, or 8**

Students will learn the characteristics of visual art through a wide range of subject matter, symbols, meaningful images, and visual expressions. This beginning level course will develop computer based artistic skills and creative concepts. An introduction to color theory, as well as the elements and principles of design, will also be part of this course.

9181 INTERMEDIATE DIGITAL ART (18 weeks)**Grades 7 or 8*****Background: Successful completion of Beginning Digital Art***

This is an intermediate level course that will teach the development of visual perception and recording from direct observation, memory, and imagination. Students will explore software applications that promote visual awareness, as well as expand their skill set in both manual and digital artistic techniques.

9182 ADVANCED DIGITAL ART (18 weeks)**Grades 8*****Background: Successful completion of Intermediate Digital Art***

This advanced level course teaches the development of visual perception and recording from direct observation, memory, and imagination. Students will explore software applications that promote visual awareness, as well as expand their skill set in both manual and digital artistic techniques. The elements and principles of design will be emphasized throughout artistic production and creation as students develop and express intentions and feeling through artistic production and creation.

Music

Note: Ensemble courses (band, chorus, and orchestra) are performance-based courses that involve participation in concerts and other performances and rehearsals outside of class time. There may be a requisite instrumental rental fee and uniform fee for students in these programs.

9229 BEGINNING BAND (36 weeks)**Grades 6, 7, or 8**

In Beginning Band, students learn proper playing technique on an instrument well-suited to their natural abilities. Students learn to play both individually and in an ensemble setting and learn maintenance of the instrument. The teacher follows the county-adopted curriculum, which is based on the Virginia Standards of Learning. Evaluation of progress is based on individual playing tests, written work, and daily class participation. Daily, at-home practice is necessary to master playing technique. Since performances are an integral and vital extension of this course, participation in performances outside of the school day may be required.

9230 INTERMEDIATE BAND (36 weeks)**Grades 7 or 8*****Background: Successful completion of Beginning Band***

Intermediate Band is a continuation of Beginning Band. In intermediate band, students continue to learn proper playing technique and develop ensemble skills. The teacher follows the county-adopted curriculum, which is based on the Virginia Standards of Learning. Evaluation of progress is based on individual playing tests, written work, and daily class participation. Daily, at-home practice is necessary to continue mastering playing technique. Since performances are an integral and vital extension of this course, participation in performances outside of the school day may be required.

9231 ADVANCED BAND (36 weeks)**Grade 8*****Background: Successful completion of Intermediate Band***

Advanced Band is a continuation of beginning and Intermediate Band. In Advanced Band, students refine playing skills and develop higher-level listening skills. Students are highly encouraged to attend All-County band auditions, All-District band auditions and Solo and Ensemble Festival. The teacher follows the county adopted curriculum, which is based on the Virginia Standards of Learning. Evaluation of progress is based on individual playing tests, written work, and daily class participation. Daily, at-home practice is necessary to continue mastering playing technique.

Since performances are an integral and vital extension of this course, participation in performances outside of the school day may be required.

9269 BEGINNING CHORUS (36 weeks)

Grades 6, 7, or 8

Beginning Chorus introduces students to the study of vocal technique, vocal pedagogy, proper vocal production, correct abdominal breathing, intonation, posture, and conducting patterns. Music theory, ear training, sight-singing, music repertoire development, music history, analysis, and technology are components of this course. The teacher follows the county-adopted curriculum, which is based on the Virginia Standards of Learning. Students also develop their abilities to perform as an ensemble. Additional goals for the course focus on assisting students in understanding the role of music in our society, appreciating different cultures and customs, acquiring stage presence and decorum, and fostering positive attitudes for further choral study.

9270 INTERMEDIATE CHORUS (36 weeks)

Grades 7 or 8

Background: Successful completion of Beginning Chorus

Intermediate Chorus is a continuation of Beginning Chorus. This course extends students' skills and understanding of musical compositions, basic theory structure, music history, vocal pedagogy, proper vocal production and technique. The goals of the course set higher expectations of a student's knowledge and understanding of vocal technique, music theory, ear training, sight-singing, music history, analysis, and technology. Development of the student's ability to perform as an ensemble is a strong focus for the course. Students study the role of music in our society, different cultures and customs, stage presence, and decorum. Since performances are an integral and vital extension of this course, participation in performances outside of the school day may be required.

9271 ADVANCED CHORUS (36 weeks)

Grade 8

Background: Successful completion of Intermediate Chorus

Advanced Chorus is a continuation of Intermediate Chorus. This course establishes a high expectation level for a student's development and refinement of skills and understanding of musical compositions, vocal technique, proper vocal production, and technique. These goals target increasing and deepening a student's knowledge and understanding of music theory, ear training, sight-singing, music history, analysis, and technology. The development of ensemble performance skills is a strong focus for the course. Students extend their understanding of music through interdisciplinary activities and exploration of career opportunities in the field of music. Students increase their understanding of the role of music in our society, different cultures and customs, stage presence, and decorum. Students are highly encouraged to attend All-County and All-District Chorus auditions. Since performances are an integral and vital extension of this course, participation in performances outside of the school day may be required.

9235 BEGINNING ORCHESTRA (36 weeks)

Grades 6, 7, or 8

In Beginning Orchestra, students study an instrument from the string family (violin, viola, cello, bass). Students learn correct technique on their chosen string instrument and perform in an ensemble through sequential music exercises, folk songs, and age-appropriate repertoire. Students are guided to the understanding of musical compositions, basic theory structure, music history, music interpretation, articulation, dynamics, phrasing, ensemble balance, bowing technique, instrument care, tone production, and conducting patterns. Daily, at-home practice is necessary to continue mastering playing technique. Since performances are an integral and vital extension of this course, participation in performances outside of the school day may be required.

9236 INTERMEDIATE ORCHESTRA (36 weeks)

Grades 7 or 8

Background: Successful completion of Beginning Orchestra

Intermediate Orchestra is a continuation of Beginning Orchestra. Students continue the mastery of string technique and ensemble performance through the study of advanced music exercises, folk songs, and age-appropriate repertoire. Daily, at-home practice is necessary to continue mastering playing technique. Performance opportunities will be more abundant. Since performances are an integral and vital extension of this course, participation in performances outside of the school day may be required.

9241 ADVANCED ORCHESTRA (36 weeks)**Grade 8**

Background: *Successful completion of Intermediate Orchestra*

Advanced Orchestra is a continuation of Beginning and Intermediate Orchestra. Students continue the mastery of string technique and ensemble performance through advanced technical etudes, scales and arpeggios, and age-appropriate repertoire. Daily, at-home practice is necessary to continue mastering playing technique. Preparation for performances is more intensive. Since performances are an integral and vital extension of this course, participation in performances outside of the school day may be required.

9249 GUITAR (18 weeks)**Grades 7 or 8**

This course is designed for students with a passion for music and desire to learn guitar. Guitar instruction emphasizes basic technique, music reading, progressions, and music theory. Music literature is selected from classical and contemporary repertoire. This course offers a comprehensive study of all musical styles. This course may only be taken once. No prior experience is required.

9272 MUSIC PRODUCTION (18 weeks)**Grades 7 or 8**

This course is for students with a passion for music and creativity. In this hands-on course, students will create sound maps and basic recording techniques while composing original compositions. Students will collaborate with others to create a production plan to perform, record, and produce music through the exploration of electronic sounds, software-based instruments, and traditional acoustic instruments. Students will become active music makers, creators and responders to music. This course may only be taken once.

Theatre Arts

1390 BEGINNING THEATRE ARTS (18 weeks)**Grades 6, 7 or 8**

In this course, students develop their creative potential by producing and participating in dramatic and theatrical experiences. Through activities that require students to work cooperatively, students begin to develop their internal and external personal resources and form aesthetic judgments. They are exposed to dramatists and their works and to key theatrical players and participants. Students begin to integrate drama with other academic disciplines.

1395 INTERMEDIATE THEATRE ARTS (18 weeks)**Grades 7 or 8**

Background: *Successful completion of Beginning Theatre Arts*

This course begins to refine students' dramatic and theatrical skills typically learned in beginning theatre arts. Using voice, language, movement, imagination, and emotional perception, students develop characters for the theater, and their own self-discipline and self-concept. They learn drama through artistic collaboration through improvisation, play writing, directing, technical production, and theater management. In addition, students learn about theater in the past and theater today with an emphasis on available roles and careers.

1400 ADVANCED THEATRE ARTS (18 weeks)**Grade 8**

Background: *Successful completion of Intermediate Theatre Arts*

This course continues to refine students' dramatic and theatrical skills previously taught in intermediate theatre arts. Using voice, language, movement, imagination, and emotional perception, students develop not only characters for the theater, but their own self-discipline and self-concept. They learn through artistic collaboration with activities such as improvisation, play writing, directing, technical production, and theater management. In addition, students learn about theater in the past and theater today with an emphasis on available roles and careers.

World Language Courses

In a beginning world language course, students gain an understanding of the components of a world language and of the study skills necessary to learn a world language.

A world language course is a high school credit-bearing class; students who elect to take a world language will be enrolled in this class for the full year and follow Stafford County guidelines for middle school students enrolled in high school credit-bearing courses.

All middle schools offer Spanish I. Additional language courses will be offered as determined by staff availability.

5510 SPANISH I (36 weeks)

Grade 8

High School Credit-1

Students gain an understanding of the components of a world language and the study skills necessary to learn a world language. As students develop skills in listening, speaking, reading, and writing, they engage in active practice in real-life situations and in a variety of cultural contexts. This course is offered at all middle schools.

5110 FRENCH I (36 weeks)

Grade 8

High School Credit-1

Students gain an understanding of the components of a world language and the study skills necessary to learn a world language. As students begin to develop skills in listening, speaking, reading, and writing, they engage in active practice in real-life situations and in a variety of cultural contexts.

5210 GERMAN I (36 weeks)

Grade 8

High School Credit-1

Students gain an understanding of the components of a world language and the study skills necessary to learn a world language. As students begin to develop skills in listening, speaking, reading, and writing, they engage in active practice in real-life situations and in a variety of cultural contexts.

5310 LATIN I (36 weeks)

Grade 8

High School Credit-1

Students are introduced to the basic vocabulary and grammar system of the language. Roman life, history, mythology, and English derivations are integral parts of the course.

5511 SPANISH FOR FLUENT SPEAKERS I (36 weeks)

Grade 8

High School Credit-1

This course is intended for fluent, heritage, or native speakers of Spanish, including Spanish-speaking English Language Learners. This course will be taught primarily in Spanish. The goal of the course is to provide fluent Spanish-speaking students with opportunities to develop their speaking, listening, writing, and reading skills and abilities. Students will study Hispanic culture and history to strengthen identity and build a sense of community.

Career and Technical Education Courses

Business and Information Technology

6609 BEGINNING DIGITAL EXPLORATIONS (18 weeks)

Grade 6

Students are introduced to computing devices and software as problem-solving tools. Students will complete a variety of projects with word processing, database, presentation, and spreadsheet software. Students will be placed in a virtual environment to explore Internet safety and digital citizenship. Students will explore coding and device maintenance as well as the "nuts and bolts" of how technology works.

4002 INTERMEDIATE COMPUTER SCIENCE DISCOVERIES (18 weeks)

Grades 7 or 8

Computer Science Discoveries, an introductory computer science course, takes a wide lens on computer science by covering topics such as problem solving, programming, physical computing, user centered design, and data, while inspiring students as they build their own websites, apps, animations, games, and physical computing systems. An interdisciplinary approach will be supported in teaching and learning.

6617 ADVANCED DIGITAL EXPLORATIONS (18 weeks)

Grades 7 or 8

This course helps students develop or review correct keyboarding techniques and gain a basic knowledge of word processing, spreadsheet, database, graphics, network, and telecommunication applications. Students demonstrate an understanding of computer concepts through the application of knowledge and real-world activities and develop employability skills required for careers in information technology. An interdisciplinary approach will be supported in teaching and learning.

Technology and Engineering Education

8482 BEGINNING TECHNOLOGY AND ENGINEERING (18 weeks)

Grade 6

This foundational course establishes OSHA safety standards through the use of the Engineer Design Process. Students investigate the relationship between technology, engineering, and how technology impacts the world around them. Project based learning is used to explore hand tools, materials, and techniques used to address occupational challenges. Students may design projects with computer aided drafting, 3D printing, parts of a system, and sublimation. Workplace Readiness Skills and career awareness activities in STEM are embedded throughout the course.

8464 INTERMEDIATE TECHNOLOGY AND ENGINEERING (18 weeks)

Grades 7 or 8

Students expand their knowledge of the Engineer Design Process by transforming materials into useful products. Students investigate inventions and engineering achievements that have impacted history, advanced society, and altered our world. Problem Based Learning is used to plan, design, build, and present how innovations address contemporary technological problems. These future engineers improve and repurpose a product using emerging technologies to include: machine tools, hand tools, and advanced machining software. Students explore Work-Based Learning experiences and benefits of participating in Technology Student Association (TSA).

8463 ADVANCED TECHNOLOGY AND ENGINEERING (18 weeks)

Grades 7 or 8

This advanced technology and engineering course utilizes the Engineering Design Process to introduce: construction, transportation, manufacturing, communication, power and energy, and biotechnology pathways. Students interpret designer's schematics in order to choose the best materials for designing and assembling a product in the production lab using industry appropriate machinery. Students will be exposed to processes for working with plastics, metals,

woods, ceramics, and composites to produce a product or meet a need. Challenging laboratory activities ignite students' creativity to build systems and analyze technologies to learn how and why they work. Students will practice workplace readiness skills, gain exposure to Work-Based Learning and collaborate with high school Technology Student Association (TSA) members. Note: Students are encouraged to complete 8482 or 8464 prior to enrolling in this course.

Family and Consumer Sciences

8208 BEGINNING FAMILY AND CONSUMER SCIENCES (18 weeks)

Grade 6

Students explore the Family and Consumer Sciences program areas through creative and critical thinking activities. Students make decisions about their individual growth, goal setting, money management, healthy food selections, food preparation, and clothing care. They learn to manage time, resources, and program equipment. This is an interdisciplinary approach to family and consumer sciences. An interdisciplinary approach will be supported in teaching and learning.

8263 INTERMEDIATE DESIGNING WITH FOODS, FASHION, AND FAMILY (18 weeks)

Grades 7 or 8

Students utilize the design thinking process to learn family and consumer science concepts. Students resolve issues in foods, fashion, and family as they move through the design process. They explore nutrition, wellness, food preparation, personal finance, resource management, textile/apparel problems and construction, and address the needs of the family and community. An interdisciplinary approach will be supported in teaching and learning.

8244 ADVANCED JOURNEY TOWARDS INDEPENDENCE ▲ (18 weeks)

Grades 7 or 8

This course provides advanced consumer literacy tools to help students develop independent living skills. Students will use problem-based projects and real-world experiences to address consumer decisions, time and money management with financing a living space, clothing, child care, and food preparation while balancing relationships, family, and learning workplace readiness skills. Projects may include Life/Event Planning, Entrepreneurship, and Service Learning in the community. An interdisciplinary approach will be supported in teaching and learning.

▲ = Work-Based Learning

Academic Electives

1202 COMMUNITY LEADERS I ▲ (18 weeks)

Grades 6, 7, or 8

This project-based elective course explores the qualities of leadership, identifies students' leadership skills and how they can help build a stronger school. Various forms of literature and media sources will be explored to identify the qualities of a leader and relate those to current student-led initiatives around the world. Students will identify and present school community needs and develop a plan to bring awareness and/or create solutions by completing a school-based community service project. During this course students will strengthen their leadership capacity through a focus on collaboration, critical thinking, creativity, communication, citizenship, and wellness.

▲ = Work-Based Learning

1204 COMMUNITY LEADERS II ▲ (18 weeks)

Grades 7 or 8

Building on the leadership skills developed in Community Leaders I, students will continue to explore the styles and characteristics of leadership. They will focus on how they can build stronger communities. Various forms of literature and media sources will be explored to identify the qualities of a leader and relate those to current student-led initiatives around the world. Students will identify and present community needs and develop a plan to bring awareness and/or create solutions by completing a community service project. During this course students will strengthen their leadership capacity through a focus on collaboration, critical thinking, creativity, communication,

citizenship, and wellness.
▲ = Work-Based Learning

2352 HISTORY AND SOCIAL STUDIES INDEPENDENT STUDY (18 weeks)
Grades 7 or 8

Students will use this course to complete a National History Day project. With support from a teacher, students will research a topic that aligns with the annual theme and complete one of 5 types of projects: exhibit, website, documentary, performance, or research paper. Students may present their projects at the Stafford Social Studies Showcase and compete in the Virginia/National History Day competitions. This course may only be taken one time.

LITERACY LAB (36 weeks)

1106 Grade 6

1107 Grade 7

1108 Grade 8

Background: Selection for this course is based on a set of criteria including previous SOL tests, reading assessments, and teacher recommendation.

The focus of this course is to provide students with explicit, direct instruction in reading fluency, vocabulary development, and comprehension strategies to build background knowledge. Direct instruction in phonemic awareness and phonics is provided as needed. Students' strengths and weaknesses are addressed through whole group and small group instruction. Emphasis is placed on understanding text structure, building background knowledge, making relevant connections to text, asking questions, inferring, summarizing, and synthesizing through systematic reading and writing instruction. Using a blended learning approach that combines personalized, computer-based instruction with explicit, targeted teacher-delivered lessons and activities, this course will deliver the exact instruction each student needs to become a proficient reader.

1399 PUBLIC SPEAKING AND DEBATE (18 weeks)
Grades 6, 7, or 8

This course will introduce students to the basics of public speaking, including debate and online formats such as podcasts and Ted Talks. Students will learn the purpose of a speech and practice various forms of public speaking and debate. This course supports critical thinking, research, writing, and public speaking. Students will participate in class presentations and debates. This course may only be taken one time.

1172 CREATIVE WRITING (18 weeks)
Grades 6, 7 or 8

Students will use mentor texts to discover and refine a variety of writing styles to write creatively and expressively, with a focus on lively and descriptive language. Students will write a variety of creative pieces culminating in a writing portfolio. Students will peer edit and provide guidance on written papers in structured writing centers. This course may only be taken one time.

INVESTIGATE MATHEMATICS (36 weeks)

3113 Grade 6

3114 Grade 7

3115 Grade 8

Background: Selection for this course is based on a set criteria including previous SOL assessment scores, a NWEA MAP Growth assessment, and teacher recommendation.

This course provides students with the opportunity to further explore mathematical topics through hands-on experiences in order to deepen their conceptual understanding and strengthen their performance and confidence with mathematics. Students will receive systematic, targeted intervention to close instructional gaps and to improve number sense, computation, and algebraic skills. There will be a focus on problem solving strategies and critical thinking skills.

3117 MATHEMATICS PERFORMANCE LAB (18 weeks)
Grades 7 or 8

This elective course is designed to give students opportunities to work through rich mathematical tasks and empower them to utilize critical thinking skills. Students will work cooperatively through real-world scenarios while making powerful connections between mathematical content and skills. Algebraic topics will be emphasized through a problem-centered, inquiry-based learning environment. This course may only be taken one time.

4000 INNOVATION STUDIO (18 weeks)
Grades 7 or 8

The Innovation Studio elective course explores science, technology, engineering, and math all in one curriculum. Learners are presented opportunities to work in collaborative groups in order to solve relevant interdisciplinary-based problems. Robotics, coding, and prototyping provide an environment for students to demonstrate computational thinking and mastery of all-century skills. This course may only be taken one time.

4140 EXPLORING LIVING SYSTEMS, MARVELS, AND PHENOMENA (18 weeks)
Grades 7 or 8

This science lab elective complements Life Science as it focuses on both scientific inquiry and specific investigations that help students decode the diversity of life, ecosystems, phenomena, and decode physical forces, and chemical processes through direct data collection of qualities and quantities providing evidence for understanding.

Index of Middle School Courses

Courses with low enrollment, or those requiring special facilities or teachers with special skills, may not be offered at all schools or during a given school year.

COURSE #	COURSE	HIGH SCHOOL CREDIT	Duration	GRADE	BACKGROUND
ENGLISH					
1109	Grade 6 English	0	36 weeks	6	
1110	Grade 7 English	0	36 weeks	7	
1120	Grade 8 English	0	36 weeks	8	
HISTORY AND SOCIAL SCIENCE					
2354	Grade 6 United States History: 1865 to the present	0	36 weeks	6	
2357	Grade 7 Civics and Economics	0	36 weeks	7	
2359	Grade 8 World Geography	0	36 weeks	8	
MATHEMATICS					
3110	Pre-Algebra 6	0	36 weeks	6	
3116	Pre-Algebra 6 Intensified	0	36 weeks	7	Selection for this course is based on a set criteria.
3111C	Pre-Algebra 7	0	36 weeks	7	
3112	Grade 8 Mathematics	0	36 weeks	8	
3130H	Honors Algebra I	1	36 weeks	7 - 8	Selection for this course is based on a set criteria including successful completion of Pre-Algebra 7 and a passing score on the Grade 8 Mathematics SOL test.
3143H	Honors Geometry	1	36 weeks	8	Selection for this course is based on a set criteria including successful completion of Honors Algebra I and a passing score on the Algebra I SOL test.
SCIENCE					
4105	Grade 6 Science	0	36 weeks	6	
4115	Grade 7 Life Science	0	36 weeks	7	
4125	Grade 8 Physical Science	0	36 weeks	8	
HEALTH AND PHYSICAL EDUCATION					
7110	Grade 6 Health and Physical Education	0	36 weeks	6	
7120	Grade 7 Health and Physical Education	0	36 weeks	7	
7200	Grade 8 Health and Physical Education	0	36 weeks	8	
ENGLISH LEARNERS (EL)					
5712	Content Language Development for English Learners	0	36 weeks	6 - 8	Selection for this course is based on a set criteria

COURSE #	COURSE	HIGH SCHOOL CREDIT	Duration	GRADE	BACKGROUND
					including WIDA assessments and teacher recommendation.
5713	Reading and Writing Strategies for English Learners	0	36 weeks	6 - 8	Selection for this course is based on a set criteria including WIDA assessments and teacher recommendation.
5733	Math Concepts for English Learners	0	36 weeks	6 - 8	Selection for this course is based on a set criteria including WIDA assessments and teacher recommendation.
ELECTIVES - VISUAL AND PERFORMING ARTS					
VISUAL ARTS					
9103	Beginning Studio Art	0	18 weeks	6 - 8	
9105	Intermediate Studio Art	0	18 weeks	7 - 8	Successful completion of Beginning Studio Art
9115	Advanced Studio Art	0	18 weeks	8	Successful completion of Intermediate Studio Art
9180	Beginning Digital Art	0	18 weeks	6 - 8	
9181	Intermediate Digital Art	0	18 weeks	7 - 8	Successful completion of Beginning Digital Art
9182	Advanced Digital Art	0	18 weeks	8	Successful completion of Intermediate Digital Art
PERFORMING ARTS					
9229	Beginning Band	0	36 weeks	6 - 8	
9230	Intermediate Band	0	36 weeks	7 - 8	Successful completion of Beginning Band
9231	Advanced Band	0	36 weeks	8	Successful completion of Intermediate Band
9269	Beginning Chorus	0	36 weeks	6 - 8	
9270	Intermediate Chorus	0	36 weeks	7 - 8	Successful completion of Beginning Chorus
9271	Advanced Chorus	0	36 weeks	8	Successful completion of Intermediate Chorus
9235	Beginning Orchestra	0	36 weeks	6 - 8	
9236	Intermediate Orchestra	0	36 weeks	7 - 8	Successful completion of Beginning Orchestra
9241	Advanced Orchestra	0	36 weeks	8	Successful completion of Intermediate Orchestra
9249	Guitar	0	18 weeks	7 - 8	
9272	Music Production	0	18 weeks	7 - 8	
1390	Beginning Theatre Arts	0	18 weeks	6 - 8	
1395	Intermediate Theatre Arts	0	18 weeks	7 - 8	Successful completion of Beginning Theatre Arts
1400	Advanced Theatre Arts	0	18 weeks	8	Successful completion of Intermediate Theatre
ELECTIVES - WORLD LANGUAGES					
5510	Spanish I	1	36 weeks	8	
5110	French I	1	36 weeks	8	
5210	German I	1	36 weeks	8	
5310	Latin I	1	36 weeks	8	
5511	Spanish For Fluent Speakers I	1	36 weeks	8	Course is intended for heritage and native speakers

COURSE #	COURSE	HIGH SCHOOL CREDIT	Duration	GRADE	BACKGROUND
					of Spanish and is taught in Spanish.
CAREER AND TECHNICAL EDUCATION					
BUSINESS AND INFORMATION TECHNOLOGY					
6609	Beginning Digital Explorations	0	18 weeks	6	
4002	Intermediate Computer Science Discoveries	0	18 weeks	7 - 8	
6617	Advanced Digital Explorations	0	18 weeks	7 - 8	
TECHNOLOGY EDUCATION					
8482	Beginning Technology and Engineering	0	18 weeks	6	
8464	Intermediate Technology and Engineering	0	18 weeks	7 - 8	
8463	Advanced Technology and Engineering	0	18 weeks	7 - 8	
FAMILY AND CONSUMER SCIENCES					
8208	Beginning Family and Consumer Sciences	0	18 weeks	6	
8263	Intermediate Designing with Foods, Fashion, and Family	0	18 weeks	7 - 8	
8244	Advanced Journey Towards Independence	0	18 weeks	7 - 8	
ACADEMIC ELECTIVE					
1106 1107 1108	Literacy Lab	0	36 weeks	6-8	Selection for this course is based on a set of criteria including previous SOL tests, reading assessments, and teacher recommendation.
1172	Creative Writing	0	18 weeks	6 - 8	Elective
1399	Public Speaking and Debate	0	18 weeks	6 - 8	Elective
1202	Community Leaders I	0	18 weeks	6 - 8	Elective
1204	Community Leaders II	0	18 weeks	7 - 8	Elective
2352	History and Social Studies Independent Study	0	18 weeks	7 - 8	Elective
3113 3114 3115	Investigate Mathematics	0	36 weeks	6-8	Selection for this course is based on a set criteria including previous SOL tests and teacher recommendation.
3117	Mathematics Performance Lab	0	18 weeks	7 - 8	Elective
4000	Innovation Studio	0	18 weeks	7 - 8	Elective
4140	Exploring Living Systems, Marvels, and Phenomena	0	18 weeks	7 - 8	Elective
REQUIRED ELECTIVE					
9069	Pathways to Success	0	18 weeks	7	

High School Program



**Stafford County
Public Schools**

Inspire | Empower | Excel

High School Program

The purpose of high school is to solidify the educational experience (K-12) of all students as they transition to postsecondary life. In addition, it ensures that students are not only equipped with necessary and rigorous academic knowledge, but also with the ability to apply it to complex, real-life situations thereby positively impacting their local and global communities. Moreover, it facilitates an environment that builds upon a foundation of social and emotional wellness and awareness, producing well-rounded individuals that are prepared for the transition into adulthood.

Stafford Schools' Framework for Student Learning and Stafford Profile of a Graduate guide these efforts. They ensure that students are consistently engaged in high quality, student centered instruction. The classroom experience continues to be grounded in critical thinking, communication, collaboration, and creativity in an environment that is supportive of students' unique learning and social-emotional needs. Regardless of students' post secondary aspirations (work-ready, post secondary education, military), Stafford Schools staff support their goals, pathways, and ultimate success.

General Course Information

Increasing Secondary Options for Students

Stafford Schools is undergoing a significant redesign of high schools that will better prepare students for college and/or careers. The redesign will modernize program offerings based on job-market data and provide specialized centers of learning that provide multiple pathways to match students' interests and postsecondary goals, beginning with the class of 2028 (current eighth graders in 2024-2025). Changes to programmatic offerings aligned with new high school centers and pathways will not impact students that entered high school prior to 2024-2025. First-time ninth-grade students that choose to attend a specialty center or program will transfer to the offering school location.

Course Registration

During the winter and spring, school counselors in each middle and high school will meet with students and/or parent/guardian(s) to help students select appropriate courses. Courses are selected using the online platforms of StudentVue or ParentVue. Certain courses are required, with many courses selected according to a student's interests and postsecondary goals. Generally, elective courses must have an enrollment of 15 students in order to be offered; staffing limitations may also impact the ability for a course to be offered. Alternates for elective courses should be chosen, in case a schedule conflict or low enrollment forces cancellation of a course.

Course Changes and Cancellation

While every effort is made to provide educational opportunities that meet the needs of all students, on occasion, courses must be canceled. Generally, a minimum of ten students must be enrolled in an Advanced Placement (AP), Dual Enrollment (DE), or an International Baccalaureate (IB) course for the course to be offered; however, a course may be canceled and a suitable alternative will be identified. Generally, elective courses will be offered with a minimum enrollment of 15, unless state regulations require an enrollment of fewer than 15 students. Other courses may be canceled due to low enrollment, staffing limitations, and/or budget limitations. Juniors and seniors receive priority enrollment in order to complete graduation requirements.

Course sections are filled and balanced using student course selections made in the spring. Requests for schedule changes may be considered.

Important notes:

- Students will have the option to drop or add courses based on their specific schedules.
- Students have until the 5th scheduled class meeting to add or drop a course without principal approval.
- With principal approval, students may drop a course after the 5th scheduled class meeting if a suitable alternative placement is found.

- Courses dropped after the 15th class meeting (based on date of student placement) will be recorded on the student transcript as a “Withdraw Pass” (“WP”) or “Withdraw Fail” (“WF”) and will not be included in the calculation of the student’s GPA.
- Course level changes, such as honors to regular, will be considered until five days past the end of the first grading period. The principal may review and approve level changes beyond this deadline.
- The drop/add date for Dual Enrollment and Virtual Virginia courses will be determined by the sponsoring college or organization. ***Students dropping courses after the allowed drop date are responsible for tuition fees.***

Auditing Courses

Students may request to audit a course on a space available basis and at the sole discretion of the principal. Students who are approved to audit a course are expected to complete all assignments and assessments. Audited courses will not be computed into the student’s grade point average. Commonwealth Governor’s School (CGS) courses may not be audited unless approved by the CGS director and the principal. AP, DE, IB, and Project Lead the Way (PLTW) courses may not be audited.

Credit Recovery and Virtual Courses

Recognizing that students may run into difficulty earning credits or accessing certain courses desired to fulfill their academic/career goals, Stafford Schools utilizes technology and VDOE approved digital curriculum to offer high school courses online as needed. This includes online initial credit and credit recovery courses. Students may be able to take an online course with a Stafford teacher or enroll in a virtual course through one of our approved online providers. Students interested in pursuing either individual virtual courses should speak with their school counselor to review available offerings to fulfill their scheduling needs.

The purpose of a credit recovery course is to provide an opportunity for a student who failed a course to accelerate and to complete courses based on individual needs and to meet specific graduation requirements. Credit recovery courses are self-paced and based on mastery of individual units. Participation requires prior approval by the principal. Students must pass the online examination to earn credit and a final grade.

Note: Credit recovery courses do not meet the NCAA requirements. If you plan to participate in collegiate athletics, the NCAA Eligibility Center has not approved credit recovery courses to count towards the NCAA eligibility standards. For additional information about NCAA guidelines, please visit [Stafford Schools NCAA Eligibility](#). For NCAA guidelines and requirements for non-traditional and online courses, please visit the NCAA’s [Guide for the College-Bound Student Athlete](#). For more information regarding the rules please visit the [NCAA site](#) or the [NCAA Eligibility Center](#). For local assistance, please contact your NCAA school counseling representative.

Preparing a Student High School Plan

Below are sample four-year plans to assist with scheduling your courses. Boxes marked “Required Elective” indicate the minimum electives required for graduation. Students should consult their counselor when selecting these courses. Boxes marked “Student Choice” are those you may select for additional courses. The blank sample four-year plan is for you and your parents/guardians to prepare a customized plan to meet your educational and career objectives. The blank plan contains ten class spaces to provide for alternatives, if your first choice cannot be scheduled. Remember that you cannot sign up for your exact period-by-period schedule.

SAMPLE STANDARD DIPLOMA FOUR-YEAR PLAN

CLASS	GRADE 9	GRADE 10	GRADE 11	GRADE 12
1	English 9	English 10	English 11	English 12
2	World History to 1500/World Geography	Required Elective	Virginia and United State History	Virginia and United State Government
3	Earth Science or Environmental Science	Biology	Upper Level Science	Student Choice
4	Algebra I or Geometry	Geometry or Algebra II	Algebra, Functions and Data Analysis or Algebra III	Algebra II or Pre-calculus
5	Health and PE 9	Health and PE 10	Required Elective*	Required Elective *
6	Fine Arts or Career and Technical Education	Required Elective	Economics and Personal Finance	Required Elective
7	Student Choice	Student Choice	Student Choice	Student Choice
8	Student Choice	Student Choice	Student Choice	Student Choice

*Students are required to complete a sequence of elective courses which leads to completing a career and technical program or continued education.

SAMPLE ADVANCED STUDIES DIPLOMA FOUR-YEAR PLAN

CLASS	GRADE 9	GRADE 10	GRADE 11	GRADE 12
1	English 9	English 10	English 11	English 12
2	World History to 1500/World Geography	World History from 1500/World Geography	Virginia and United States History	Virginia and United States Government
3	Earth Science or Environmental Science or Biology	Biology or Chemistry	Chemistry or Physics	Higher-Level Science Elective
4	Algebra I or Geometry	Geometry or Algebra II	Algebra II or Pre-calculus	Higher-Level Mathematics Elective
5	Health and PE 9	Health and PE 10	Visual Arts or Career and Technical Education	Student Choice
6	World Language	World Language	World Language	Student Choice
7	Student Choice	Student Choice	Economics and Personal Finance	Student Choice
8	Student Choice	Student Choice	Student Choice	Student Choice

High School Plan Template

(Select appropriate courses from the descriptions contained in this catalog.)

CLASS	GRADE 9	GRADE 10	GRADE 11	GRADE 12
1				
2				
3				
4				
5				
6				
7				
8				
Alternates				
Alternates				

Stafford Schools Secondary Offerings

Stafford Schools provides opportunities for students to select challenging and interesting secondary specialty programs based on their learning needs, styles, and preferences. Secondary specialty programs may be application-based and vary based on location. First-time ninth-grade students in 2024-2025 and beyond that elect to attend a secondary offering will be required to transfer to the offering school location.

Stafford Schools provides three types of secondary offerings for our rising high school students that connect with their individual needs, interests, and post-secondary goals. Offerings include:

- **Stafford Specialty Centers** - Each specialty center is a school within one of our high schools that prepare students for careers in a general field with multiple pathways. Specialty centers provide students with a community of like-minded students, specialized coursework, and opportunities for students interested in entering the workforce directly after high school or after some additional schooling and/or training.
- **Stafford Secondary Program Pathways** - Each specialty program is a series of advanced and specialized coursework pathways aimed to deepen student knowledge, skills, and understanding of a particular field of study or career. Secondary offerings include four-year and other program pathways that are one to four years in length.
- **Regional School Programs** - Each regional school offering that provides specialized coursework and experiences for students.

Stafford Specialty Centers



Building upon the continued focus on C5W which emphasizes communication, collaboration, critical thinking, creativity, citizenship, and wellness, Stafford Schools currently offers current 8th graders access to three secondary Specialty Center opportunities housed at the following locations for high school students:

- **Leadership, Education, and Public Service (LEAPS) Center** at Mountain View High School
- **Engineering Professions and Industries of Construction (EPIC) Center** at Stafford High School
- **Community Health and Medical Professions (CHAMP) Center** at Brooke Point High School

Goals

Each Specialty Center's four-year program pathways provide specialized coursework and experiences that prepare students to excel in their post secondary educational journey or careers in high impact employment areas that align with local economic needs. As a result of this specialization, students become a part of a learning community that is built upon shared interests and aspirations. In addition, the educational experiences offered via our Specialty Centers lead to students making informed post-secondary choices and provide the opportunity for them to earn qualifying industry certifications.

Within each Specialty Center students will have the opportunity to customize their learning experience based on their post-secondary plans. Students will be able to explore two main outcomes; industry certification in specialized areas to move directly into the workforce or pre-collegiate specialized coursework to continue their educational pursuits

after high school. Beyond these outcomes, all Specialty Center students will engage in work-based learning experiences, develop leadership characteristics, and cultivate an entrepreneurship prowess to monetize the skills learned in coursework.

Specialty Center Implementation Timeline

Stafford Schools plans to expand secondary opportunities for all students by opening a Specialty Center in each high school by the 2026-2027 school year.

2024-2025

- Leadership, Education, and Public Service (LEAPS) Center - Mountain View High School
- Engineering Professions and Industries of Construction (EPIC) Center - Stafford High School
- Community Health and Medical Professions (CHAMP) Center - Brooke Point High School

2025-2026

- Business Operations, Systems, and Software (BOSS) Center - Colonial Forge High School

2026-2027

- Aviation and Integrated Management (AIM) Center - North Stafford High School
- Creative Arts, Media, and Performance (CAMP) Center - New High School

NOTE: Center names have not been finalized.

Multiple Student Pathways

Each Specialty Center will offer multiple pathways that provide targeted instruction in specific student interests and career goals. Each center will have pathways for students that intend on entering the workforce immediately after high school or after some college and/or training.

Eligibility Criteria and Selection

All rising 9th graders may apply to Stafford Specialty Centers. Each pathway within each Specialty Center will have minimum criteria. Eligible students that meet the minimum criteria and apply for a Specialty Center will be entered into a pool of candidates for a selection via lottery. The number of seats available within each pathway will vary, but will be established prior to the lottery selection. To ensure some geographic representation in each pathway within each Specialty Center, a set minimum number of seats will be allotted to each high school.

School Transfer and Transportation

Students that are selected and accept an offer to attend one of the specialty centers' four-year pathways will be transferred to the center's school location at the beginning of grade nine. Transportation will be provided to and from the student's home to the Specialty Center. Students will be able to participate in clubs and activities and play sports, based on VHSL eligibility, at their Specialty Center. Students whose participation in a Specialty Center pathway ends will be required to return to their zoned (base) high school unless space is available within another center pathway.



LEADERSHIP, EDUCATION, AND PUBLIC SERVICE CENTER AT MOUNTAIN VIEW HIGH SCHOOL

Empowering Minds. Inspiring Futures.

Leadership, Education, and Public Service (LEAPS) Center

Location

Mountain View High School

Student Experience

The Leadership, Education, and Public Service (LEAPS) Center at Mountain View High School offers coursework and learning experiences that allows students to explore careers and post secondary education in the following areas:

- Community Service And Advocacy
- Education
- Law And Criminal Justice
- Leadership

Students enrolled in this Specialty Center will develop an appreciation for the importance of leadership with applications in community and public service. Experiences will develop critical thinking, problem solving, team-building, and interpersonal skills. Students in one of the leadership pathways will complete a capstone project and culminating service-learning activity. Those in the criminal justice or Teachers for Tomorrow pathway will complete rigorous coursework and experiences preparing them to lead in the community and the world.

Student Pathways and Eligibility Criteria

The LEAPS Center will have four pathways of study:

- Pathway I: Civic Leadership
Minimum Criteria: Eligible for grade 9
- Pathway II: Civic Leadership with International Baccalaureate (IB) Programme Diploma
Minimum Criteria: Successful completion of Algebra I in grade 8 and eligible for grade 9
- Pathway III: Teachers for Tomorrow
Minimum Criteria: Eligible for grade 9
- Pathway IV: Law and Criminal Justice
Minimum Criteria: Eligible for grade 9

Middle School Elective Connections

The courses listed are courses that have related content to courses included in the pathway. The courses are not to be considered prerequisites.

- Community Leaders
- Advanced Digital Explorations

Civic Leadership Pathway - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
English	Center English 9	Center English 10	Center English 11	Center English 12
History and Social Sciences	Center World History I	Center World History II	Center Virginia and United States History	Center Virginia and United States Government
Mathematics	Algebra I	Geometry	Algebra II	Algebra III
	Geometry	Algebra II	Pre-calculus	AP or DE Calculus OR Statistics
Science	Biology	Chemistry	Physics	Science Elective
World Language	World Language I	World Language II	World Language III	World Language IV
Health and Physical Education	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
Pathway Requirement	Communication for Leadership and Public Service	Policy, Advocacy, and Ethics	Community Organization and Advocacy with Service Capstone Proposal	Leadership and Public Service Seminar with Capstone Presentation
Elective	N/A	N/A	Economics and Personal Finance	Elective
Elective	Elective	Elective	Elective	Elective

NOTE: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available.

Civic Leadership with the IB Diploma Programme Pathway - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
English (Group 1 Language A)	Center English 9	Center English 10	IB Language and Literature	IB Language and Literature
World Language* (Group 2 Language B)	World Language Level I World Language Level II (semester courses) ----- World Language Level II	World Language Level III	IB World Language Acquisition I	IB World Language Acquisition II
History and Social Sciences (Group 3 Individuals and Societies)	Center World History II	AP Comparative Government	IB History of the Americas I	IB History of the Americas II
Science (Group 4 Experimental Science)	Biology	Chemistry	IB Biology I OR IB Chemistry I OR IB Physics I	IB Biology II OR IB Chemistry II OR IB Physics II
Mathematics (Group 5 Mathematics)	Geometry	Algebra II	IB Mathematics: Applications and Interpretation I	IB Mathematics: Applications and Interpretation II
	Algebra II	Pre-calculus	IB Mathematics: Analysis and Approaches I	IB Mathematics: Analysis and Approaches II
Required Electives (Group 6 Electives)	N/A	N/A	IB Elective**	IB Elective**
Health and Physical Education	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
Pathway Requirement	Communication for Leadership and Public Service	Policy, Advocacy, and Ethics	Community advocacy and service requirements of the specialty center included in required IB Diploma Programme coursework	
Elective	Elective	Elective OR Economics and Personal Finance [†]	IB Theory of Knowledge I	IB Theory of Knowledge II
Elective	N/A	N/A	Elective	Elective

NOTE: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available.

*Electives and World Language courses should be taken in a successive sequence.

**IB Electives include: Art, Theatre, Music, Social and Cultural Anthropology, Computer Science, Psychology, Environmental Systems and Societies, Economics and Business Management.

[†]Students electing to take IB Art, IB Theatre, or IB Music will complete Economics and Personal Finance independently to provide space for taking art, theatre, or music levels I and II in grades 9 and 10.

Students Seeking to Enroll in Individual IB Courses

Students enrolled at schools offering IB courses may enroll in individual IB courses. Students enrolling in IB courses must complete all assessments embedded throughout the year, and are strongly encouraged to take the end-of-year IB assessment. Students enrolled in the IB Diploma Programme must complete all assessments, including the final assessment.

Teachers for Tomorrow Pathway - Sample Courses

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
English	Center English 9	Center English 10	Center English 11	DE English 12
History and Social Sciences	Center World History I	Center World History II	DE Virginia and United States History	Virginia and United States Government
Mathematics	Algebra I	Geometry	Algebra II	Algebra III
	Geometry	Algebra II	Pre-calculus OR DE Quantitative AND DE Statistical Reasoning	AP or DE Calculus OR AP Statistics
Science	Biology	Chemistry	Physics	Science Elective
World Language	World Language I	World Language II	World Language III	World Language IV
Health and Physical Education	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
Program Requirement	Communication for Leadership and Public Service	Psychology	DE Virginia Teachers for Tomorrow I*	DE Virginia Teachers for Tomorrow II
Suggested Electives	Elective	Family Relations	Elective	Elective
Elective	N/A	N/A	Economics and Personal Finance	Elective

NOTE: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available.

*Requires 40 hours of Practicum experience

Through an agreement among University of Mary Washington (UMW), Germanna Community College (GCC), and Stafford Schools, Teachers for Tomorrow (TfT) provides students with a dual enrollment program preparing students for a career in teaching and education. This course sequence provides an overview of the development of human beings from birth to adolescence to explore K-12 education. Students who successfully complete the TfT Pathway will be eligible to enter GCC with the first semester of coursework completed towards a two-year elementary education program that leads to a four-year teacher program at UMW. Students may choose to enter UMW after graduation from Stafford Schools. Students interested in earning an educational degree may transfer dual enrollment (DE) credits to other Virginia colleges and universities. Students completing the TfT program will be offered a letter of intent to teach with Stafford Schools upon completion of their licensure requirements.

Law and Criminal Justice Pathway - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
English	Center English 9	Center English 10	Center English 11	Center English 12
History and Social Sciences	Center World History I	Center World History II	Center Virginia and United States History	Center Virginia and United States Government
Mathematics	Algebra I	Geometry	Algebra II	Algebra III
	Geometry	Algebra II	Pre-calculus	AP or DE Calculus or Statistics
Science	Biology	Chemistry	Physics	Science Elective
World Language	World Language I	World Language II	World Language III	World Language IV
Health and Physical Education	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
Pathway Requirement	Communication for Leadership and Public Service	Policy, Advocacy, and Ethics	Criminal Justice I: Law Enforcement	Criminal Justice II: Law and the Justice System
Suggested Elective	Elective	Elective	Sociology	Homeland Security and/or Digital Security
Elective	N/A	N/A	Economics and Personal Finance	Elective

NOTE: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available.



ENGINEERING PROFESSIONS AND INDUSTRIES OF CONSTRUCTION CENTER AT STAFFORD HIGH SCHOOL

Empowering Minds. Inspiring Futures.

Engineering Professions and Industries of Construction (EPIC) Center

Location

Stafford High School

Student Experience

The Engineering Professions and Industries of Construction (EPIC) Center at Stafford High School offers coursework and learning experiences that allows students to explore careers and post secondary education in the following areas:

- Carpentry
- Drafting
- Electricity
- Engineering
- Heating, Ventilation, Air Conditioning and Refrigeration (HVAC)
- Masonry
- Plumbing

Students enrolled in this Specialty Center will have the opportunity to extend their applications of mathematics and science beyond the classroom in innovative and practical spaces within two pathways. This Specialty Center provides rigorous coursework that strengthens students' critical thinking skills, supports innovation and creativity, and builds entrepreneurial skills. Students may choose to specialize in a construction trade of their choice and complete an internship, earn other relevant certifications, or complete rigorous coursework in preparation to pursue an engineering degree.

Potential Credentials

- National Center for Construction Education and Research (NCCER)
- Project Management
- Heavy Equipment
- OSHA 10
- OSHA 30

Student Pathways and Eligibility Criteria

The Engineering Professions and Industries of Construction (EPIC) Center at Stafford High School will have two unique pathways that drive the student's course of study:

- Pathway I: Construction Trades (Carpentry, Drafting, Electricity, HVAC, Masonry, and Plumbing)
Minimum Criteria: Eligible for grade 9
- Pathway II: Engineering
Minimum Criteria: Successful completion of Algebra I in grade 8 and eligible for grade 9

Middle School Elective Connections

The courses listed are courses that have related content to courses included in the pathway. The courses are not to be considered prerequisites.

- Intermediate Computer Science Discoveries

- Advanced Digital Explorations
- Innovation Studio
- Mathematical Performance Lab
- Technology and Engineering

Construction Trades Pathway - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
English	Center English 9	Center English 10	Center English 11	Center English 12
History and Social Sciences	World History I	World History II	Virginia and United States History	Virginia and United States Government
Mathematics	Center Algebra I	Center Geometry	Algebra, Functions, and Data Analysis OR Algebra II	Algebra II OR Algebra III OR Pre-calculus OR DE Statistical Reasoning and Quantitative Analysis
	Center Geometry	Algebra, Functions, and Data Analysis OR Algebra II	Algebra II OR Pre-calculus	Pre-calculus OR DE Statistical Reasoning and Quantitative Analysis
Science	Environmental Science	Biology	Physics	Chemistry
Health and Physical Education	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
Pathway Requirement	Construction Trades I	Specialty Area Elective I Carpentry I, Drafting: Fundamentals, Electrical I, HVAC I, Plumbing I, Masonry I	Specialty Area Elective II Carpentry II, Drafting Mechanical, Electrical II, HVAC II, Plumbing II, Masonry II (2 credits)	Specialty Area Elective III/ WBL Experience Carpentry III, Drafting Architectural/Advanced. Electrical III, HVAC III/IV, Plumbing III/IV, Masonry III (2 credits)
Elective	World Language I	World Language II	World Language III	DE Construction Management I AND DE OSHA 30 Construction Safety (1 semester each)
Elective	Elective	Economics and Personal Finance	Principles of Business and Marketing	Business Management OR DE Entrepreneurship AND DE Small Business Management (1 semester each)

NOTES: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available. The number of required credits for Specialty Area Elective III and beyond may limit the number of elective course slots.

Engineering Pathway - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
English	Honors English 9	Honors English 10	AP or DE English 11	AP or DE English 12
History and Social Sciences	Honors World History I	Honors World History II	AP or DE Virginia and United States History	AP or DE Virginia and United States Government
Mathematics	Engineering Algebra II	Engineering Geometry	AP or DE Pre-calculus	AP or DE Calculus I/II
		AP or DE Precalculus	AP or DE Calculus I/II	DE Linear Algebra OR DE Statics
Science	AP Environmental Science	Honors Biology	AP or DE Chemistry	AP or DE Physics
World Language	World Language I	World Language II	World Language III	AP or DE World Language IV
Health and Physical Education	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
Pathway Requirement	Engineering Explorations	Engineering Analysis and Applications	Engineering Studies	Engineering Practicum
Elective	Technical Drawing and Design	Engineering Drawing and Design	Economics and Personal Finance	DE Foundations of Engineering AND DE Engineering Design (1 semester each)
Elective	N/A	N/A	Elective	Elective

NOTE: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available.



COMMUNITY HEALTH AND MEDICAL PROFESSIONS CENTER AT BROOKE POINT HIGH SCHOOL

Empowering Minds. Inspiring Futures.

Community Health and Medical Professions (CHAMP) Center

Location

Brooke Point High School

Student Experience

The Community Health and Medical Professions (CHAMP) Center offers coursework and learning experiences that prepare students for careers including those in the following areas:

- Medical Doctor
- Nursing - Certified Nurse Aide, Licensed Practical Nurse, Registered Nurse, Bachelor of Science in Nursing, Nurse Practitioner
- Physician Assistant
- Mental Health Professional

Students enrolled in this Specialty Center will have the opportunity to extend their applications of mathematics and science beyond the classroom in innovative and practical spaces within four pathways. This center provides rigorous coursework that strengthens students' critical thinking skills, supports innovation and creativity, and builds entrepreneurial skills. Students may choose to specialize in a healthcare pathway of their choice and complete an internship and or a clinical experience, earn other relevant certifications, or complete rigorous coursework in preparation to pursue a career in a healthcare field. Students selected for the nursing pathway will choose to further specialize during grade 9.

Potential Credentials

- Certified Nurse Aide (C.N.A.) Examination
- Therapeutic Services Assessment
- Medical Assistant Certificate (MAC) Examination
- National Council Licensure Examination for Practical Nursing (NCLEX-PN)

Student Pathways and Eligibility Criteria

The Community Health and Medical Professions Center at Brooke Point High School will have four unique pathways that drive the student's course of study.

- Pathway I: Biomedical Sciences (formerly STAT Biomedical Science, a Governor's STEM Academy)
Minimum Criteria: Successful completion of Algebra I in grade 8 and eligible for grade 9
- Pathway II: Licensed Practical Nurse (LPN) Prep
Minimum Criteria: Eligible for grade 9
- Pathway III: Bachelor's of Science in Nursing Prep (BSN) Prep
Minimum Criteria: Eligible for grade 9
- Pathway IV: Mental Health Services
Minimum Criteria: Eligible for grade 9

Middle School Elective Connections

The courses listed are courses that have related content to courses included in the pathway. The courses are not to be considered prerequisites.

- Pathways to Success

- Community Leaders
- Creative Writing
- Exploring Living Systems, Marvels, And Phenomena

Biomedical Sciences Pathway (Governor's STEM Academy) - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
English	Center English 9 Honors	Center English 10 Honors	English 11 OR AP English Language and Composition	English 12 OR AP Literature and Composition OR DE English Composition
History and Social Sciences	Honors World History I	Honors World History II	AP or DE Virginia and United States History	AP or DE Virginia and United States Government
Mathematics	Honors Geometry	Honors Algebra II	AP or DE Pre-calculus	AP Calculus OR AP Statistics OR DE Calculus
Science	Center Biology	Center Chemistry	AP Biology	AP or DE Physics
World Language	World Language I	World Language II	World Language III	DE World Language IV
Health and Physical Education	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
Pathway Requirement	Principles of Biomedical Science	Human Body Systems	Medical Interventions	Biomedical Innovation Capstone Course
Electives	Elective	Economics and Personal Finance	AP Seminar	AP Research
Electives	N/A	N/A	Elective	Elective

NOTE: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available.

Licensed Practical Nursing (LPN) Prep Pathway* - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
English	Center English 9	Center English 10	English 11	English 12
History and Social Sciences	World History I	World History II	Virginia and United States History	Virginia and United States Government
Mathematics	Algebra I	Center Geometry	Center Algebra II	Pre-calculus OR AP Calculus OR AP Statistics OR DE Quantitative and Statistical Reasoning
	Center Geometry	Center Algebra II	Pre-calculus	
Science	Center Environmental Science	Center Biology	Center Chemistry	Biology II: Anatomy and Physiology
World Language	World Language I	World Language II	World Language III	World Language IV
Health and Physical Education	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
Pathway requirements	Introduction to Health and Medical Sciences	Health Assisting Careers	Nurse Aide I (2 credits)	Nurse Aide II (2 credits)
Elective	Elective	Elective	Economics and Personal Finance	DE Medical Terminology

NOTE: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available.

*This pathway enables students to become a Certified Nurse Assistant upon high school graduation. Students may choose to continue their studies to become a Licensed Practical Nurse (LPN) with one additional year through a community college. Students may choose to continue their studies at a 4 year institute to earn their Registered Nurse (RN) or Bachelor's of Science in Nursing (BSN).

Bachelor's of Science in Nursing (BSN) Prep Pathway* - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
English	Center English 9	Center English 10	English 11	English 12
History and Social Sciences	World History I	World History II	Virginia and United States History	Virginia and United States Government
Mathematics	Algebra I	Center Geometry	Center Algebra II	DE Pre-calculus OR AP Statistics OR DE Quantitative and Statistical Reasoning
	Center Geometry	Center Algebra II	DE Pre-calculus	DE Calculus
Science	Center Biology	Center Chemistry	Physics	Biology II: Anatomy and Physiology
World Language	World Language I	World Language II	World Language III	World Language IV
Health and Physical Education	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
Pathway Requirements	Introduction to Health and Medical Sciences	Health Assisting Careers	DE Medical Terminology	DE Psychology
Electives	Elective	Elective	Economics and Personal Finance	Elective
Electives	N/A	N/A	Elective	Elective

NOTE: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available.

*This pathway prepares students to pursue Bachelor's of Science in Nursing (BSN) programs after high school graduation.

Mental Health Services Pathway - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
English	Center English 9 Honors	Center English 10 Honors	English 11	English 12
History and Social Sciences	World History I	World History II	Virginia and United States History	Virginia and United States Government
Mathematics	Algebra I	Center Algebra II	Center Geometry	AP or DE Pre-calculus OR DE Quantitative and Statistical Reasoning
	Center Geometry		AP or DE Pre-calculus	AP or DE Calculus or AP Statistics
Science	Biology	Chemistry	Physics	DE Biology
World Language	World Language I	World Language II	World Language III	World Language IV
Health and Physical Education	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
Pathway Requirement	Introduction to Health and Medical Sciences	Introduction to Family and Human Services	Family and Human Services I	Mental Health Assisting Careers
Elective	Elective	Elective	DE Medical Terminology	DE Psychology
Elective	N/A	N/A	Economics and Personal Finance	Biology II: Anatomy and Physiology

NOTE: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available.

Stafford Secondary Programs

Four-Year Secondary Program Pathways

Stafford secondary programs provide a series of advanced and specialized coursework aimed to deepen student knowledge, skills, and understanding of a particular field of study or career. Depending upon the program of choice, students may also obtain relevant certifications that serve local and regional economic needs. Each program offers a four-year pathway of study with opportunities for late entry for many programs.

Current secondary program pathway offerings include:

- **Auto Body Technology** is a program with mastery of each task including: collision and repair, painting and refinishing. This program is accredited by the The Board of the National Institute for Automotive Service Excellence (ASE).
- **Automotive Technology** is a program with mastery of each task including the four primary ASE certified areas: Brakes, Steering and Suspension, Electrical/Electronics and light duty vehicle repair. This program is accredited by the The Board of the National Institute for Automotive Service Excellence (ASE).
- **Barbering and Cosmetology** prepares students for certification through the Virginia Board of Barbers/Cosmetology. Coursework includes mannequin- and live-model work, safety, sterilization, sanitation, bacteriology, effective communication, and management.
- **Culinary Arts** is a program designed to prepare students for college and careers in the food service industry.
- **Cyber4+** is a program focused on preparing students for college and careers in cybersecurity. This program will provide students with coursework and project-based learning that will prepare them for the opportunity to attain multiple industry-recognized certifications and extensive dual enrollment college and the opportunity to receive an associate's degree through Germanna Community College prior to graduation. Cyber4+ provides students with additional support through community business partnerships.
- **Early Childhood Education** prepares students for employment or continued education in the field of childcare and early childhood education. The Early Childhood program builds skills through integrated learning experiences centered around opportunities for student engagement with concrete materials and exploration.
- **Emergency Medical Technician (EMT)** program prepares students for a variety of careers and advanced coursework in the healthcare field including service as a paramedic. Students will have the opportunity to earn their EMT certification as well as continuing education hours required for recertification.
- **International Baccalaureate (IB) Diploma Programme** is a rigorous pre-university course of study in the last two years of high school that focuses on developing the student as a whole by emphasizing ten Learner Profile traits: IB learners strive to be inquirers, knowledgeable, thinkers, communicators, principled, open-minded, caring, risk-takers, balanced, and reflective.
- **Stafford Academy for Technology (STAT)** is a state-approved Governor's Science, Technology, Engineering and Mathematics (STEM) Academy. STAT is a four-year program of study utilizing integrated hands-on, project-based instruction focused on STEM career areas. STAT includes two programs: Information Technology and Engineering.

Eligibility Criteria and Selection

All rising 9th graders may apply to Stafford Specialty Programs. Each specialty program may have a unique set of minimum criteria. Eligible students that meet the minimum criteria and apply for a specialty program will be entered into a pool of candidates for selection via lottery. The number of seats available within each program may vary based on local factors and state and federal requirements, but will be established prior to the lottery selection. To ensure geographic representation in each pathway within each specialty program, a set minimum number of seats will be allotted to each high school in Stafford County. Some programs may be offered to rising 10th and 11th grade students, as indicated.

School Transfer and Transportation

Students that are selected and offered a seat within a secondary program will be transferred to the program's school location while enrolled in the program. If multiple program locations exist, placement will be based on residence location (not based on the zoned high school). Transportation will be provided to and from the student's home to the secondary program school. Virginia High School League eligibility will be established at the program's school location in grade 9.

Auto Body Technology

Location

North Stafford High School

Student Experience

Auto Body Technology is a program with mastery of each task including: collision and repair, painting and refinishing. Auto Body Technology skills range from technical skills to workplace readiness skills. Students learn automotive history, practice shop safety, gain career skills, and use custom techniques. Students will be encouraged to participate in work-based learning activities and in courses to build entrepreneurial skills.

Potential Credentials

- Automotive Service Excellence (ASE) Certification

Eligibility Criteria and Selection

The program is open to students that are eligible for grade 9. Eligible 10th grade applicants may be considered if space is available. Students are required to complete a pre-test prior to being admitted as required by Automotive Service Excellence (ASE). This program can accept up to 20 students per section.

Auto Body Technology Courses

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
Program Requirement	Principles of Business and Marketing	Auto Body Technology I - Collision and Repair (2 credits)	Auto Body Technology II - Painting and Refinishing (4 credits)	Auto Body Technology III - Collision, Repair, Painting, and Refinishing (4 credits)
Suggested Courses			Business Management	DE Entrepreneurship AND DE Small Business Management

Automotive Technology

Locations

Brooke Point High School
North Stafford High School

Student Experience

Students learn all aspects of repair, safety, and customer service. Automotive Technology skills provide students experience in diagnostics, adjustment, and repair of automotive vehicles. Students will continue to master skills related to suspension and steering, brakes, electrical/ electronic systems, and engine performance by operating as automotive shop technicians. Students will participate in work-based learning experiences and will be encouraged to enroll in courses to build entrepreneurial skills.

Potential Credentials

- Automotive Service Excellence (ASE) Certification

Eligibility Criteria and Selection

The program is open to students that are eligible for grade 9. Eligible 10th grade applicants may be considered if space is available. Students are required to complete a pre-test prior to being admitted as required by Automotive Service Excellence (ASE). This program can accept up to 20 students per section.

Automotive Technology Courses

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
Program Requirement	Principles of Business and Marketing	Automotive Technology I	Automotive Technology II (2 credits)	Automotive Technology III (2 credits)
Suggested Courses			Business Management	DE Entrepreneurship AND DE Small Business Management

Barbering and Cosmetology

Locations

Mountain View High School (Barbering only)
Stafford High School

Student Experience

Barbering and Cosmetology prepares students for certification through the Virginia Board of Barbers/Cosmetology. Coursework includes mannequin- and live-model work, safety, sterilization, sanitation, bacteriology, effective communication, and management. Students will participate in work-based learning experiences and will be encouraged to enroll in courses to build entrepreneurial skills.

Potential Credentials

- Virginia Barbering or Cosmetology State License

Eligibility Criteria and Selection

This program is open to students that are eligible for grade 9. The program is also available to rising 10th and 11th grade students, if space is available. Regular attendance is required in order to meet the clinical lab hours, based on requirements from the Virginia Board for Barbers and Cosmetology. The program can accept up to 20 students at each location per section.

Barbering and Cosmetology Courses

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
Program Requirement	Principles of Business and Marketing	Business Management	Master Barbering I (3 credits) OR Cosmetology I (3 credits)	Master Barbering II (4 credits) OR Cosmetology II (4 credits)
Suggested Courses	Nutrition and Wellness	Psychology		DE Entrepreneurship AND DE Small Business Management

Culinary Arts

Locations

Brooke Point High School
Mountain View High School
Stafford High School

Student Experience

The Culinary Arts program is designed to prepare students for college and careers in the food service industry. The program will provide work-based learning experiences and encourages students to enroll in courses that build leadership and entrepreneurial skills.

Potential Credentials

- ServSafe Manager Certification by the National Restaurant Association (NRA)

Eligibility Criteria and Selection

This program is open to students that are eligible for grade 9. The program is also available to rising 10th and 11th grade students, if space is available. The work in this course requires that the student comply with the regulations of the Virginia Health Department in preparing and serving food sold to the public. The program can accept up to 20 students per section at each location. Additional requirements for annual continuation in the program are listed in course descriptions.

Middle School Elective Connections

The courses listed are courses that have related content to courses included in the pathway. The courses are not to be considered prerequisites.

- Journey Towards Independence

Culinary Arts Courses

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
Program Requirement	Nutrition and Wellness	Culinary Arts I (2 credits)	Culinary Arts II (2 credits)	Culinary Arts Specialization (2 credits)
Suggested Courses	Digital Applications	Leadership	Business Management	DE Entrepreneurship AND DE Small Business Management

Cyber4+

Location

Colonial Forge High School



Student Experience

Cyber4+ is a program focused on preparing students for college and careers in cybersecurity. This program will provide students with coursework and project-based learning that will prepare them for the opportunity to attain multiple industry-recognized certifications and extensive dual enrollment college and the opportunity to receive an associate's degree through Germanna Community College prior to graduation. Cyber4+ provides students with additional support through community business partnerships.

Potential Credentials

- CompTIA ITF+
- CompTIA A+
- CompTIA Network+
- CompTIA Security+

Eligibility Criteria

The Cyber4+ is open to students that are eligible for grade 9. Rising 10th grade students that have successfully completed Information Technology Fundamentals may be considered if space is available.

Middle School Elective Connections

The courses listed are courses that have related content to courses included in the pathway. The courses are not to be considered prerequisites.

- Intermediate Computer Science Discoveries
- Advanced Digital Explorations
- Innovation Studio
- Mathematical Performance Lab
- Technology and Engineering

Cyber4+ Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
English	English 9	English 10	DE English 11 (6 out of 9 English credits)	DE English 12 (satisfies 3 literature credits)
History and Social Sciences	World History and Geography I	World History and Geography II	DE Virginia and United States History (satisfies 6 history credits)	DE Virginia and United States Government (6 social science credits)
Mathematics	Algebra I	Geometry	Algebra II	AP Statistics or DE Quantitative Reasoning AND DE Statistical Reasoning (satisfies 6 mathematics credits)
	Geometry	Algebra II	DE Pre-calculus (3 mathematics credits and 3 general education credits)	AP Calculus AB BC OR DE Calculus I and II (4 mathematics credits and 4 general education credits)
	Algebra II	Pre-calculus OR DE Pre-calculus (3 mathematics credits and 3 general education credits)	DE Calculus I and II (4 mathematics credits and 4 general education credits)	DE Linear Algebra (4 general education credits)
Science	Environmental Science	Biology	DE Biology (4 science credits) OR DE Chemistry (4 science credits) OR DE Environmental Science (4 lab science credits)	DE Physics OR DE Chemistry (4 science credits) OR DE Environmental Science (4 lab science credits)
World Language	World Language I	World Language II	World Language III	DE World Language (6 credits humanities/general education credits) OR DE Elective
	World Language II	World Language III	DE World Language (6 credits humanities/general education credits) OR DE Elective	DE Elective DE Principles of Psychology (3 general education credits)
Health and Physical	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
Education				
Cybersecurity	Information Technology Fundamentals	Cybersecurity I	Cybersecurity II	Cybersecurity III
Elective	Elective	Economics and Personal Finance	DE Programming I and Programing II*	DE Art I AND DE History of Art (3 credits each) (satisfies 6 Humanities credits)
Elective	N/A	N/A	DE Business Management	DE Principles of Public Speaking (3 credits - 1 semester) OR DE Introduction to Communication AND Senior Capstone (1 semester)
Virginia Community Colleges Required			DE SDV 100 College Success Skills (1 credit) - During lunch flex time	

*These courses are equivalent to the GCC DE Software Design AND DE Java Programming I (6 credits general education electives)

Early Childhood Education

Locations

Brooke Point High School
North Stafford High School

Student Experience

The Early Childhood Education program prepares students for employment or continued education in the field of childcare and early childhood education. Emphasis will be placed on development, implementation, and evaluation of learning activities through first-hand experiences working with young children in an on-site lab setting. National Child Development Associate Credential competencies and state validated education competencies are included in the program.

Eligibility Criteria and Selection

This program is open to students that are eligible for grade 9. The programs are also available to rising 10th and 11th grade students, if space is available. The program can accept up to 20 students at each location per section.

Middle School Elective Connections

The courses listed are courses that have related content to courses included in the pathway. The courses are not to be considered prerequisites.

- Community Leaders
- Advanced Journey Towards Independence

Early Childhood Education Courses

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
Program Requirement	Family Relations	Child Development and Parenting	Early Childhood, Education, and Services I (2 credits)	Early Childhood, Education, and Services II (2 credits)

Emergency Medical Technician

Locations

Colonial Forge High School
Stafford High School

Student Experience

The Emergency Medical Technician (EMT) program prepares students for a variety of careers and advanced coursework in the healthcare field including service as a paramedic. Students will have the opportunity to earn their EMT certification as well as continuing education hours required for recertification.

Potential Credentials

- Emergency Medical Technician (EMT) State License
- Emergency Telecommunicator Certification (ETC)

Eligibility Criteria and Selection

This program is open to students that are eligible for grade 9. The program is also available to rising 10th and 11th grade students, if space is available. The program can accept up to 25 students per section at each location.

This program is accredited by the Virginia Office of Emergency Medical Services (OEMS) and requires students to be 16 years of age by the first day of school, provide documentation of immunizations and a negative drug screen, capability to read technical reading level of at least grade 10, and a social security number.

EMT courses require students to devote time outside the school day to participate in related activities occurring in the evening and on weekends. Cardiopulmonary Resuscitation (CPR) certification is required prior to the start of class through AHA Healthcare provider or ARC Professional Cardiopulmonary Resuscitation.

Middle School Elective Connections

The courses listed are courses that have related content to courses included in the pathway. The courses are not to be considered prerequisites.

- Community Leaders
- Advanced Digital Explorations
- Innovation Studio
- Mathematical Performance Lab
- Technology and Engineering I and II

Emergency Medical Technician Courses

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
Program Requirement	Introduction to Health and Medical Sciences	Emergency Medical Telecommunications	Emergency Medical Technician I AND Emergency Medical Technician II - concurrent enrollment	Emergency Medical Technician III

International Baccalaureate Diploma Programme

Location

Mountain View High School

Student Experience

Those seeking the full International Baccalaureate (IB) Programme Diploma will experience a curriculum designed to support the development of a global mindset coupled with rigorous coursework that is recognized around the world. Upon completing the curriculum requirements, students will have the opportunity to receive the IB Diploma as well as their high school diploma. Students that wish to exit the IB Diploma Programme pathway will return to their zoned high school.

Eligibility Criteria

This program is open to students that successfully complete Algebra I in grade 8 and are eligible for grade 9 at a Stafford high school. The IB Diploma Programme is also available to rising 10th and 11th grade students, if space is available and prerequisites have been met.

Middle School Elective Connections

The courses listed are courses that have related content to courses included in the pathway. The courses are not to be considered prerequisites.

- Community Leaders
- Advanced Digital Explorations

IB Diploma Programme Pathway - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
English (Group 1 Language A)	English 9 Honors	English 10 Honors	IB Language and Literature	IB Language and Literature
World Language* (Group 2 Language B)	World Language Level I World Language Level II (semester courses) ----- World Language Level II	World Language Level III	IB World Language Acquisition I	IB World Language Acquisition II

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
History and Social Sciences (Group 3 Individuals and Societies)	World History II	AP Comparative Government	IB History of the Americas I	IB History of the Americas II
Science (Group 4 Experimental Science)	Biology	Chemistry	IB Biology I OR IB Chemistry I OR IB Physics I	IB Biology II OR IB Chemistry II OR IB Physics II
Mathematics (Group 5 Mathematics)	Geometry	Algebra II	IB Mathematics: Applications and Interpretation I	IB Mathematics: Applications and Interpretation II
	Algebra II	Pre-calculus	IB Mathematics: Analysis and Approaches I	IB Mathematics: Analysis and Approaches II
Required Electives (Group 6 Electives)	N/A	N/A	IB Elective**	IB Elective**
Health and Physical Education	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
Elective	Elective	Elective [†] OR Economics and Personal Finance	IB Theory of Knowledge I	IB Theory of Knowledge II
Elective	N/A	N/A	Elective	Elective

NOTE: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available.

*Electives and World Language courses should be taken in a successive sequence.

**IB Electives include: Art, Theatre, Music, Social and Cultural Anthropology, Computer Science, Psychology, Environmental Systems and Societies, Economics and Business Management.

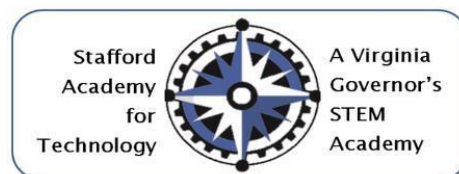
[†]Students electing to take IB Art, IB Theatre, or IB Music will need to complete art, theatre, or music levels I and II in grades 9 and 10.

STAT Programs for Engineering and Information Technology

Locations

Engineering: North Stafford High School

Information Technology: Brooke Point High School



Student Experience

STAT is a four-year program of study utilizing an integrated, hands-on, project-based model of instruction. Students select one of the two possible Science, Technology, Engineering, and Mathematics (STEM) academies: Engineering or Information Technology. The STAT instructional team includes teachers from the Career and Technical Education

(specialty) area, as well as science, English, and mathematics.

STAT students learn in a “cohort” of like-minded students during 9th-12th grade in both academic and CTE courses. Students design a senior research project that serves as excellent preparation for careers in a STEM field and have the opportunity to earn industry certifications. Academic integrity is of the utmost importance in this rigorous project-based learning program. The STAT Honors and Excellence Agreement is shared with all cohort members at the start of the new year.

STAT students are expected to earn an industry certification or state occupational license as well as successfully complete at least nine transferable college credits. Upon completion of this four year cohort, students will earn the Governor’s STEM Academy diploma seal.

Potential Credentials

- Project Lead the Way (PLTW) End of Course Test

Eligibility Criteria

All STAT programs are open to students that have successfully completed Algebra I in grade 8 and eligible for grade 9. STAT programs are also available to rising 10th grade students, if space is available.

Middle School Elective Connections

The courses listed are courses that have related content to courses included in the pathway. The courses are not to be considered prerequisites.

- Community Leaders
- Computer Science Discoveries
- Advanced Digital Explorations
- Innovation Studio
- Mathematical Performance Lab
- Technology and Engineering I & II

STAT Engineering - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
English	English 9 Honors	English 10 Honors	English 11 Honors OR AP English Language and Composition	AP Literature and Composition OR DE English Composition
History and Social Sciences	Honors World History I	Honors World History II	AP Virginia and United States History	AP or DE Virginia and United States Government
Mathematics	Algebra I	Honors Geometry	Honors Algebra II	Algebra III
	Honors Geometry	Honors Algebra II	Algebra III OR AP or DE Pre-calculus	AP or DE Pre-calculus
	Honors Algebra II	Honors Algebra III OR AP Pre-calculus	AP or DE Pre-calculus OR AP or DE Calculus	AP or DE Calculus
Science	Honors Biology	Honors Chemistry	AP Environmental Science	Honors/AP Physics

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
World Language	World Language	World Language	World Language	World Language
Health and Physical Education	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
Program Required	Introduction to Engineering Design	Aerospace Engineering OR Digital Electronics	Principles of Engineering	Engineering Design and Development Capstone Course
Elective	Elective	Economics and Personal Finance	Required Elective: Civil Engineering and Architecture OR Computer Integrated Manufacturing	Elective
Elective	N/A	N/A	AP Seminar	AP Research

NOTE: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available.

STAT Information Technology - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
English	English 9 Honors	English 10 Honors	English 11 Honors OR AP English Language and Composition	AP Literature and Composition OR DE English Composition
History and Social Sciences	Honors World History I	Honors World History II	AP Virginia and United States History	AP or DE Virginia and United States Government
Mathematics	Algebra I	Honors Geometry	Honors Algebra II	Algebra III
	Honors Geometry	Honors Algebra II	Algebra III OR AP or DE Pre-calculus	AP or DE Pre-calculus
	Honors Algebra II	Algebra III OR AP or DE Pre-calculus	AP or DE Pre-calculus OR AP or DE Calculus AB	AP or DE Calculus AB
Science	Honors Earth Science	Honors Biology	Honors Chemistry	AP or DE Physics
World Language	World Language	World Language	World Language	World Language
Health and Physical	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A

	LAUNCH	LEARN		LEAD
	9th Grade	10th Grade	11th Grade	12th Grade
Education				
Program Required	Information Technology Fundamentals	Database Design and Management* OR Cybersecurity I	STAT Programming OR Cybersecurity I OR Cybersecurity II*	Java Programming OR AP Computer Science A OR Cybersecurity II OR Cybersecurity III
Electives	Elective	Economics and Personal Finance	Elective	Elective

NOTE: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available.

*For the class of 2026 and beyond

Other Secondary Programs

Stafford Schools secondary programs provide a series of advanced and specialized coursework aimed to deepen student knowledge, skills, and understanding of a particular field of study or career. Depending upon the program pathway of choice, students may also obtain relevant certifications that serve local and regional economic needs. Each program pathway offers a one- to three-year program of study. Students accepted into a program pathway will be required to transfer to the offering school, if different from the student's zoned high school. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Current offerings include:

- **Auto Body Technology** is a program with mastery of each task including: collision and repair, painting and refinishing. This program is accredited by the The Board of the National Institute for Automotive Service Excellence (ASE).
- **Automotive Technology** is a program with mastery of each task including the four primary ASE certified areas: Brakes, Steering and Suspension, Electrical/Electronics and light duty vehicle repair. This program is accredited by the The Board of the National Institute for Automotive Service Excellence (ASE).
- **Barbering and Cosmetology** prepares students for certification through the Virginia Board of Barbers/Cosmetology. Coursework includes mannequin- and live-model work, safety, sterilization, sanitation, bacteriology, effective communication, and management.
- **Carpentry** prepares students with skills leading to careers in the construction industry and/or post-secondary education. Students learn the principles and technologies in commercial and residential construction. In addition, students develop leadership skills and compete in the SkillsUSA program as well as the Bringing Occupational Opportunities To Schools (BOOTS) program.
- **Criminal Justice** highlights occupations within the criminal justice system. Through understanding the rule of law and exploring policy, students will examine evidence, techniques of investigation, report writing, and courtroom procedures.
- **Culinary Arts** is a program designed to prepare students for college and careers in the food service industry.
- **Early Childhood Education** prepares students for employment or continued education in the field of childcare and early childhood education. The Early Childhood program builds skills through integrated learning experiences centered around opportunities for student engagement with concrete materials and exploration.
- **Electricity** prepares students to develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems that prepare them for real-world work environments. In addition, students develop leadership skills and compete in the SkillsUSA program as well as the Bringing Occupational Opportunities To Schools (BOOTS) program.
- **Emergency Medical Technician (EMT)** program prepares students for a variety of careers and advanced coursework in the healthcare field including service as a paramedic. Students will have the opportunity to earn their EMT certification as well as continuing education hours required for recertification.
- **Firefighting** is a high school firefighter program (HSFP) through a partnership with Stafford County Fire and Rescue. Firefighting prepares students in the professional standards necessary to successfully fight live fires, address hazardous-materials incidents, and conduct search-and-rescue operations.
Health Assisting Careers provides students with an opportunity to study families of health careers such as dental, medical, nursing, allied health, and related occupations and continue to develop basic skills common to careers in health care.
- **Horticulture Sciences** includes courses Horticulture Sciences, Greenhouse Plant Production and Management, and Landscaping. This program encompasses improving the quality and safety of food, cultivating and preserving our natural resources with a focus on the production, processing, marketing, distribution, financing, and development of agricultural commodities.
- **Masonry** prepares students through hands-on training in a program lab outfitted with laser levels, mortar mixers, masonry saws and other industry-standard equipment. Masonry, also known as brick or stone work, develops technical knowledge for laying block and brick, concrete construction, and reading blueprints. In

addition, students develop leadership skills and compete in the SkillsUSA program as well as the Bringing Occupational Opportunities To Schools (BOOTS) program.

- **Medical Assistant** prepares students to develop basic skills and techniques to assist the physician and/or other medical professionals in patient examinations, basic emergency care, simple laboratory tests, preparation for minor surgical procedures, and administrative duties.
- **Nurse Aide** is an introduction to the nursing career field. This course is approved by the State Board of Nursing and may qualify the student for participation in Virginia Nurse Aide Competency Evaluation Program (required for certification).
- **Teachers for Tomorrow** is a dual enrollment program to train students in a career in teaching and education. This course sequence provides an overview of the development of human beings from birth to adolescence to explore K-12 education.

Eligibility Criteria and Selection

Qualifying students may apply to Stafford secondary programs. Each program may have a unique set of minimum criteria. Eligible students that meet the minimum criteria and apply for a program will be entered into a pool of candidates for selection via lottery. The number of seats available within each program may vary based on local factors and state and federal requirements, but will be established prior to the lottery selection. To ensure geographic representation in each pathway within each specialty program, a set minimum number of seats will be allotted to each high school in Stafford County.

School Transfer and Transportation

Students accepting an offer to attend a one-, two-, or three-year secondary program other than Firefighting will be transferred to the program's school location while enrolled. Transportation will be provided to and from the student's home to the secondary program school.

Auto Body Technology

Location

North Stafford High School

Student Experience

Auto Body Technology is a program with mastery of each task including: collision and repair, painting and refinishing. Auto Body Technology skills range from technical skills to workplace readiness skills. Students learn automotive history, practice shop safety, gain career skills, and use custom techniques. Students will be encouraged to participate in work-based learning activities and in courses to build entrepreneurial skills.

Potential Credentials

- Automotive Service Excellence (ASE) Certification

Eligibility Criteria and Selection

The program is open to rising 10th grade and 11th grade students. Students are required to complete a pre-test prior to being admitted as required by Automotive Service Excellence (ASE). This program can accept up to 20 students per section. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Auto Body Technology Courses

	LEARN		LEAD
	10th or 11th Grade	11th or 12th Grade	12th Grade
Program Requirement	Auto Body Technology I - Collision and Repair (2 credits)	Auto Body Technology II - Painting and Refinishing (4 credits)	Auto Body Technology III - Collision, Repair, Painting, and Refinishing (4 credits)

Automotive Technology

Locations

Brooke Point High School
North Stafford High School

Student Experience

Students learn all aspects of repair, safety, and customer service. Automotive Technology skills provide students experience in diagnostics, adjustment, and repair of automotive vehicles. Students will continue to master skills related to suspension and steering, brakes, electrical/ electronic systems, and engine performance by operating as automotive shop technicians. Students will participate in work-based learning experiences and will be encouraged to enroll in courses to build entrepreneurial skills.

Potential Credentials

- Automotive Service Excellence (ASE) Certification

Eligibility Criteria and Selection

The program is open to rising 10th and 11th grade students. Students are required to complete a pre-test prior to being admitted as required by Automotive Service Excellence (ASE). This program can accept up to 20 students per section. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Automotive Technology Courses

	LEARN		LEAD
	10th or 11th Grade	11th or 12 Grade	12th Grade
Program Requirement	Automotive Technology I	Automotive Technology II (2 credits)	Automotive Technology III (2 credits)

Barbering and Cosmetology

Locations

Mountain View High School (Barbering only)
Stafford High School

Student Experience

Barbering and Cosmetology prepares students for certification through the Virginia Board of Barbers/Cosmetology. Coursework includes mannequin- and live-model work, safety, sterilization, sanitation, bacteriology, effective

communication, and management. Students will participate in work-based learning experiences and will be encouraged to enroll in courses to build entrepreneurial skills.

Potential Credentials

- Virginia Barbering or Cosmetology State License

Eligibility Criteria and Selection

This program is open to rising 11th grade students. (10th graders may be accepted if space is available). Regular attendance is required in order to meet the clinical lab hours, based on requirements from the Virginia Board for Barbers and Cosmetology. The program can accept up to 20 students at each location per section. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Barbering and Cosmetology Courses

	LEARN	LEAD
	11th Grade *(10th Graders may be accepted if space is available)	11th or 12th Grade
Program Requirement	Master Barbering I (3 credits) OR Cosmetology I (3 credits)	Master Barbering II (4 credits) OR Cosmetology II (4 credits)

Carpentry

Locations

Stafford High School

Student Experience

Carpentry prepares students with skills leading to careers in the construction industry and/or post-secondary education. Students learn the principles and technologies in commercial and residential construction. In addition, students develop leadership skills and compete in the SkillsUSA program as well as the Bringing Occupational Opportunities To Schools (BOOTS) program

Potential Credentials

- Carpentry Level One Assessment

Eligibility Criteria and Selection

The program is open to rising 10th and 11th grade students. This program can accept up to 20 students per section. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Carpentry Courses

	LEARN		LEAD
	10th or 11th Grade	11th or 12th Grade	12th Grade
Program Requirement	Carpentry I (2 credits)	Carpentry II (2 credits)	Carpentry III (2 credits)

Criminal Justice

Locations

Brooke Point High School
North Stafford High School

Student Experience

Criminal Justice is designed to expose students to occupations within the criminal justice system. Through understanding the rule of law and exploring policy, students will examine evidence, techniques of investigation, report writing, and courtroom procedures. Course topics include the functions of government, law enforcement, corrections, crime investigation, and the court system as well as criminal behavior and motivation.

Eligibility Criteria and Selection

This program is open to rising 11th grade students. The program can accept up to 25 students at each location. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Criminal Justice Courses

	LEARN	LEAD
	11th Grade	12th Grade
Program Requirement	Criminal Justice I	Criminal Justice II

Culinary Arts

Locations

Brooke Point High School
Mountain View High School
Stafford High School

Student Experience

The Culinary Arts program is designed to prepare students for college and careers in the food service industry. The program will provide work-based learning experiences and encourages students to enroll in courses that build leadership and entrepreneurial skills.

Potential Credentials

- ServSafe Manager Certification by the National Restaurant Association (NRA)

Eligibility Criteria and Selection

The program is available to rising 10th and 11th grade students. The work in this course requires that the student comply with the regulations of the Virginia Health Department in preparing and serving food sold to the public. The program can accept up to 20 students per section at each location. Additional requirements for annual continuation in the program are listed in course descriptions. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Culinary Arts Courses

	LEARN		LEAD
	10th or 11th Grade	11th or 12th Grade	12th Grade
Program Requirement	Culinary Arts I (2 credits)	Culinary Arts II (2 credits)	Culinary Arts Specialization (2 credits)

Early Childhood Education

Locations

Brooke Point High School

North Stafford High School

Student Experience

The Early Childhood Education program prepares students for employment or continued education in the field of childcare and early childhood education. Emphasis will be placed on development, implementation, and evaluation of learning activities through first-hand experiences working with young children in an on-site lab setting. National Child Development Associate Credential competencies and state validated education competencies are included in the program.

Eligibility Criteria and Selection

The programs are available to rising 10th and 11th grade students. The program can accept up to 20 students at each location per section. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Early Childhood Education Courses

	LEARN		LEAD
	10th Grade	10th or 11th Grade	11th or 12th Grade
Program Requirement	Child Development and Parenting	Early Childhood, Education, and Services I (2 credits)	Early Childhood, Education, and Services II (2 credits)

Electricity

Locations

Stafford High School

Student Experience

Electricity prepares students to develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems that prepare them for real-world work environments. In addition, students develop leadership skills and compete in the SkillsUSA program as well as the Bringing Occupational Opportunities To Schools (BOOTS) program.

Potential Credentials

- Electrical Level One Assessment

Eligibility Criteria and Selection

The program is open to rising 10th and 11th grade students. This program can accept up to 20 students per section. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Electricity Courses

	LEARN		LEAD
	10th or 11th Grade	11th or 12 Grade	12th Grade
Program Requirement	Electricity I (2 credits)	Electricity II (2 credits)	Electricity III (2 credits)

Emergency Medical Technician

Locations

Colonial Forge High School
Stafford High School

Student Experience

The Emergency Medical Technician (EMT) program prepares students for a variety of careers and advanced coursework in the healthcare field including service as a paramedic. Students will have the opportunity to earn their EMT certification as well as continuing education hours required for recertification.

Potential Credentials

- Emergency Medical Technician (EMT) State License
- Emergency Telecommunicator Certification (ETC)

Eligibility Criteria and Selection

The program is available to rising 10th, 11th, and 12th grade students. The program can accept up to 25 students per section at each location.

This program is accredited by the Virginia Office of Emergency Medical Services (OEMS) and requires students to be 16 years of age by the first day of school, provide documentation of immunizations and a negative drug screen, capability to read technical reading level of at least grade 10, and a social security number.

EMT courses require students to devote time outside the school day to participate in related activities occurring in the evening and on weekends. Cardiopulmonary Resuscitation (CPR) certification is required prior to the start of class through AHA Healthcare provider or ARC Professional Cardiopulmonary Resuscitation. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Emergency Medical Technician Courses

	LEARN		LEAD
	10th or 11th Grade	11th or 12th Grade	12th Grade
Program Requirement	Emergency Medical Telecommunications	Emergency Medical Technician I AND Emergency Medical Technician II - concurrent enrollment	Emergency Medical Technician III

Firefighting

Location

Stafford County Fire and Rescue

Student Experience

Stafford's Firefighting Program offers a high school firefighter program (HSFP) through a partnership with Stafford County Fire and Rescue. Firefighting prepares students in the professional standards necessary to successfully fight live fires, address hazardous-materials incidents, and conduct search-and-rescue operations. The program meets the standards of National Fire Protection Association (NFPA) 1001-2013 leading to the Firefighting I certification.

Potential Credentials

- Firefighter I Certification Examination
- Firefighter II Certification Examination

Eligibility Criteria and Selection

This program is open to rising 11th or 12th grade students. The program can accept up to 20 students. The application for the Firefighting program is separate from the Stafford secondary programs application. Firefighting will be offered on an every other day schedule. Counselors must verify students have a plan to meet required credits necessary for graduation before they are eligible to participate in the program. Please see your school counselor for more information.

Stafford Fire and Rescue and National Fire Protection Association (NFPA) requires students to be at least 16 years old by July 1 and pass the NFPA 1582 medical physical. Additional requirements include parent/guardian consent and CPR, HAZMAT operations, and Mayday Awareness certifications. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

The program requires an application that is approved by Stafford Fire and Rescue.

Firefighting Courses

	LEAD
	11th or 12th Grade (*10th grade if age requirement met)
Program Requirement	Firefighter I (2 credits) AND Firefighter II (2 credits) - concurrent enrollment

Health Assisting Careers

Location

Brooke Point High School

Student Experience

Health Assisting Careers provides students with an opportunity to study families of health careers such as dental, medical, nursing, allied health, and related occupations and continue to develop basic skills common to careers in health care.

Eligibility Criteria

This program is open to rising 11th and 12th grade students. The program can accept up to 18 students per section at each location. Note: Introduction to Health and Medical Sciences is recommended as a prerequisite for Health Assisting Careers. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Health Assisting Careers Courses

	LEARN	LEAD
	10th or 11th Grade	11th or 12th Grade
Program Requirement	Introduction to Health and Medical Sciences	Health Assisting Careers (2 credits)

Horticultural Sciences

Location

North Stafford High School

Student Experience

Horticulture Science includes courses Horticulture Sciences, Greenhouse Plant Production and Management, and Landscaping. This program encompasses improving the quality and safety of food, cultivating and preserving our natural resources with a focus on the production, processing, marketing, distribution, financing, and development of agricultural commodities.

Eligibility Criteria

This program is open to rising 10th and 11th grade students. The program can accept up to 20 students per section. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Horticultural Sciences Courses

	LEARN	LEAD	
	10th or 11th Grade	11th or 12th Grade	11th or 12th Grade
Program Requirement	Horticulture Sciences	Greenhouse Plant Production and Management (2 credits)	Landscaping (2 credits)

Masonry

Locations

Stafford High School

Student Experience

Masonry prepares students through hands-on training in a program lab outfitted with laser levels, mortar mixers, masonry saws and other industry-standard equipment. Masonry, also known as brick or stone work, develops technical knowledge for laying block and brick, concrete construction, and reading blueprints. In addition, students develop leadership skills and compete in the SkillsUSA program as well as the Bringing Occupational Opportunities To Schools (BOOTS) program.

Potential Credentials

- Masonry Level One Assessment

Eligibility Criteria and Selection

The program is open to rising 10th and 11th grade students. This program can accept up to 20 students per section. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Masonry Courses

	LEARN		LEAD
	10th or 11th Grade	11th or 12th Grade	12th Grade
Program Requirement	Masonry I (2 credits)	Masonry II (2 credits)	Masonry III (2 credits)

Medical Assistant

Location

Mountain View High School

Student Experience

Medical Assistant I prepares students to develop basic skills and techniques to assist the physician and/or other medical professionals in patient examinations, basic emergency care, simple laboratory tests, preparation for minor surgical procedures, and administrative duties.

Eligibility Criteria

This program is open to rising 10th and 11th grade students, if space is available. Rising 11th grade students that have successfully completed Introduction to Health and Medical Sciences would meet the requirements to enroll in Medical Assistant I during the 11th grade year. The program can accept up to 20 students per section at each location. Note: Introduction to Health and Medical Sciences is recommended as a prerequisite for Medical Assistant I. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Medical Assistant Courses

	LEAD		
	10th Grade	11th Grade	12th Grade
Program Requirement	Introduction to Health and Medical Sciences	Medical Assistant I (2 credits)	Medical Assistant II (2 credits)

Nurse Aide

Location

North Stafford High School

Student Experience

Nurse Aide is an introduction to the nursing career field. This course is approved by the State Board of Nursing and may qualify the student for participation in Virginia Nurse Aide Competency Evaluation Program (required for certification).

Potential Credentials

- Certified Nurse Aide (C.N.A.) Exam

Eligibility Criteria

This program is open to rising 11th and 12th grade students, if space is available. The program can accept up to 20 students per section. Students will be required to purchase a scrub uniform and white shoes without a logo. A description and cost of the uniform will be provided by the instructor during the first week of class. Additional requirements include a watch with a second hand, have a negative PPD (Tuberculosis screening test), a urine drug screen test, flu shot, TB test, and receive a COVID-19 vaccine prior to clinical placement. All screenings, tests and vaccines must be dated after August of the school year they are entering. This course is approved by the State Board of Nursing and will qualify the student for participation in Virginia Nurse Aide Competency Evaluation Program (required for certification). Transportation to the clinical sites is provided. Note: Introduction to Health and Medical Sciences is recommended as a prerequisite for Nurse Aide. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Nurse Aide Courses

	LEAD	
	10th or 11th Grade	11th or 12th Grade
Program Requirement	Introduction to Health and Medical Sciences	Nurse Aide I (2 credits) AND Nurse Aide II (2 credits) - concurrent enrollment

Teachers for Tomorrow

Locations

Mountain View High School

Student Experience

Through an agreement among University of Mary Washington (UMW), Germanna Community College (GCC), and Stafford Schools, Teachers for Tomorrow (TfT) provides students with a dual enrollment program preparing students for a career in teaching and education. This course sequence provides an overview of the development of human beings from birth to adolescence to explore K-12 education. Students who successfully complete the TfT Pathway will be eligible to enter GCC with the first semester of coursework completed towards a two-year elementary education program that leads to a four-year teacher program at UMW. Students may choose to enter UMW after graduation from Stafford Schools. Students interested in earning an educational degree may transfer dual enrollment (DE) credits to other Virginia colleges and universities. Students completing the TfT program will be offered a letter of intent to teach with Stafford Schools upon completion of their licensure requirements.

Potential Credentials

- Teacher PRAXIS Core Test

Eligibility Criteria and Selection

This program is open to rising 11th grade students. The program can accept up to 25 students at each location. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

Teachers for Tomorrow Courses

	LEARN	LEAD
	11th Grade	12th Grade
Program Requirement	DE Virginia Teachers for Tomorrow I*	DE Virginia Teachers for Tomorrow II**

*Requires 40 hours of Practicum experience

**CTE Industry Credential required

Regional High School Programs

Stafford students have access to two regional high school program offerings.

- **Academy of Technology and Innovation at the University of Mary Washington's** South Campus (ATI-UMW) is focused on preparing students for college and careers in the computer and data sciences. ATI-UMW will provide an innovative experience merging the high tech skill needs of today's economy with the robust, critical thinking of a liberal arts and science foundation.
- **Commonwealth Governor's School (CGS)** at Colonial Forge, North Stafford, and Stafford High Schools provides a curriculum designed to challenge students in four major academic content areas, through problem-based instruction appropriate for gifted and highly motivated learners and to focus on the community issues of environment, development, and service.

The Academy of Technology and Innovation at the University of Mary Washington

Student Experience

ATI-UMW, a college partnership regional high school, will focus on the reciprocal relationship between computer and data science fields, as applied across content areas using an interdisciplinary, project-based learning approach. This program will provide opportunities for students interested directly in computer and data sciences, as well as for students interested in liberal arts and classical sciences who want to augment their skills and knowledge through developing a complementary skill set in computer and data sciences. Students will participate in robust, hands-on, project-based learning experiences that will involve real-world learning experiences, performance based assessment, and hands-on service learning opportunities. Instructional approaches will include personalized, small group, and traditional classroom learning environments, and K-12 instruction will be enhanced through college and community partnerships.



Location and Transportation

ATI-UMW is located at the University of Mary Washington's Stafford Campus off of Route 17 in Stafford County. Stafford students selected for enrollment and opting to attend will transfer to ATI-UMW for all four years of high school. Students will be provided transportation to and from their home to ATI-UMW.

Eligibility Criteria and Selection

All students eligible for entry into the 9th grade at a Stafford County high school are eligible to apply. Eligible students that apply will be entered into a pool of candidates for selection via lottery. Students and their families should be aware that coursework in the program will be rigorous, include a number of advanced courses, and provide opportunities for college credit and/or industry certifications. The number of seats available to Stafford Schools is projected to be 50. To ensure some geographic representation, a set minimum number of seats will be allotted to each high school in Stafford County.

Middle School Elective Connections

The courses listed are courses that have related content to courses included in the pathway. The courses are not to be considered prerequisites.

- Computer Science Discoveries
- Advanced Digital Explorations
- Innovation Studio
- Mathematical Performance Lab

ATI-UMW - Sample Course Sequence

Area	9th Grade	10th Grade	11th Grade	12th Grade
English	Global Studies I (English 9 and World History II)	Global Studies II (English 10 and AP World History)	American Studies I (English 11 Virginia and US History AP or regular)	American Studies II (English 12 and Virginia and US Government AP or regular)
History and Social Sciences				
Mathematics	Algebra I	Geometry	Algebra II	Pre-Calculus
	Integrated Mathematics I (Algebra I + Geometry Part A)	Integrated Mathematics II (Algebra II + Geometry Part B)	Pre-Calculus OR Data Science	Calculus AB OR AP Statistics
	Geometry	Algebra II		
	Algebra II	Pre-calculus	Calculus AB	Calculus BC OR AP Statistics
Science OR Integrated Science	Biology	Chemistry	Physics	AP or DE Science
Health and Physical Education	Health and Physical Education 9 (virtual)	Health and Physical Education 10 (virtual)	N/A	N/A
World Language Offerings*	Spanish I, II, III	Spanish II, III, IV	Spanish III, IV, V	Spanish IV, V
Required Electives	Introduction to Computer Science OR Programming/ Introduction to Data Science	AP Computer Science Principles	AP Computer Science A OR AP Statistics	Economics and Entrepreneurship (Fulfills Economics and Personal Finance content, integrated with entrepreneurship and taught across all four years; awarded senior year)
Additional Elective Possibilities**	Cloud Computing; Coding Website Design (HTML and CSS); Cybersecurity I; Cybersecurity II; Data Methods and Analysis (Mixed Methods); Data Science Applications; Data Visualizations; Digital Art I; Digital Art II; Digital Marketing and Data Science; Ethics and Government for Data and Computer Science; Introduction to Data Science Coding Languages (R, Python, SQL, etc.) Music Studio; Population Science; Programming; Teachers for Tomorrow I and II; UX and UI			

**The exact elective possibilities will be curated through existing staff, higher education partnerships, Virtual Virginia, concurrent enrollment opportunities, independent study, and small group instruction based on student interests and instructor availability.

NOTE: Upper-level courses may include Advanced Placement (AP) or Dual Enrollment (DE) options not currently listed. Staff are working with Germanna Community College, Rappahannock Community College, and the University of Mary Washington to consider an associate's degree pathway.

*Other world languages may be offered through Virtual Virginia and augmented through the college partnership.

The Commonwealth Governor's School

Student Experience

The Commonwealth Governor's School (CGS) provides gifted and motivated students with a challenging, interdisciplinary program in English, science, mathematics, and social studies. Based on a school-within-a-school model, this half-day program utilizes real-time interactive technology, field experiences, and team teaching to create a regional community of learners.

Coursework in the CGS curriculum includes honors, dual enrollment, and Advanced Placement opportunities. Students as early as 9th grade can take advantage of these advanced classes. CGS believes in the need for students to learn outside of a traditional classroom setting. As a result, CGS students participate in six to seven field experiences per year. These hands-on learning opportunities enable students to pursue real-life applications and work with experts in a variety of career fields.

Students attending CGS pursue a yearlong independent research (culminating) project on an interest, topic, question, or initiative they would like to develop. The student works with an advisor, project expert, and other CGS faculty members on research skills, statistical analysis, project development, and presentation skills. Upon completing the four sections of the culminating project, students receive one graded high school credit at the end of their senior year.

Locations and Transportation

Accepted students attend one of three sites, based on the location of their residence (not necessarily the zoned high school): Colonial Forge High School, North Stafford High School, or Stafford High School. Beginning with first-time ninth-grade students in 2023-2024 and beyond that elect to attend CGS will transfer to the offering school location for all four years of high school. Stafford Schools students selected for enrollment will be provided transportation to and from their home to their assigned CGS site.

Eligibility Criteria and Selection

Students entering the CGS program must have completed Algebra I during the academic school year prior to the 9th grade. Students wishing to [apply to CGS](#) should contact their school counselor or gifted education resource teacher.

Middle School Elective Connections

The courses listed are courses that have related content to courses included in the pathway. The courses are not to be considered prerequisites.

- Community Leaders

Commonwealth Governor's School - Sample Course Sequence

Area	9 th Grade	10 th Grade	11 th Grade	12 th Grade
English	Honors English 9	Honors English 10	AP English Language and Composition	AP English Literature and Composition
Mathematics	Honors Algebra II*	Honors Geometry and Trigonometry OR AP Pre-calculus	AP Pre-calculus OR AP Calculus AB with Special Topics	AP Statistics OR AP Calculus BC and Multivariable Calculus
Science	AP Environmental Science	AP Biology	Dual Enrollment Chemistry	AP Physics 1
History and Social Sciences	AP European History	AP U.S. Government	AP U.S. History	AP Human Geography

Commonwealth Governor’s School - Sample Course Sequence

Area	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Culminating	Advanced Research and Writing (Novice Level)	Advanced Research and Writing (Apprentice Level)	Advanced Research and Writing (Journeyman Level)	Advanced Research and Writing (Master Level)

*Students entering the CGS program must have completed Algebra I during the academic school year prior to the 9th grade.

Notes:

- Students wishing to enroll in additional AP mathematics courses (i.e., AP Statistics, AP Calculus AB, etc.) may need to enroll in that class as an elective.
- Students complete the Culminating Project (through registering for Advanced Research and Writing each year).
- Additional fees may be required for courses included in the CGS program. All efforts will be made to keep fees to a maximum of \$75 or less. Opportunities for financial assistance may be available. Please see your school counselor.

For more information, please visit the [CGS website](#) or see the gifted resource teacher available at each school.

Advanced Placement Capstone Program

The AP Capstone Program is a two-year seminar and research course that explores real-world issues while focusing on developing critical analysis, communication, and investigative skills. AP Capstone, developed by College Board, is built on the foundation of two courses—AP Seminar and AP Research—and is designed to complement and enhance the in-depth, discipline-specific study provided through AP courses. It cultivates curious, independent, and collaborative scholars and prepares them to make logical, evidence-based decisions.

AP Capstone Diploma

Students who earn scores of 3 or higher in both of the AP Capstone courses and on four additional AP Exams of their choosing will receive the AP Capstone Diploma.

AP Seminar and Research Certificate

Students who earn scores of 3 or higher in both of the AP Capstone courses but not on the four additional AP Exams will receive the AP Seminar and Research Certificate, signifying successful performance in those courses

Dual Enrollment Courses

Dual enrollment (DE) courses provide high school juniors and seniors an opportunity to take college courses while completing their high school requirements. Courses are taught by high school instructors who have the qualifications to teach at the college level. DE courses are offered through multiple post-secondary providers; each provider may have unique requirements for courses and grading practices. Interested students should discuss DE options with their high school counselors.

Prospective students may be required to complete an application for admission, provide qualifying GPA, PSAT, SAT, ACT scores, or take the Virginia Placement Test (VPT). They also will register through their high school in the spring. Stafford’s reduced tuition rates for dual enrollment are the responsibility of families. In determining whether to drop a DE course, the student must follow drop/add procedures and timelines established by the college, not those of the school division.

Dual Enrollment Qualifications:

- 3.0 GPA, OR PSAT ERW score of 390 or higher, OR SAT ERW score of 480 or higher, OR ACT score of 18 or higher on English and Reading, OR VPT ENG 111 placement score:
- Additional qualifying scores for Mathematics: 3.0 GPA and a C or better in high school math courses, OR PSAT ERW score of 390 or higher and a math score of 500 or higher, OR SAT ERW score of 480 or higher and math score of 530 or higher, OR ACT score of 18 or higher on English and reading and math score of 22 or higher, OR VPT ENG 111 placement and VPT MTH 154 placement scores.

DE courses for CTE will only be offered if minimum enrollment is met, and DE course providers may vary. Stafford Schools will offer a letter of intent to hire students who successfully complete the Teachers for Tomorrow program, complete a College/University Education program, and are eligible to earn a teacher license.

International Baccalaureate Diploma Programme

International Baccalaureate (IB) Diploma Programme (DP) is a rigorous pre-university course of study in the last two years of high school that focuses on developing the student as a whole by emphasizing ten Learner Profile traits: IB learners strive to be inquirers, knowledgeable, thinkers, communicators, principled, open-minded, caring, risk-takers, balanced, and reflective. This focus, in turn, develops and hones university-and career-readiness skills, including a strong work ethic, problem-solving and analytical thinking, collaboration, communication, and global awareness. When combined with the “Pre-DP” preparatory courses in grades 9-10, the IB Diploma Programme is a coordinated four-year sequence of college preparatory study that meets the needs of highly motivated secondary school students.

IB courses carry the potential for earning college credit. Students enrolled in individual IB courses must complete all assessments embedded throughout the year, and are strongly encouraged to take the end-of-year IB assessment in May. Students and/or parents/guardians are responsible for the IB exam fee by the appropriate date. Opportunities for financial assistance may be available. Please see your school counselor. Students enrolled in the IB Diploma Programme must complete all assessments including the assessment in May.

Students pursuing the full IB Diploma complete one course from each of the six subject groups). In addition, full IB Diploma students will research and write an independent, argumentative 4000-word Extended Essay on a topic of personal interest and complete the metacognitive Theory of Knowledge (ToK) course as well as a Creativity, Activity, and Service (CAS) experiences portfolio designed to provide balance for the academic rigor of the program.

It is strongly recommended that students interested in the IB Diploma Programme visit the IB page on the MVHS website for more information and attend an IB Information Night.

As a part of the implementation of specialty centers in Stafford Schools, the IB Diploma Programme is being consolidated to MVHS as a part of the Center for Leadership and International Relations beginning with rising 9th graders in 2024-2025. Students enrolled in the IB program at BPHS prior to 2024-2025 will continue in their IB program at BPHS through 2026-2027.

HIGH SCHOOL OFFERINGS



English Courses

The English curriculum prepares individuals to read with comprehension, think critically, and communicate effectively. To provide for individual differences, instructional grouping is offered at each grade level. Students will take the End Of Course (EOC) Reading and EOC Writing assessments in selected courses. Weighted grades are designated by a # for AP, DE, and IB courses. All classes may not be offered at all schools, due to enrollment and availability.

General Courses

1130 ENGLISH 9
1130C CENTER ENGLISH 9
1140 ENGLISH 10
1140C CENTER ENGLISH 10
1150 ENGLISH 11
1150C CENTER ENGLISH 11
1160 ENGLISH 12
1160C CENTER ENGLISH 12
1 Credit per course

A series of sequential courses designed to prepare students for continuing education and careers beyond high school. Instructional activities are based on the Virginia Standards of Learning and develop students' proficiency in oral and written communication, reading, research, and critical thinking and analysis skills. Students will explore a variety of text genres and make comparisons between diverse texts.

1130H HONORS ENGLISH 9
1130HC CENTER HONORS ENGLISH 9
1140H HONORS ENGLISH 10
1140HC CENTER HONORS ENGLISH 10
1150H HONORS ENGLISH 11
1150HC CENTER HONORS ENGLISH 11
1 Credit

A series of sequential courses, designed to prepare students for college and AP English, DE English Composition, or IB English courses. The instruction develops fundamental skills in inquiry (research), rhetorical analysis, argument, and synthesis above and beyond the scope of the Virginia Standards of Learning.

Advanced Placement Courses

1140AP AP ENGLISH 10: SEMINAR
Grade 10
1 Credit#

This course engages students in cross-curricular conversations that explore academic and real-world topics and issues while considering diverse perspectives (e.g., cultural and social, artistic and philosophical, political and

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historical, environmental, economic, and scientific). It will foster students' ability to investigate a problem or issue, analyze arguments, compare different perspectives, and synthesize information from multiple sources. Students will evaluate a variety of literary, informational, and visual texts and analyze authors' perspective, rhetorical choices, and argumentative structure to develop evidence-based arguments. Students will work alone and in a group to convey their findings through multiple written formats, multimedia presentations and oral defenses. Although this course has no prerequisites, after completion of the English 10 AP Seminar course, students are eligible to take the subsequent course, AP Research, and may be eligible for an AP Capstone Diploma.

1196AP AP ENGLISH: LANGUAGE AND COMPOSITION

Grade 11

1 Credit#

This course is designed to enable students to write effectively for college courses across the curriculum as well as in their personal and professional lives. Students are provided with opportunities to write about a variety of subjects, with emphasis on expository analytical, and argumentative forms of writing. Additionally, students learn to read primary and secondary sources carefully, to synthesize material from texts in their own compositions, and to cite sources using conventions recommended by professional organizations. Although the course focus is primarily writing, students are also engaged in reading complex texts with understanding and examining the rhetorical strategies and stylistic choices made by writers. Students will be prepared to take the year-end AP English Language and Composition exam for possible college credit. Summer assignments may be provided.

1195AP AP ENGLISH: LITERATURE AND COMPOSITION

Grade 12

1 Credit#

AP English is a year-long course designed to be taken during a student's senior year, engender advanced study of literature, and prepare students for college. The course will include literary analysis and composition components. Students will practice interpreting and evaluating literature. Essays will be expository, analytical, and argumentative. Students will be prepared to take the year-end AP English Literature and Composition exam for possible college credit. Summer assignments may be provided.

Dual Enrollment Courses

1177DE DE ENGLISH COMPOSITION (GCC ENG 111 and 112)

Grades 11-12

1 Credit#

DE English introduces students to critical thinking and the fundamentals of academic writing. 80% of the work in this class will involve writing assignments. Through the writing process, students refine topics; develop and support ideas; investigate, evaluate, and incorporate appropriate resources; edit for effective style and usage; and determine appropriate approaches for a variety of contexts, audiences, and purposes. Writing activities will include exposition and argumentation with at least one researched essay per semester. Second semester of the course requires students to locate, evaluate, integrate, and document sources and effectively edit for style and usage. The course will prepare students for all other expected college writing and for writing in the workplace by engaging the writing process, rhetoric, critical thinking, and research.

Commonwealth Governor's School Courses

1130G ENGLISH 9: HONORS ENGLISH 9

Grade 9

1 Credit

Honors English 9 introduces students to the critical analysis of literature through challenging reading, writing, and discussion. Students study the defining characteristics of the forms and levels of discourse, both imaginative and expository. Students apply their skills to timeless problems of communities, their environment, and their development. In addition, students study the fictional representation as well as the historical facts surrounding key events in European history.

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1140G ENGLISH 10: HONORS ENGLISH 10**Grade 10****1 Credit**

Basic concepts learned in the 9th grade course are applied to literary works of increasing complexity. Special attention is given to the relationship between and among individuals, their society, and their environment. Written and oral work increasingly emphasizes persuasive forms appropriate to public discourses and to problem-solving in human communities.

1196APG ENGLISH 11: AP ENGLISH LANGUAGE AND COMPOSITION**Grade 11****1 Credit#**

Students extend and refine their skills in critical reading and writing and will prepare for the 11th grade SOL. These skills are applied to examining the American cultural experience and its connections to the world. English and Social Studies content will thus reinforce each other. Reading and writing assignments will be challenging and designed to expand student sophistication in exploring aesthetic and cultural issues. The students will be prepared and are encouraged to take the AP exam for possible college credit.

1195APG ENGLISH 12: AP ENGLISH LITERATURE AND COMPOSITION**Grade 12****1 Credit#**

In this course, students will apply their critical English skills to European and American literature, analyzing the development of cultural trends, including changing views of the protagonist and the surrounding social climate. Students will develop an understanding of major cultural developments of the nineteenth and twentieth centuries. In addition, students will examine the cultural landscape through both its fictional representation and through an examination of factual information presented in CGS Human Geography. The students will be prepared and are encouraged to take the AP exam for possible college credit.

International Baccalaureate Courses

Students will be prepared and are encouraged to take the year-end IB examination for possible college credit.

Schools offering these courses: BPHS (through 2026-2027) and MVHS.

IB LANGUAGE AND LITERATURE (HL)**1151IB Grade 11****1161IB Grade 12****1 Credit per Year#**

****Successful completion of English or Honors English courses for IB year one***

****Successful completion of IB year one to go on to IB year two***

In this 2-year course, students will be challenged to think critically about the role of language and interactions between text, context, audience, and purpose. They can expect to develop college-level writing skills. In addition, students will engage in analysis of literary works such as short stories, poetry, plays, non-fiction, and novels. In 11th grade, students focus on language in cultural context and language in mass media. In the 12th grade, students focus on analysis of poetry, memoir, and plays, as well as a critical and comparative study of the novel as a literary genre. Students who take this course should be prepared to think critically and take an active role in class discussions. Required IB assessments include oral activities, written tasks, an oral commentary, and course-end exams that call upon the student to analyze and compare previously unseen texts as well as literary works that have been read during the course. The students will be prepared and are encouraged to take the year-end IB examination for possible college credit.

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English Elective Courses

1300 ORAL COMMUNICATION

Grades 10-12

1 Credit

Since communication is a lifelong process, oral communication focuses on necessary skills to help students communicate more effectively in their personal, social, and professional lives. To accomplish this goal, students will receive instruction in prepared speeches, impromptu speeches, personal communication, and oral interpretation.

1200 JOURNALISM I

Grades 9-12

1 Credit

This elective course teaches the skills of managing, editing, and publishing a product in the journalistic writing style. Students write news, editorials, features, and sports articles and publish school and community news in the school magazine. This is a publication course and may involve participation outside of class.

1210 JOURNALISM II

Grades 10-12

1 Credit

**Successful completion of Journalism I and service on the school's publication staff*

This sequential elective course is specifically designed for students serving on the school's publication staff. This is a publication course and may involve participation outside of class.

1211 JOURNALISM III

Grades 11-12

1 Credit

**Successful completion of Journalism II and service on the school's publication staff*

This sequential elective course provides students with the opportunity to learn editorial leadership and professionalism. Students will function as productive members of the publication staff. This is a publication course and may involve participation outside of class.

1212 JOURNALISM IV

Grade 12

1 Credit

**Successful completion of Journalism III and service on the school's publication staff*

This sequential elective course will train students to serve as publication leaders who participate in peer tutoring, plan newspaper content, and help determine the news and editorial foci of the school newspaper. This is a publication course and may involve participation outside of class.

1215 PHOTOJOURNALISM I

Grades 9-12

1 Credit

In this course, students study photography and layout of publications as well as the writing styles appropriate for those publications. Generally, this course is designed for members of the school's yearbook staff. This is a publication course and will involve participation outside of class.

1216 PHOTOJOURNALISM II

Grades 10-12

1 Credit

**Successful completion of Photojournalism I and service on the school's publication staff*

This sequential elective course is specifically designed for students serving in key roles on the school's yearbook

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staff. This is a publication course and will involve participation outside of class.

1217 PHOTOJOURNALISM III

Grades 11-12

1 Credit

****Successful completion of Photojournalism II and service on the school's publication staff***

This sequential elective course produces the school yearbook. Students prepare photographs, layout, and writing appropriate to the yearbook. Students also serve in leadership and supervisory roles to the yearbook staff. This is a publication course and will involve participation outside of class.

1218 PHOTOJOURNALISM IV

Grade 12

1 Credit

****Successful completion of Photojournalism III and service on the school's publication staff***

This sequential elective course produces the school yearbook. Students prepare photographs, layout, and writing appropriate to the yearbook. Students also serve in leadership and supervisory roles to the yearbook staff. This is a publication course and will involve participation outside of class.

1171 CREATIVE WRITING I

Grades 9-12

1 Credit

This course develops a community of writers who share their work in the classroom and in the school literary magazine. Considerable emphasis is placed on developing an effective critique and on providing a climate that enhances enjoyment of creative expression. The course is a learn-by-doing course where students learn both to discipline and to free themselves through language. Students will experiment with literary genres and with various techniques and forms. Students will publish the school's literary magazine. This is a publication course and may involve participation outside of class.

1165 CREATIVE WRITING II

Grades 10-12

1 Credit

****Successful completion of Creative Writing I and service on the school's publication staff***

This sequential elective course is a writing intensive class designed for students in grades 11 and 12 who have completed an introductory course in creative writing and have demonstrated a proclivity toward writing. The course builds upon and refines the skills and concepts developed in the introductory course and will feature self-directed projects and student-led discussions with a strong emphasis on the professional writer's life and craft. Students are required to submit work for publication both within and outside the school. This is a publication production course which involves participation outside of class. Creative Writing II students will assume the staff leadership roles for the school literary magazine.

READING ACROSS THE CONTENT AREAS I-IV

1181 Grade 9

1182 Grade 10

1183 Grade 11

1184 Grade 12

1 Credit

Reading Across the Content Areas is designed for students requiring specific instruction in reading secondary content material; texts that often are compactly written and contain specialized vocabulary. Instruction will focus on student engagement, reading fluency, vocabulary, graphics (maps, charts, tables), and reading on the Internet. Strategies for questioning, visualizing, connecting, predicting, summarizing, and monitoring one's understanding will be covered. This course is recommended for students who did not pass the eighth-grade reading SOL or are at risk in many of their subject-area courses in the upper grades.

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DEVELOPMENTAL READING I-IV**9491 Grade 9****9492 Grade 10****9493 Grade 11****9494 Grade 12****1 Credit**

These classes are designed for students requiring differentiated instruction in reading, and may qualify as 1 elective credit per course, up to 4 credits. This program provides an academic based opportunity for students to achieve a degree of mastery in phonemic awareness, phonics, fluency, vocabulary, and comprehension. Teachers support students' reading through continued assessment, the provision of instructional-level materials, planned interventions that reflect the student's Individualized Education Program, and the developmental nature of reading. Enrollment is based on the recommendation of the IEP team.

ENGLISH REVIEW**1515 Grade 11****1516 Grade 12****1 Elective Credit**

This course is designed for students who need reading and writing remediation. Students learn and practice reading comprehension and writing strategies in a small group setting. An opportunity to retake the End-of-Course English assessments will be offered. Enrollment is determined based on prior English coursework or SOL scores.

1178 ADVANCED WRITING**Grades 10-12****1 Elective Credit**

This course provides students an in-depth study of writing in the academic disciplines. Students improve their writing through intense word study, critical reading, and analytical thinking. Students expand and refine their ability to write through analyzing and evaluating their writing and that of others. Students will develop work-based skills, including communication and collaboration, by serving as a peer tutor in the writing center.

History and Social Sciences Courses

The Standard Diploma requires three courses in history. Standard Diploma students must take either World History I or World History II, plus Virginia and United States History and Virginia and United States Government. The Advanced Studies Diploma requires that students complete four courses in history. Students may substitute Advanced Placement courses for selected courses. Weighted grades are designated by a # for AP, DE, and IB courses. All classes may not be offered at all schools due to enrollment and availability.

General Course Sequence

2215 WORLD HISTORY AND GEOGRAPHY I

2215C CENTER WORLD HISTORY AND GEOGRAPHY I

Grade 9

1 Credit

This beginning course explores the historical development of people, places, and patterns of life from ancient times to 1500 CE (AD). World History and Geography I or II is required for the Standard Diploma. Students will be administered a state assessment.

2215H HONORS WORLD HISTORY AND GEOGRAPHY I

2215HC CENTER HONORS WORLD HISTORY AND GEOGRAPHY I

Grade 9

1 Credit

This advanced course explores the historical development of people, places, and patterns of life from ancient times to 1500 CE (AD) in preparation for AP and/or IB courses. Students are expected to be independent learners with good written and oral communication skills. The instruction provides additional expectations requiring students to conduct independent research and write essays. Students will be administered a state assessment.

2216 WORLD HISTORY AND GEOGRAPHY II

2216C CENTER WORLD HISTORY AND GEOGRAPHY II

Grade 10

1 Credit

This in-depth course explores the historical development of people, places, and patterns of life from 1500 CE (AD) to the present. Students may take the SOL test if they have not already passed an earlier SOL test.

2216H HONORS WORLD HISTORY AND GEOGRAPHY II

2216HC CENTER HONORS WORLD HISTORY AND GEOGRAPHY II

Grade 10

1 Credit

This advanced course explores the historical development of people, places, and patterns of life from 1500 CE (AD) to the present in preparation for AP and/or IB courses. Students are expected to be independent learners with good written and oral communication skills. The instruction provides additional expectations requiring students to conduct independent research and write essays. Students may take the SOL test if they have not already passed an earlier SOL test.

2360 VIRGINIA AND UNITED STATES HISTORY

2360C CENTER VIRGINIA AND UNITED STATES HISTORY

Grade 11

1 Credit

This required course will explore the political, economic, and cultural growth of Virginia and the United States. Skills in historical analysis, perspective, interpretation, and historical writing will be emphasized. Students may take the SOL test if they have not already passed an earlier SOL test.

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2440 VIRGINIA AND UNITED STATES GOVERNMENT
2440C CENTER VIRGINIA AND UNITED STATES GOVERNMENT
Grade 12
1 Credit

This required course will explore the structure and function of the American Government at the national and state levels. Students will also study the government of Stafford County and the student's role as a citizen.

Advanced Placement Courses

Note: AP and DE social studies courses require students to use solid reading, writing, and time-management skills. Students enrolling in AP and DE social studies courses should have successfully completed prior English and social studies coursework. Students will be prepared and are encouraged to take the AP exam for possible college credit.

2380AP AP MODERN WORLD HISTORY
Grade 10
1 Credit#

This course may be substituted for World History II. Students will explore the historical development of people, places, and patterns of life from 1200 CE (AD) to the present. There will be a special emphasis on thinking historically, historical perspectives; and using primary source documents to analyze and write about significant events.

2319AP AP UNITED STATES HISTORY
Grades 11-12
1 Credit#

This course may be substituted for Virginia and U.S. History. It will provide the knowledge and analytical skills necessary to deal with the achievements, issues and problems of American history emphasizing in-depth analysis of major political, social, cultural, and economic developments.

2450AP AP COMPARATIVE GOVERNMENT AND POLITICS
Grade 12 (Grade 10 for IB Students)
1 Credit#

This course may be substituted for Virginia and U.S. Government. It will provide an intense study of the structures and functions of American government and an examination of other governmental forms in the world, including China, Great Britain, Iran, Mexico, Nigeria, and Russia.

2445AP AP UNITED STATES GOVERNMENT/POLITICS
Grade 12
1 Credit#

This course may be substituted for Virginia and U.S. Government. It will provide an intense study of the structures and functions of the U. S. government and political system.

2212AP AP HUMAN GEOGRAPHY
Grades 9-12
1 Credit#

This course provides students with the opportunity to identify and analyze contemporary concerns and problems from local, national, and global perspectives. Using geographical tools and skills, students consider issues pertaining to population distribution and composition, cultural patterns and processes, political organization, land use, industrialization and economic development, and urbanization.

2902AP AP PSYCHOLOGY
Grades 11-12
1 Credit#

AP Psychology provides an overview of current psychological theory and practice. Students will explore the

systematic and scientific study of the behavior and mental processes of humans and other animals. In accordance with the driving principals of current psychological practice, this course will emphasize scientific method and critical thinking skills.

2802AP AP MICROECONOMICS

Grades 11-12

1 Credit#

AP Microeconomics studies the behavior of individuals and businesses as they exchange goods and services in the marketplace. Microeconomics studies the economic way of thinking, understanding the nature and function of markets, the role of scarcity and competition, the influence of factors such as interest rates on business decisions, and the role of government in promoting a healthy economy. AP Microeconomics prepares students for the AP exam and for further study in business, history, and political science.

Note: BOTH AP Microeconomics and AP Macroeconomics must be successfully completed in order to satisfy the Economics and Personal Finance graduation requirement. This course must be completed prior to enrollment in AP Macroeconomics.

2803AP AP MACROECONOMICS

Grades 11-12

1 Credit#

Prerequisite: Successful completion of AP Microeconomics or Economics and Personal Finance

AP Macroeconomics is designed to give students a thorough understanding of the principles of economics that apply to an economic system as a whole. This course places particular emphasis on the study of national income and price level determination, and also familiarizes students with economic performance measures, the financial sector, stabilization policies, economic growth and international economics.

Note: BOTH AP Microeconomics and AP Macroeconomics must be successfully completed in order to satisfy the Economics and Personal Finance graduation requirement.

2399AP AP EUROPEAN HISTORY

Grades 10-12

1 Credit#

AP European History is a world history and geography survey course designed to emphasize higher cognitive and critical thinking skills. Students will study the cultural, economic, political, and social developments that have shaped Europe from 1450 to the present.

Dual Enrollment Courses

2360DE DE UNITED STATES HISTORY (GCC HIS 121 and 122)

Grade 11

1 Credit#

This rigorous course covers roughly 500 years of American history, from North America's pre-Columbian beginnings to the present, while providing students with the opportunity to acquire the knowledge and analytical skills necessary to understand the achievements, issues, and challenges of American history. Students who successfully complete this course will receive credit from Germanna Community College. This course can substitute for Virginia and United State History.

2440DE DUAL ENROLLMENT UNITED STATES GOVERNMENT (GCC PLS 135 and 136)

Grade 12

1 Credit#

This course examines the political structure, processes, institutions, and policy making at the federal, state, and local levels. It examines federalism and the relationship between the different levels of government. Topics include civil liberties and civil rights; political parties and elections; public opinion, the media, and interest groups; policy making; as well as state and local issues such as education, healthcare, criminal justice, and metropolitan issues. Students who complete the course will receive credit from Germanna Community College. This course is co-enrolled with Virginia and United States Government.

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Commonwealth Governor's School Courses

2399APG SOCIAL STUDIES 9: AP EUROPEAN HISTORY

Grade 9

1 Credit#

AP European History is a world history and geography survey course designed to emphasize higher cognitive and critical thinking skills. Problem-solving strategies are utilized to teach basic social science skills such as map reading, research, comparison-making, and assessing cause and effect. Students will be prepared for the Standards of Learning World History from 1500 CE (AD) to the Present and World Geography test. Students will have met the requirements for World History and will be eligible to take the AP European History exam.

2445APG SOCIAL STUDIES 10: AP U.S. GOVERNMENT

Grade 10

1 Credit#

This government course is designed to enable students to identify and analyze political theory while examining the institutions, political processes, and practices of local, state, and national governments. Students identify topics of community, national, and international concern, gather data and research possible solutions. Students will have met the requirements for U.S. Government and will be eligible to take the AP U.S. Government exam.

2319APG SOCIAL STUDIES 11: AP U.S. HISTORY

Grades 11-12

1 Credit#

This U.S. History course is designed to present U.S. History within a global perspective. Emphasis will be on critical reading and writing. Students will interpret and utilize factual data to construct historical arguments and develop a deeper understanding of contemporary American society. Students may take the U.S. History SOL test and will be eligible to take the AP U.S. History exam.

2212APG SOCIAL STUDIES 12: AP HUMAN GEOGRAPHY

Grade 12

1 Credit#

This course provides students with the opportunity to identify and analyze contemporary concerns and problems from local, national, and global perspectives. Using geographical tools and skills, students consider issues pertaining to population distribution and composition, cultural patterns and processes, political organization, land use, industrialization and economic development, and urbanization. Students may take the World Geography SOL test and will be eligible to take the AP Human Geography exam.

International Baccalaureate Courses

Students will be prepared and are encouraged to take the year-end IB examination for possible college credit.

Schools offering these courses: BPHS (through 2026-2027) and MVHS.

2806IB IB ECONOMICS (SL) with PERSONAL FINANCE

Grades 11 or 12

1 Credit#

This one year course covers microeconomics, macroeconomics, international economics, and development economics in addition to personal finance. The ethical dimensions involved in the application of economic theories and practices permeate the course, and economics are investigated with a global perspective. In addition to the IB Economics SL curriculum, students complete the Personal Finance curriculum through an online platform. This course fulfills the Economics and Personal Finance requirement for graduation.

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#-Weighted, ●-Application Required, ▲-Work-Based, *-Successful Completion

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IB THEORY OF KNOWLEDGE

1197IB Grade 11

1198IB Grade 12

1 Credit per Year#

Successful completion of IB year one to go on to IB year two

IB Theory of Knowledge (ToK) is a two-year course required for an IB Diploma. It includes embedded instruction and guided practice regarding the other two elements of the IB Core—the Extended Essay and Creativity, Action, and Service. The ToK course is designed to foster in students a habit of mind that reflects on human ways and limits of knowing as well as on the human ability to communicate these ways of knowing. Students will explore fundamental questions of epistemology by reflecting upon and questioning the basis of knowledge and experience, examining cultural and ideological bias, and by formulating rational arguments and value judgments of their own. Academic disciplines examined include language, history, logic, science, mathematics, ethics and aesthetics. The course includes an externally assessed paper and internally assessed oral presentation.

IB HISTORY (HL)

2360IB Grade 11

2361IB Grade 12

1 Credit per Year#

****Successful completion of World History or Honors World History and preferably AP US Government***

****Successful completion of IB year to go on to IB year two***

This is a two-year course of study. During the first year, students will study “History of the Americas,” a survey of U.S., Canadian, and Latin American history. The first year focuses on the American region's historical experience, as well as political, economic, and social systems. Students will demonstrate historical analysis by discussion, presentation, and written work including an internally assessed research paper. During the second year, students study “Twentieth Century Topics” of World History. The second year continues to stress political, economic, and social systems as well as requiring students to further develop their skills of interpretation and analysis through historiography. The course culminates in a series of external assessments that include document-based questions, short essay response and an internally assessed research paper which provide the possibility of college credit.

2847IB IB SOCIAL AND CULTURAL ANTHROPOLOGY (SL)

Grades 11 or 12

1 Credit#

****Successful completion of previous social studies courses***

IB Social and Cultural Anthropology is a one-year college level comparative study of human societies and culture. It explores both the universal principles of social and cultural life and characteristics of specific societies and cultures. The course examines society from the small scale to the complex industrial scale, as well as modern nation states.

Note: This course can be used to satisfy the Group 6 “art or elective” requirement for full IB Diploma Program students.

2903IB IB PSYCHOLOGY (SL)

Grades 11 or 12

1 Credit#

****Successful completion of previous social studies courses***

The IB Psychology is a one-year course most appropriately defined as the systematic study of human experience and behavior; physical, economic and social environments; and the history and development of social and cultural institutions. Students will collect, describe, and analyze data used in studies of society, to test hypotheses and interpret complex data and source material. At the standard level students are required to study the biological, cognitive, learning, and humanistic perspectives, to use qualitative and quantitative research methodology, and to complete an experimental study.

Note: This course can be used to satisfy the Group 6 “art or elective” requirement for full IB Diploma Program students.

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#-Weighted, ●-Application Required, ▲-Work-Based, *-Successful Completion

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6135IB IB BUSINESS MANAGEMENT (SL)

Grades 11 or 12

1 Credit#

****Successful completion in prior business math courses***

Business and Management is a one-year course designed to provide a broad introduction to the principles and practices of organizations, set in a scene of international markets, exchange, and production. A written assessment based on the application of tools, techniques, and theory to a real business situation or problem is internally assessed by the classroom teacher.

Note: This course can be used to satisfy the Group 6 “art or elective” requirement for full IB Diploma Program students.

History and Social Sciences Elective Courses

2372 AFRICAN AMERICAN HISTORY

Grades 10-12

1 Credit

This course provides students with a broad overview of the African American experience and explores ancient Africa, their role in building America, and moving through modern times. In addition, the course will highlight the social, cultural, and political contributions of African Americans to American society. This course will have a capstone project.

2998 EXPLORING LOCAL HISTORY

Grades 11-12

1 Credit

This year-long elective course will furnish students with an opportunity for an in-depth, multi-perspective examination of the people and places of Stafford and the greater Fredericksburg region. The course will emphasize 21st Century learning skills of information literacy, communication, critical thinking, citizenship, and independent and collaborative learning. Key to successful completion of this course will be ability to conduct research and complete projects. Students enrolling in the course should have an interest in United States history and have taken or are currently taking US/VA History.

2996 GLOBAL ISSUES

Grades 11-12

1 Credit

This course will provide an opportunity for in-depth study of current world events. In addition, students will investigate the geographic, economic, social, and cultural background of current world events. Students should have a strong intellectual curiosity concerning world affairs and successfully completed prior social studies coursework.

2500 SOCIOLOGY

Grades 10-12

1 Credit

This introductory Social Science course will include studies in social change, social status, group behavior, and adjustment to personal problems and situations throughout life and society. Students should have successfully completed prior coursework in English and social studies.

2900 PSYCHOLOGY

Grades 10-12

1 Credit

This course is designed to introduce students to the systemic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields. They also learn about the ethics and methods psychologists use in their science and practice.

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6120 ECONOMICS AND PERSONAL FINANCE (also listed under Career and Technical Education)
Grades 10-12
1 Credit

This course presents economic concepts, the interdependence of the world's economies, and skills necessary to navigate the financial decisions faced to make informed decisions related to career exploration, budgeting, banking, credit, insurance, spending, taxes, saving, investing, buying/leasing a vehicle, living independently, and inheritance. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success. The course will assist in the development of thinking skills that include analyzing real-world situations, economic reasoning, decision-making, and problem-solving. In order to assist in meeting diploma requirements for graduation, all students will take the W!SE Financial Literacy test (state-approved industry credential) and complete an online learning experience through completion of the Ever-Fi Financial Literacy module.

Mathematics Courses

Sample High School Mathematics Course Sequences

	9th Grade	10th Grade	11th Grade	12th Grade
Sample #1	Algebra I	Geometry	Algebra, Functions, and Data Analysis	Algebra II
Sample #2	Algebra I	Geometry	Algebra II	Algebra III OR Probability and Statistics OR Data Science
Sample #3	Geometry	Algebra II	Probability and Statistics or Pre-calculus	Higher-Level Mathematics Courses*
Sample #4	Algebra II	Pre-calculus or DE Quantitative and Statistical Reasoning	Higher-Level Mathematics Courses*	Higher-Level Mathematics Courses*

***Higher-Level Mathematics Courses**

- AP Statistics
- DE Quantitative and Statistical Reasoning
- AP Computer Science A
- IB Computer Science (SL)
- DE Pre-calculus
- AP Pre-calculus
- Calculus
- DE Calculus
- DE Linear Algebra
- DE Differential Equations
- AP Calculus AB
- AP Calculus BC
- Data Science
- IB Mathematics: Applications and Interpretation SL
- IB Mathematics: Applications and Interpretation HL
- IB Mathematics: Analysis and Approaches SL
- IB Mathematics: Analysis and Approaches HL

Preparing students to pursue higher education, to compete in a global workforce, and to be informed citizens requires rigorous mathematical knowledge and skills. Students must gain an understanding of fundamental ideas in number sense, computation, measurement, geometry, probability, data analysis and statistics, algebra and functions, and they must develop proficiency in mathematical skills. The content of the mathematics standards is intended to support the following five process goals for students: becoming mathematical problem solvers, communicating mathematically, reasoning mathematically, making mathematical connections, and using mathematical representations to model and interpret practical situations. Weighted grades are designated by a # for Advanced Placement (AP), Dual Enrollment (DE) and International Baccalaureate (IB) courses. All classes may not be offered at all schools due to enrollment and availability.

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General Course Sequence

3130 ALGEBRA I

Grades 9-10

1 Credit

Algebra I requires students to use algebra as a tool for representing and solving a variety of contextual problems. Students use tables and graphs to interpret algebraic expressions, equations, and inequalities and to analyze behaviors of functions. Additionally, students use a transformational approach to graphing functions and writing equations when given the graph of the equation in order to build a strong connection between algebraic and graphic representations of functions. Mathematical communication and reasoning are emphasized throughout the course. Students will take the SOL Algebra I test at the end of the course.

3130H HONORS ALGEBRA I

Grade 9

1 Credit

This advanced course, a part of the STAT program, is designed to prepare students for both AP and IB courses, allowing students to make connections between algebraic and graphic representations of linear, quadratic, exponential, and absolute value functions. Students use a transformational approach to graphing functions and writing equations when given the graph of the equation in order to build a strong connection between algebraic and graphic representations of functions. Mathematical communication and reasoning are emphasized throughout the course. This course is taught at an accelerated pace. Students will take the SOL Algebra I test at the end of the course.

3143 GEOMETRY

3143C CENTER GEOMETRY

Grades 9-12

1 Credit

**Successful completion of Algebra I*

Geometry is a course with an emphasis on developing reasoning skills through the explorations of geometric relationships including properties of geometric figures, trigonometric relationships, and mathematical proofs. There is an emphasis on two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. The course is designed to develop effective methods of thinking through deductive reasoning. Mathematical communication and reasoning are emphasized throughout the course. Students may take the SOL Geometry test at the end of the course.

3143H HONORS GEOMETRY

3143HC CENTER HONORS GEOMETRY

3143HE ENGINEERING HONORS GEOMETRY

Grades 9-10

1 Credit

**Successful completion of Algebra I*

This advanced course, designed to prepare students for both AP and IB courses, is an enriched Geometry curriculum with greater emphasis on proofs, logical reasoning and the application of theorems. Students study two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. Area and volume of regular polygons as well as special right triangles are some of the additional topics that students will learn. Mathematical communication and reasoning are emphasized throughout the course. This course is taught at an accelerated pace. Students may take the SOL Geometry test at the end of the course.

3134 ALGEBRA, FUNCTIONS, AND DATA ANALYSIS

Grades 10-12

1 Credit

**Successful completion of Algebra I*

This course is designed for students who have successfully completed the standards for Algebra I and may benefit from additional support in their transition to Algebra II. Through the investigation of mathematical models and

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interpretation/analysis of data from relevant, applied contexts and situations, students will strengthen conceptual understandings in mathematics and further develop connections between algebra and statistics. Students will solve problems that require the formulation of linear, quadratic, exponential, or piecewise-defined equations or a system of equations. Mathematical communication and reasoning are emphasized throughout the course. Graphing utilities (calculators, computer, and other technology tools) will be used to assist in teaching and learning.

3135 ALGEBRA II

Grades 9-12

1 Credit

****Successful completion of Geometry or Algebra Functions, and Data Analysis***

Algebra II expands and clarifies the concepts introduced in Algebra I. A thorough treatment of advanced algebraic concepts will be provided through the study of functions, equations, inequalities, systems of equations, polynomials, rational and radical equations, complex numbers, and curves of best fit. Emphasis will be placed on contextual applications and modeling throughout the course of study. These standards include a transformational approach to graphing functions. Transformational graphing uses translation, reflection, dilation, and rotation to generate a “family of functions” from a given “parent” function and builds a strong connection between algebraic and graphic representations of functions. Students will vary the coefficients and constants of an equation, observe the changes in the graph of the equation, and make generalizations that can be applied to many graphs. Mathematical communication and reasoning are emphasized throughout the course. Students may take the SOL Algebra II test at the end of the course.

3135H HONORS ALGEBRA II

3135HE ENGINEERING HONORS ALGEBRA II

Grades 9-12

1 Credit

****Successful completion of Geometry***

This advanced course, designed to prepare students for both AP and IB courses, is an enriched Algebra II curriculum with an in-depth study of equations and functions. A thorough treatment of advanced algebraic concepts will be provided through the study of functions, equations, inequalities, systems of equations, polynomials, rational and radical equations, complex numbers, and curves of best fit. Emphasis will be placed on contextual applications and modeling throughout the course of study. Students will vary the coefficients and constants of an equation, observe the changes in the graph of the equation, and make generalizations that can be applied to many graphs. Graphing rational and polynomial graphs with multiple transformations are just some of the additional topics students will learn. Mathematical communication and reasoning are emphasized throughout the course. This course is taught at an accelerated pace. Students may take the SOL Algebra II test at the end of the course.

3160 ALGEBRA III WITH TRIGONOMETRY

Grades 11-12

1 Credit

****Successful completion of Algebra II***

This course is designed for students who have successfully completed the standards for Algebra II and may benefit from additional support in their transition to Pre-calculus: Math Analysis with Trigonometry. Algebra III with Trigonometry reviews and extends the concepts taught in Algebra II and Geometry in preparation for the SAT and other Math Achievement tests. It includes topics on triangular and circular trigonometric functions, study of polynomials, quadratics, and exponential and logarithmic functions.

3138 DATA SCIENCE

Grades 10-12

1 Credit

****Successful completion of Algebra II***

This course provides an introduction to the learning principles associated with analyzing big data. Through the use of open-source technology tools, students will identify and explore problems that involve the use of relational database concepts and data-intensive computing to find solutions and make generalizations. Students will engage in a data science problem-solving structure to interact with large data sets as a means to formulate problems, collect and clean data, visualize data, model using data, and communicate effectively about data formulated solutions.

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3162 PRE-CALCULUS: MATH ANALYSIS WITH TRIGONOMETRY

Grades 10-12

1 Credit

**Successful completion of Algebra II*

Pre-calculus, designed to prepare students for both AP and IB mathematics courses, serves as appropriate preparations for a calculus course. This course covers the application of trigonometric functions and their relationships by the circular approach and by the triangular approach. Students will also work with exponential and logarithmic functions, sequences and series, vectors, parametric and polar coordinates, and limits.

3190 STATISTICS/PROBABILITY WITH DISCRETE TOPICS

Grades 11-12

1 Credit

**Successful completion of Algebra II*

This course is designed for students who plan to enter such fields as business, education, economics, computers, psychology, sociology, medicine, etc., which require the organization and the interpretation of data to be successful in their jobs. This course will also provide a fundamental background for those students who plan careers in engineering, mathematics, or the sciences.

3199 CALCULUS

Grades 11-12

1 Credit

**Successful completion of Algebra III with Trigonometry or Pre-calculus: Math Analysis with Trigonometry*

This course introduces students to the fundamental basics of Calculus. Topics include functions, limits, derivatives, integrals, and the Fundamental Theorem of Calculus.

Advanced Placement Courses

3192AP AP STATISTICS

Grades 11-12

1 Credit#

**Successful completion of Algebra II*

The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to exploring data, sampling and experimentation of data, anticipating patterns, and statistical inference. Students will be prepared to take the year-end AP Statistics exam for possible college credit. For further information, please see your math department chairperson. Summer assignments may be provided.

Note: It is recommended that students have taken Honors Algebra II, Pre-calculus: Math Analysis with Trigonometry or any AP or IB Mathematics course.

3162AP AP PRE-CALCULUS

Grades 10-12

1 Credit#

**Successful completion of Algebra II*

The purpose of this course is to prepare students for the skills and level of rigor needed for successful study in calculus courses. This course presents topics in polynomial, rational, exponential, and logarithmic functions and systems of equations and inequalities. Students will also work on the topics of functions involving parameters, vectors, and matrices. The mathematical practices of procedural and symbolic fluency, multiple representations, as well as communication and reasoning are emphasized in this course.

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3177AP AP CALCULUS AB**Grades 11-12****1 Credit#******Successful completion of Pre-calculus: Math Analysis with Trigonometry***

AP Calculus AB addresses the theory and practice of differential and integral calculus of a function of one variable. Topics include functional analysis, limits, integration, continuity, the derivative and applications, and solving problems which deal with the rate of change. The content of this course is equivalent to one semester of college calculus. Students will be prepared to take the year-end AP Calculus AB exam for possible college credit.

3178AP AP CALCULUS BC**Grades 11-12****1 Credit#******Successful completion of Pre-calculus: Math Analysis with Trigonometry***

AP Calculus BC covers the same topics as that covered in AB Calculus. In addition, students in Calculus BC will apply calculus techniques to polar curves, parametric equations, vector function sequences and series, and slope fields. The content of this course is equivalent to two semesters of college calculus. Students will be prepared to take the year-end AP Calculus BC exam for possible college credit.

3185AP AP COMPUTER SCIENCE A**Grades 10-12****1 Credit#******Successful completion of Algebra II***

The focus of this course is to provide students with a conceptual background in computer science. The major emphasis is on programming methodology, algorithms, and non-dynamic data structure in the JAVA language. Students will be prepared to take the year-end AP Computer Science A exam for possible college credit. Summer assignments may be provided.

Dual Enrollment Courses**3196DE DE QUANTITATIVE AND STATISTICAL REASONING (GCC MTH 154 and MTH 155)****Grades 11-12****1 Credit#******Successful completion of Algebra II***

The year-long course will provide students with an opportunity to complete six hours of college coursework. The first semester presents topics in proportional reasoning, modeling, financial literacy and validity studies (logic and set theory). Major emphasis is on the process of taking a real-world situation, identifying the mathematical foundation needed to address the problem, solving the problem and applying what is learned to the original situation. The second semester presents elementary statistical methods and concepts including visual data presentation, descriptive statistics, probability, estimation, hypothesis testing, correlation, and linear regression. Emphasis is placed on the development of statistical thinking, simulation, and the use of statistical software. Students who successfully complete this course will receive credit from Germanna Community College.

3162DE DE PRE-CALCULUS (GCC MTH 161 and MTH 162)**Grades 10-12****1 Credit#******Successful completion of Algebra II***

The purpose of this year-long course is to prepare students for the skills and level of rigor needed for successful study in calculus courses. This course presents topics in power, polynomial, rational, exponential, and logarithmic functions and systems of equations and inequalities. Students will also work on the topics of trigonometry, trigonometric applications including Law of Sines and Cosines, and an introduction to conics.

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3178DE DE CALCULUS I and II (GCC MTH 263 and MTH 264)**Grades 11-12****1 Credit#**

**Successful completion of Pre-calculus: Math Analysis with Trigonometry (GCC requires a final course grade of "B" or better in combination with a current cumulative high school GPA of 3.0 or better.)*

The general purpose of this year-long course is to prepare students for further study in calculus with analytic geometry. The first semester of this course presents the concepts of limits, derivatives, differentiation of various types of functions and use of differentiation rules, application of differentiation, antiderivatives, integrals and applications of integration. The second semester continues the study of algebraic and transcendental functions including rectangular, polar, and parametric graphing, indefinite and definite integrals, methods of integration and power series along with applications. Students who successfully complete this course will receive credit from Germanna Community College.

3250DE DE LINEAR ALGEBRA (GCC MTH 266)**Grades 11-12****1 Credit#**

**Successful completion of DE Calculus II (GCC requires a final course grade of "C" or better.)*

This course includes the study of matrices, vector spaces, determinants, solutions of systems of linear equations, basis and dimension, eigenvalues, and eigenvectors. Students who successfully complete this course will receive credit from Germanna Community College. This is a first semester course that is to be taken with DE Differential Equations as a second semester course.

3252DE DE DIFFERENTIAL EQUATIONS (GCC MTH 267)**Grades 11-12****1 Credit#**

**Successful completion of DE Calculus II (GCC requires a final course grade of "C" or better.)*

This course introduces ordinary differential equations and includes the study of differential equations, second and higher order ordinary differential equations with applications and numerical methods. Students who successfully complete this course will receive credit from Germanna Community College. This is a second semester course that is to be taken with DE Linear Algebra as a first semester course.

Commonwealth Governor's School Courses

3135G MATHEMATICS 9: HONORS ALGEBRA II**Grade 9****1 Credit**

This course presents an in-depth study of algebra topics, including the study of linear and quadratic equations, functions and systems; irrational and complex numbers, matrix theory, conic sections, and polynomials; sequences and series; and probability. Students may take the SOL Algebra II test.

3143G MATHEMATICS 10: HONORS GEOMETRY WITH TRIGONOMETRY**Grade 10****1 Credit**

This course will consist of a range of geometry and trigonometry topics, including logic and deductive reasoning, angles, parallel lines, congruence and similarity, triangles, quadrilaterals, polygons, circles, trigonometric functions (triangular and circular), trigonometric identities, and applications of trigonometry. Students may take the Geometry SOL.

3162G HONORS PRE-CALCULUS WITH DISCRETE TOPICS**Grades 10-11****1 Credit**

This course will study functions and their properties, including exponential and logarithmic, rational, and trigonometric functions (triangular and circular). Trigonometric identities, applications of trigonometry, parametric equations, vectors, sequences, and series will also be explored. Discrete topics will include the mathematics of choice, management science, and growth and symmetry.

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3162APG AP PRE-CALCULUS**Grades 10-12****1 Credit#******Successful completion of Honors Algebra II***

The purpose of this course is to prepare students for the skills and level of rigor needed for successful study in calculus courses. This course presents topics in polynomial, rational, exponential, and logarithmic functions and systems of equations and inequalities. Students will also work on the topics of functions involving parameters, vectors, and matrices. The mathematical practices of procedural and symbolic fluency, multiple representations, as well as communication and reasoning are emphasized in this course.

3177APG AP CALCULUS AB WITH SPECIAL TOPICS**Grade 11****1 Credit**

This is a college-level calculus course. Students cultivate their understanding of differential and integral calculus through engagement with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions. Using traditional CGS methods, students will explore practical applications of content through problem-solving and project-based learning. Students will be highly prepared to take the AP Calculus AB exam at the end of the course.

3178APG AP CALCULUS BC AND MULTIVARIABLE CALCULUS**Grade 12****1 Credit#**

This course includes concepts and applications of differential and integral calculus, sequences and series, elementary differential equations, and using all of these skills with functions of more than one variable. Experiences with appropriate microcomputer software and graphing calculators are included. Students will be eligible to take the Advanced Placement Calculus BC exam. Summer assignments may be required.

3192APG AP STATISTICS**Grade 12****1 Credit#**

This course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data: observing patterns and departures from patterns; Planning a Study: deciding what and how to measure; Anticipating Patterns: producing models using probability theory and simulation; Statistical Inference: confirming models. The course will follow the curriculum for the Advanced Placement Examination in Statistics. Summer assignments may be required.

International Baccalaureate Courses

Students will be prepared and are encouraged to take the year-end IB examination for possible college credit. Schools offering these courses: BPHS (through 2026-2027) and MVHS.

3185IB IB COMPUTER SCIENCE (SL)**Grades 11 -12****1 Credit#******Successful completion of AP Computer Science A***

The content of this 1-year course includes software development, computer systems, system design, social significance, number systems and Boolean Logic, advanced data structures and algorithms, objects and their use in problem solutions, the system life cycle, and file organization. The understanding of a case study will be included. Students will complete an in-depth project that demonstrates mastery of all required Standard Level aspects.

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IB MATHEMATICS: APPLICATIONS AND INTERPRETATION (SL)**3164IB Grade 11****3196IB Grade 12****1 Credit per course#******Successful completion of Algebra II for IB year one*******Successful completion of IB year one to go on to IB year two***

This is a two-year IB math course for students with varied backgrounds and abilities. Skills needed for the demands of a technological society are developed, but specific technical expertise is not required. The course enables students to appreciate varied cultural and historical perspectives of mathematics. Topics: Numbers and Algebra, Functions, 3-dimensional Geometry and Trigonometry, Statistics and Probability, Introductory Differential and Integral Calculus with applications in optimizations.

Note: Students who are likely to need mathematics in pursuit of a science or mathematics career are advised to consider IB Mathematics Analysis or Application and Interpretation HL. Schools offering course: BPHS, MVHS

IB MATHEMATICS: ANALYSIS AND APPROACHES (SL)**3167IB Grade 11****3198IB Grade 12****1 Credit per course#******Successful completion of Pre-calculus: Math Analysis with Trigonometry for IB year one*******Successful completion of IB year one to go on to IB year two***

This 2-year IB math course sequence is designed for strong math students who are preparing for studies in subjects such as science, engineering, economics, technology, and architecture. The course enables students to appreciate varied cultural and historical perspectives of mathematics. The goal of this course is to provide students with a solid foundation of Algebra, Functions, 3-dimensional Geometry and Trigonometry, Statistics and Probability, and Differential and Integral Calculus to include optimization and kinematics.

IB MATHEMATICS: APPLICATIONS AND INTERPRETATION (HL)**3165IB Grade 11****3195IB Grade 12****1 Credit per course#******Successful completion of Pre-calculus: Math Analysis with Trigonometry*******Successful completion of IB year one to go on to IB year two***

This 2-year IB math course is designed for studies in subjects such as science, medicine, psychology and technology. Skills needed for the demands of a data-driven society are developed. The course enables students to appreciate varied cultural and historical perspectives of mathematics. Topics: Number and Algebra (to include complex numbers, matrices, and systems), Functions (to include fitting models to data), 3-dimensional Geometry and Trigonometry with vectors, Statistics and Probability (to include hypothesis testing and confidence intervals), Differential and Integral Calculus with applications in optimizations, kinematics, and differential equations.

IB MATHEMATICS: ANALYSIS AND APPROACHES (HL)**3168IB Grade 11****3197IB Grade 12****1 Credit per course#******Successful completion of Pre-calculus: Math Analysis with Trigonometry.*******Successful completion of IB year one to go on to IB year two***

This 2-year IB math course is designed for strong math students who are preparing for studies in subjects such as science, engineering, economics, technology, and architecture. The course enables students to appreciate varied cultural and historical perspectives of mathematics. The goal of this course is to provide students with a solid foundation of Algebra (to include complex numbers and systems) Functions (to include solving both graphically and analytically), 3-dimensional Geometry and Trigonometry (to include inverse and reciprocal trig functions, and vector applications of lines and planes), Statistics and Probability (to include Bayes' Theorem and probability distributions), and Differential and Integral Calculus (to include optimization, kinematics, differential equations and Maclaurin series).

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Science Courses

High school science courses play an important, unique and essential role in today's ever-changing world. Students' knowledge of earth, space, life and physical sciences is critical to becoming scientifically literate citizens. All science courses are laboratory and activity- oriented to develop these important skills. Course sequencing may begin with any level one laboratory science listed below.

General Courses

4210 EARTH SCIENCE

Grades 9-10

1 Credit

This in-depth course explores physical and historical geology, meteorology, astronomy, and oceanography. There is strong emphasis on lab work. Students will be administered a state assessment. This course may be taken concurrently with Biology.

4210H HONORS EARTH SCIENCE

Grades 9-10

1 Credit

This advanced course, designed as a pre-AP and pre-IB course, explores physical and historical geology, meteorology, astronomy, and oceanography in preparation for entrance into college, AP, and/or IB courses. There is strong emphasis on lab work and independent research. The instruction will provide more detailed labs and projects. Information from scientific journals and current events will also be explored. Students will be administered a state assessment. This course may be taken concurrently with Biology.

4265 ENVIRONMENTAL SCIENCE

Grades 9-12

1 Credit

This course is designed to integrate the study of many components of our environment, including the human impact on our planet. These outcomes focus on scientific inquiry, the physical world, the living environment, resource conservation, humans' impact on the environment, and legal and civic responsibility. Instruction will build science literacy through inquiry, student data collection and analysis using appropriate tools, laboratory experiences, and field work including a meaningful watershed experience. This course can serve as a level one course for both Earth and Biology related level two elective courses.

4310 BIOLOGY

Grades 9-10

1 Credit

This in-depth course explores cell structure and function, genetics, and the diversity of life. There is strong emphasis on lab work. Students will be administered a state assessment. This course may be taken concurrently with Earth Science.

4310H HONORS BIOLOGY

Grades 9-10

1 Credit

This advanced course, designed as a pre-AP and IB course, explores cell structure and function, genetics, and the diversity of life in preparation for entrance into college, AP, and/or IB courses. There is strong emphasis on lab work and independent research. The instruction will provide more detailed labs and projects. Students will be administered a state assessment. This course may be taken concurrently with Earth Science.

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4410 CHEMISTRY**Grades 10-12****1 Credit**

This course is designed to introduce the student to the basic theories of chemistry. Algebra II must either be completed or taken concurrently for enrollment in this course. Topics include formula writing, balancing equations, solutions, acids and bases, dimensional analysis, reactions, electron configuration, atomic theory, molar concept, gas laws, and basic organic chemistry. Lab work is an integral part of this course. Students may take the SOL test during this course.

4410H HONORS CHEMISTRY**Grades 10-12****1 Credit**

The advanced chemistry course, designed as a pre- AP and IB course, is a fast-paced course that explores, in depth, chemistry concepts and the scientific process in preparation for entrance into college, AP, and/or IB courses.. Algebra II must either be completed or taken concurrently for enrollment in this course. There is strong emphasis on lab work and independent research. The instruction will provide more detailed labs and projects. Students might be required to design and conduct an independent research project. The major skills used by practicing chemists are emphasized. Students may take the SOL test during this course.

4510 PHYSICS**Grades 10-12****1 Credit**

This course covers the laws of mechanics, electricity and magnetism, electro-magnetic wave theory, elementary nuclear physics and relativity. Algebra II must either be completed or taken concurrently for enrollment in this course. It requires competence in the metric system and conversions, scientific notation, and manipulation of algebraic equations.

4510H HONORS PHYSICS**Grades 10-12****1 Credit**

This advanced physics class is a fast-paced course, designed as a pre-AP and IB course that explores the following topics in depth: mechanics, waves, thermal, electricity and magnetism. Algebra II must either be completed or taken concurrently for enrollment in this course. Students are expected to use the scientific method to design labs. There is strong emphasis on lab work and independent research. Students must be able to solve an equation for an unknown, perform metric conversions, comfortable with use of a graphing calculator, analyze data and synthesize outcomes. This course is strongly recommended for those who wish to pursue a degree in engineering or science.

Advanced Placement Courses

Note: AP courses require that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices. Students will be prepared and encouraged to take the AP exam for possible college credit.

4370AP AP BIOLOGY**Grades 10-12****1 Credit#******Successful completion of Biology and Chemistry***

This course is the equivalent of a two-semester college introductory biology course. The course follows the AP College Board criteria addressing three general areas of study: molecules and cells, heredity and evolution, and organism and populations. The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and to help students gain an appreciation of science as a process.

Note: This course may not be audited.

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#-Weighted, ●-Application Required, ▲-Work-Based, *-Successful Completion

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4370APL AP BIOLOGY LAB**Grades 10-12****1 Lab Credit**

This AP Science course may be offered with a separate lab period. Students will not receive a weighted grade for the lab and will count as an elective credit.

4470AP AP CHEMISTRY**Grades 11-12****1 Credit#******Successful completion of Algebra II and Chemistry***

This course is the equivalent of a college introductory chemistry course. Emphasis will be placed on chemical calculations, the mathematical formulations of principles, and laboratory work. **Note: This course may not be audited.**

4470APL AP CHEMISTRY LAB**Grades 11-12****1 Lab Credit**

This AP Science course may be offered with a separate lab period. Students will not receive a weighted grade for the lab and will count as an elective credit.

4573AP AP PHYSICS 1**Grades 11-12****1 Credit#******Successful completion of Geometry***

This course is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. **Note: This course may not be audited.**

4574AP AP PHYSICS 2**Grade 12****1 Credit#*****Concurrent enrollment in Pre-calculus***

This course is an algebra-based, introductory college-level physics course that explores topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields, electromagnetism; physical and geometric optics; and quantum atomic, and nuclear physics. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. **Note: This course may not be audited.**

4270AP AP ENVIRONMENTAL SCIENCE**Grades 10-12****1 Credit#******Successful completion of Algebra I***

This course is designed to provide students with the methodologies required to understand the interrelationships of the natural world, identify and analyze both natural and human-made environmental problems, evaluate relative risks and examine alternative solutions for resolving these problems.

Note: This course may not be audited.

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Dual Enrollment Courses

4320DE DE BIOLOGY

Grades 11-12

1 Credit#

Dual Enrollment Biology is an accelerated course that explores fundamental characteristics of living matter from the molecular level to the ecological community with emphasis on biological principles. The course provides lab experiences in handling, constructing, and manipulating materials in a safe manner and develops abilities to measure, organize, and communicate scientific information.. Students who successfully complete the course will receive four college credits through Germanna Community College as well as one year of high school credit.

Note: This course may not be audited.

4420DE DE CHEMISTRY

Grades 11-12

1 Credit#

Dual Enrollment Chemistry is a college level course that explores the fundamental laws, theories, and mathematical concepts of chemistry. It is designed primarily for science and engineering majors. Students who successfully complete the course will receive four college credits through Germanna Community College as well as one year of high school credit. Students who have received a high school Chemistry credit may also receive credit for successful completion of Dual Enrollment Chemistry.

Note: This course may not be audited.

4220DE DE ENVIRONMENTAL SCIENCE

GRADES 11-12

1 Credit#

Dual Enrollment Environmental Science is a college level course that explores the fundamental components and interactions that make up the natural systems of the earth. It is designed for both science and non-science majors and Introduces the basic science concepts in the disciplines of biological, chemical, and earth sciences that are necessary to understand and address environmental issues. Students who successfully complete the course will receive four college credits through Germanna Community College as well as one year of high school credit.

Note: This course may not be audited

Commonwealth Governor's School Courses

4270APG SCIENCE 9: AP ENVIRONMENTAL SCIENCE

Grade 9

1 Credit#

This course is designed to provide students with the methodologies required to understand the interrelationships of the natural world, identify and analyze both natural and human-made environmental problems, evaluate relative risks and examine alternative solutions for resolving these problems. Geometry must either be completed or taken concurrently for enrollment in this course. This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices. Students will be prepared to take the year-end AP Environmental Science exam for possible college credit.

4370APG SCIENCE 10: AP BIOLOGY

Grade 10

1 Credit#

This course is the equivalent of a college introductory biology course. The course follows the AP College Board criteria addressing three general areas of study: molecules and cells, heredity and evolution, and organism and populations. The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and to help students gain an appreciation of science as a process. This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices. Students will be prepared to take the year-end AP

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Biology exam for possible college credit. Students must take the Biology SOL exam.

4420GDE SCIENCE 11: DE CHEMISTRY

Grade 11

1 Credit#

Dual Enrollment Chemistry is a college level course that explores the fundamental laws, theories, and mathematical concepts of chemistry. It is designed primarily for science and engineering majors. Students who successfully complete the course will receive four credit hours of college credit through Richard Bland College as well as one year of high school credit. Students who have received a high school Chemistry credit may also receive credit for successful completion of Dual Enrollment Chemistry.

4573APG SCIENCE 12: AP PHYSICS 1

Grade 12

1 Credit#

This course is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices. Students will be prepared to take the year-end AP Physics exam for possible college credit.

International Baccalaureate Courses

Students will be prepared and are encouraged to take the year-end IB examination for possible college credit. Schools offering these courses: BPHS (through 2026-2027) and MVHS.

IB BIOLOGY (HL)

4390IB Grade 11

4391IB Grade 12

1 Credit per Course#

**Successful Completion of Biology, Chemistry, Algebra I and II or Honors Biology, Chemistry, Algebra I and II courses for IB year one*

**Successful completion of IB year one to go on to IB year two*

IB Biology is a two-year course that provides an overview of the major principles and processes in the areas of molecular and cellular biology, genetics, ecology, and organisms. Laboratory work is an integral part of this course and students are required to submit written laboratory reports. Key points of the first year are structure and function, universality versus diversity, and equilibrium within systems. The second year provides an introduction to advanced anatomy and physiology and plant biology.

4380IB IB BIOLOGY 11 (SL)

Grade 11

1 Credit#

**Successful Completion of Biology, Chemistry, Algebra I and II or Honors Biology, Chemistry (may be taken concurrently), Algebra I and II courses for IB year one*

This is the first year in a two-year course that provides an overview of the major principles and processes in the areas of molecular and cellular biology, genetics, ecology, and organisms. Key points of the first year are structure and function, universality versus diversity, and equilibrium within systems.

4381IB IB BIOLOGY 12 (SL)

Grade 12

1 Credit#

**Successful completion of IB Biology 11 (SL)*

This is the second year in a two-year course that continues from the overview of major principles and processes in the areas of molecular and cellular biology, genetics, ecology, and organisms. Students will design and implement their own laboratory investigations and participate in the interdisciplinary Group 4 science research project. The

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second year provides a focus on ecology, neurobiology, biotechnology, and physiology.

Schools offering course: BPHS

IB CHEMISTRY (HL)

4490IB Grade 11

4491IB Grade 12

1 Credit per Course#

****Successful completion of Chemistry, Biology, Algebra I and II or Honors Chemistry, Biology, Algebra I and II courses for IB year one***

****Successful completion of IB year one to go on to IB year two***

IB Chemistry is a two-year course that provides an overview of the major principles and processes in the areas of stoichiometric relationships, atomic structure, periodicity, chemical bonding and structure, energetics/thermochemistry, chemical kinetics, equilibrium, acids and bases, redox processes, organic chemistry, measurement, and data processing. The second year provides atomic structure, the periodic table—the transition metals, chemical bonding and structure, energetics/thermochemistry, chemical kinetics, equilibrium, acids and bases, redox processes, organic chemistry, measurement, and analysis.

4480IB IB CHEMISTRY 11 (SL)

Grade 11

1 Credit#

****Successful completion of Chemistry, Biology, Algebra I and Algebra II or Honors Chemistry, Biology, Algebra I and Algebra II***

This is the first year in a two-year course that provides a survey of the major principles of chemistry, including the structure of matter, kinetic theory of gases, chemical equilibrium, chemical kinetics, thermodynamics, acid-base theory, and organic chemistry. This course emphasizes problem-solving, proficiency in mathematical usage, and improvement and expansion of laboratory techniques as related to contemporary chemistry, to include experiment design. Students in this course continue to the second year of IB Chemistry (SL) or IB Chemistry (HL), based on grade achieved and teacher recommendation.

4481IB IB CHEMISTRY 12 (SL)

Grade 12

1 Credit#

****Successful completion of IB Chemistry 11 (SL)***

This is the second year in a two-year course that provides a survey of the major principles of chemistry, including the structure of matter, kinetic theory of gases, chemical equilibrium, chemical kinetics, thermodynamics, acid-base theory, and organic chemistry. This course emphasizes problem-solving, proficiency in mathematical usage, and improvement and expansion of laboratory techniques as related to contemporary chemistry, to include experiment design.

IB PHYSICS (HL)

4590IB Grade 11

4591IB Grade 12

1 Credit per Course#

****Successful completion of Honors Physics, Algebra I and Algebra II***

****Successful completion of IB year one to go on to IB year two***

This two-year course includes the study of mechanics, heat, electromagnetism, light, sound, and modern physics. Emphasis is on problem solving, proficiency in mathematical usage, and improvement and expansion of laboratory techniques as related to contemporary physics to include experimental design.

4580IB IB PHYSICS 1 (SL)

Grade 11

1 Credit#

****Successful completion of Algebra I and Algebra II***

This is the first year in a two-year course sequence that covers a core of physics topics, such as measurements and uncertainties, mechanics, circular motion and gravitation, electromagnetism, and waves. Emphasis is on

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problem-solving, proficiency in mathematical usage, and improvement and expansion of laboratory techniques as related to contemporary physics, including experimental design. Students in this course continue to the second year of IB Physics either SL or HL, based on student choice, grade achieved, and teacher recommendation.

4581IB IB PHYSICS 2 (SL)

Grade 12

1 Credit#

****Successful completion of IB Physics 1 (SL)***

This second year of the two-year course includes review of first- year topics and continuation to further physics topics such as thermal physics, energy production, atomic, nuclear, and particle physics, and at least one of the following optional topics: relativity, engineering physics, imaging, or astrophysics. Emphasis is on problem-solving, proficiency in mathematical usage, and improvement and expansion of laboratory techniques as related to contemporary physics, including experimental design.

4281IB IB ENVIRONMENTAL SYSTEMS AND SOCIETIES (SL)

Grades 11-12

1 Credit#

****Successful completion of Biology or Chemistry or Honors Biology or Honors Chemistry***

This one-year course enables students to develop a coherent perspective on the environment. This course uses the concepts and terminology associated with a system approach to study. These principles are subsequently applied to the study of natural ecosystems, their component parts, along with functional relationships that maintain their dynamic integrity. Topics include global cycles and physical systems, human population, freshwater ecosystems, conservation and biodiversity, and pollution.

Science Elective Courses

Students must complete an Earth Science, Biology, and/or Chemistry Level I laboratory science course before enrolling in a corresponding Level II course.

4340 BIOLOGY II: ECOLOGY

Grades 11-12

1 Credit

****Successful completion of Biology***

This course is designed for students to investigate environmental phenomenon, principles, and how human activities impact Earth. Laboratory experiments, STEM and field investigations are used to teach conceptual themes through process skills to build science literacy and responsible resource stewardship. Students are required to submit written laboratory reports and to design and conduct an investigation whether in small groups or as an individual. Earth Science may be taken concurrently.

4330 BIOLOGY II: ANATOMY AND PHYSIOLOGY

Grades 11-12

1 Credit

(Grade 10, if background is met)

****Successful completion of Biology***

This is an advanced course which covers anatomy, physiology, and the pathology of humans. It is designed primarily for the student anticipating a medical career or life science major in college. Chemistry may be taken concurrently for enrollment in this course. Lab emphasis is on dissection and microscope usage.

4240 EARTH SCIENCE II: GEOLOGY

Grades 10-12

1 Credit

****Successful completion of Earth Science***

This is an in-depth course dealing with the physical and historical aspects of the Earth most suited for students who have a strong interest in science. Biology may be taken concurrently. Emphasis will be placed on those geological processes and features that govern the Earth. Extensive laboratory experiences and occasional field excursions are

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provided to enhance the students understanding and application of the course material.

4250 EARTH SCIENCE II: OCEANOGRAPHY

Grades 11-12

1 Credit

****Successful completion of Earth Science***

In this course the theories of Earth's structure and plate tectonics will be presented as a base on which to build the explanation of the physical features of the ocean floor. Chemistry may be taken concurrently for enrollment in this course. Both historical and physical geology of the ocean floor will be investigated. Students will study the physical properties of seawater, marine chemistry, marine organisms, salinity and density, circulation with the oceans, waves, currents, tides, and oceanographic instruments and research. Emphasis will be placed on the major skills of practicing oceanographers and scientists. Students will be required to submit written laboratory reports and to design and conduct investigations in small groups, as an individual, or as a class.

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World Language Courses

World language study is recommended for the college-bound and career-minded students for whom the knowledge of a world language is a valuable asset. World language study helps to develop respect for cultural diversity as well as confidence in basic skills of communication. World languages count as elective credit in the Standard Diploma. For the Advanced Studies Diploma, a student must take three years of one language or two years each of two different languages (2+2 option). All classes may not be offered at all schools due to enrollment and availability. AP French, AP German, AP Latin and AP Spanish are not offered at all schools.

General Courses

American Sign Language

5990 AMERICAN SIGN LANGUAGE LEVEL I

Grades 10-12

1 Credit

This course is designed to give students a foundation of sign language and the culture of the deaf community. Students will learn appropriate behaviors, showing awareness of and respect for deaf culture. Deaf culture is taught through discussions, activities, reading, and videos. This is a performance-based course with an emphasis on vocabulary and grammatical skills through the use of the language. Immersion strategies are used in this course.

5995 AMERICAN SIGN LANGUAGE LEVEL II

Grades 10-12

1 Credit

**Successful completion of prior level*

Students continue to increase their skills in American Sign Language. They will add to their vocabulary and increase proficiency in grammatical features and conversational skills. Knowledge of and sensitivity to the deaf culture and the community of deaf people will continue to be emphasized. Immersion strategies are used in this course.

5997 AMERICAN SIGN LANGUAGE LEVEL III

Grades 10-12

1 Credit

**Successful completion of prior level*

The course includes vocabulary-building and mastery of grammar through rigorous receptive and expressive language activities. This course includes receptive and expressive readiness activities, sign vocabulary, ASL grammar structure, receptive and expressive fingerspelling, conversational behaviors and various aspects of deaf culture. Immersion strategies are used in this course.

French

5110 FRENCH LEVEL I

Grades 8-12

1 Credit

Students gain an understanding of the components of a world language and of the study skills necessary to learn a world language. As students begin to develop proficiency skills in listening, speaking, reading, and writing, they engage in active practice in real-life situations and in a variety of cultural contexts.

5120 FRENCH LEVEL II

Grades 9-12

1 Credit

**Successful completion of prior level*

Students continue to develop skills in listening, speaking, reading, and writing and to engage in active practice in real-life situations with the goal of increased proficiency in the language. Cultural study of the areas of the world

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where the language is spoken is expanded.

5130 FRENCH LEVEL III

Grades 9-12

1 Credit

****Successful completion of prior level***

Students complete their study of basic grammar and vocabulary and continue to learn to communicate in real-life situations with increasing precision and accuracy. Culture is woven into this course as students explore the use of the language in a wide range of cultural contexts.

5140 FRENCH LEVEL IV

Grades 10-12

1 Credit

****Successful completion of prior level***

Students will use the language to engage in a variety of activities which focus on the production of more advanced and precise language in real-world situations. Students will make oral and written presentations in the target language on a variety of more complex social and cultural topics. Immersion strategies will be utilized and students will be expected to use the target language on a daily basis in everyday classroom conversation.

German

5210 GERMAN LEVEL I

Grades 8-12

1 Credit

Students gain an understanding of the components of a world language and of the study skills necessary to learn a world language. As students begin to develop proficiency skills in listening, speaking, reading, and writing, they engage in active practice in real-life situations and in a variety of cultural contexts.

5220 GERMAN LEVEL II

Grades 9-12

1 Credit

****Successful completion of prior level***

Students continue to develop skills in listening, speaking, reading, and writing and to engage in active practice in real-life situations with the goal of increased proficiency in the language. Cultural study of the areas of the world where the language is spoken is expanded.

5230 GERMAN LEVEL III

Grades 9-12

1 Credit

****Successful completion of prior level***

Students complete their study of basic grammar and vocabulary and continue to learn to communicate in real-life situations with increasing precision and accuracy. Culture is woven into this course as students explore the use of the language in a wide range of cultural contexts.

5240 GERMAN LEVEL IV

Grades 10-12

1 Credit

****Successful completion of prior level***

Students use the language to engage in a variety of activities which focus on the production of more advanced and precise language in real-world situations. Students will make oral and written presentations in the target language on a variety of more complex social and cultural topics. Immersion strategies will be utilized and students will be expected to use the target language on a daily basis in everyday classroom conversation.

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Latin

5310 LATIN LEVEL I

Grades 8-12

1 Credit

Students are introduced to the basic vocabulary and grammar system of the language. Roman life, history, mythology, and English derivations are integral parts of the course.

5320 LATIN LEVEL II

Grades 9-12

1 Credit

****Successful completion of prior level***

Students continue to study vocabulary, grammar, Roman culture, and etymology. A major objective is to have students successfully read and interpret increasingly difficult Latin passages.

5330 LATIN LEVEL III

Grades 9-12

1 Credit

****Successful completion of prior level***

Students complete the study of basic Latin grammar to include vocabulary, grammar, and etymology. Students continue to build their knowledge of Roman culture and improve their Latin reading skills through a variety of selections from classical authors.

5340 LATIN LEVEL IV

Grades 10-12

1 Credit

****Successful completion of prior level***

Students are introduced to a variety of Latin literature. Throughout the course students continue to develop skills learned in levels 1-3.

Spanish

5510 SPANISH LEVEL I

Grades 8-12

1 Credit

Students gain an understanding of the components of a world language and of the study skills necessary to learn a world language. As students begin to develop proficiency skills in listening, speaking, reading, and writing, they engage in active practice in real-life situations and in a variety of cultural contexts.

5520 SPANISH LEVEL II

Grades 9-12

1 Credit

****Successful completion of prior level***

Students continue to develop skills in listening, speaking, reading, and writing and to engage in active practice in real-life situations with the goal of increased proficiency in the language. Cultural study of the areas of the world where the language is spoken is expanded.

5530 SPANISH LEVEL III

Grades 9-12

1 Credit

****Successful completion of prior level***

Students complete their study of basic grammar and vocabulary and continue to learn to communicate in real-life situations with increasing precision and accuracy. Culture is woven into this course as students explore the use of the

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language in a wide range of cultural contexts.

5540 SPANISH LEVEL IV

Grades 10-12

1 Credit

****Successful completion of prior level***

Students use the language to engage in a variety of activities which focus on the production of more advanced and precise language in real-world situations. Students will make oral and written presentations in the target language on a variety of more complex social and cultural topics. Immersion strategies will be utilized and students will be expected to use the target language on a daily basis in everyday classroom conversation.

5511 SPANISH FOR FLUENT SPEAKERS LEVEL I

Grades 8-12

1 Credit

This course is intended for heritage, native speakers, or those who have obtained a high level of proficiency in Spanish. This course will be taught primarily in Spanish. The goal of the course is to provide students the opportunity to develop and practice their oral and written communication skills through the study of Hispanic culture and history. This course is intended to build a sense of community among the schools' advanced speakers of the language.

Note: Students will take an assessment to ensure proper placement according to prior knowledge and study of Spanish.

5521 SPANISH FOR FLUENT SPEAKERS LEVEL II

Grades 9-12

1 Credit

****Successful completion of Spanish for Fluent Speakers I***

This course offers a second level of formal study for proficient Spanish speaking students. There will be a focus on the instruction of advanced Spanish literacy skills. Students will learn more about the language and cultural heritage while focusing on grammar, reading, writing, vocabulary development, and participate in consciousness-raising activities about Spanish language, identity and culture.

Note: Students will take an assessment to ensure proper placement according to prior knowledge and study of Spanish.

5531 SPANISH FOR FLUENT SPEAKERS LEVEL III

Grades 10-12

1 Credit

****Successful completion of Spanish for Fluent Speakers II***

This course offers a third level of formal study for native, heritage, or fluent Spanish-speaking students. This course focuses on the development of advanced communicative competence in reading, writing, speaking and listening in Spanish. Students will also continue to develop awareness and understanding of Hispanic cultures, including language variation, customs, geography, history, and current events. Upon completion of this course, students may progress into AP Spanish Language or IB Spanish.

Advanced Placement Courses

Students are encouraged to take the AP examination for possible college credit.

5170AP AP FRENCH

Grades 11-12

1 Credit#

****Successful completion of French Level IV or Level III with instructor approval***

AP French is an advanced, sequential course designed to develop proficiency in the language for highly motivated students. Students will be expected to master all of the course objectives in a rigorous and accelerated manner. The course is conducted primarily in the target language and emphasizes communication through the use of authentic materials. Students are encouraged to take the AP Exam. This course is dependent on student enrollment.

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#-Weighted, ●-Application Required, ▲-Work-Based, *-Successful Completion

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5270AP AP GERMAN**Grades 11-12****1 Credit#******Successful completion of German Level IV or Level III with instructor approval***

AP German is an advanced, sequential course designed to develop proficiency in the language for highly motivated students. Students will be expected to master all of the course objectives in a rigorous and accelerated manner. The course is conducted in the target language and emphasizes communication through the use of authentic materials. Students are encouraged to take the AP Exam. This course is dependent on student enrollment.

5370AP AP LATIN**Grades 11-12****1 Credit#******Successful completion of Latin Level IV or Level III with instructor approval***

AP Latin is an advanced, sequential course that includes an in- depth study of the texts prescribed by the College Board. Students are encouraged to take the AP Exam. This course is dependent on student enrollment.

5570AP AP SPANISH**Grades 11-12****1 Credit#******Successful completion of Spanish Level IV or Level III with instructor approval or Spanish for Fluent Speakers III***

AP Spanish is an advanced, sequential course designed to develop proficiency in the language for highly motivated students. Students will be expected to master all of the course objectives in a rigorous and accelerated manner. The course is conducted in the target language and emphasizes communication through the use of authentic materials. Students are encouraged to take the AP Exam. This course is dependent on student enrollment.

Dual Enrollment Courses**5140DE DE Intermediate French IV (GCC FRE 201 and 202)****Grades 11-12****1 Credit#******Successful completion of French level III***

This course continues to develop understanding, speaking, reading, and writing skills. It enables students to achieve proficiency at or above the Intermediate-mid level as defined by the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines. In keeping with the National Standards for Foreign Language Education, culture is embedded in this language course.

5240DE DE Intermediate German IV (GCC GER 201 and 202)**Grades 11-12****1 Credit#******Successful completion of German level III***

This course continues to develop understanding, speaking, reading and writing skills. It enables students to achieve proficiency at or above the Intermediate-mid level as defined by the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency Guidelines. In keeping with the National Standards for Foreign Language Education, culture is embedded in this language course.

5540DE DE Intermediate Spanish IV (GCC SPA 201 and 202)**Grades 11-12****1 Credit#******Successful completion of Spanish level III or Spanish for Fluent Speakers III***

This course continues to develop understanding, speaking, reading, and writing skills. It enables students to achieve proficiency at or above the Intermediate-mid level as defined by the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency Guidelines. In keeping with the National Standards for Foreign Language Education, culture is embedded in this course.

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International Baccalaureate Courses

Students will be prepared and are encouraged to take the year-end IB examination for possible college credit.

Schools offering these courses: BPHS (through 2026-2027) and MVHS.

5542IB IB SPANISH B IV

5142IB IB FRENCH B IV

5242IB IB GERMAN B IV

Grades 10 or 11

1 Credit per Course#

**Successful completion of three sequential levels of the target language*

This course is the first year of a two-year advanced sequence that is designed to strengthen fluency and proficiency in both oral and written world languages. The aim is for students to be able to speak the language with sufficient accuracy and fluency to participate in formal and informal conversations with ease. The course includes an in-depth study of various authentic texts and media on issue-related themes. Through oral presentation, individual and group projects, and written assignments, self-expression will be encouraged. The course will be conducted primarily in the target language.

5552IB IB SPANISH B V (SL)

5152IB IB FRENCH B V (SL)

5252IB IB GERMAN B V (SL)

Grades 11 or 12

1 Credit per Course#

**Successful completion of IB target language B course*

This course is the second year of a two-year advanced sequence that is designed to strengthen fluency and proficiency in both oral and written world languages. Students must earn a "C" or higher in year one of the course sequence to continue on to year two. The aim is for students to be able to speak the language with sufficient accuracy and fluency to participate in formal and informal conversations with ease. The course includes an in-depth study of various authentic texts and media on issue-oriented themes. Through oral presentation, individual and group projects, and written assignments, self-expression will be encouraged. The course will be conducted primarily in the target language.

5562IB IB SPANISH B V (HL)

5162IB IB FRENCH B V (HL)

5262IB IB GERMAN B V (HL)

Grade 12

1 Credit per Course#

**Successful completion of previous IB target language B course and Teacher Recommendation*

This course is the second year of a two-year advanced sequence that is designed to strengthen fluency and proficiency in both oral and written world languages. Students must earn a "B+" or higher in the previous IB world language course and obtain teacher recommendation. The aim is for students to be able to speak the language with sufficient accuracy and fluency to participate in formal and informal conversations with ease. The course includes an in-depth study of various authentic texts and media. Students will read several pieces of literature as part of this course. Written tasks will be based on the literature read. Through oral presentation, individual and group projects, and written assignments, self-expression will be encouraged.

IB LATIN (SL)

5340IB Grade 11

5350IB Grade 12

1 Credit per Year#

**Successful completion of three sequential levels of Latin courses for IB year one*

**Successful completion of IB year one to go on to IB year two*

In this two-year course, selected passages from prescribed authors and topics in Latin will be read. Students must earn a "C" or higher in IB year one to go on to IB year two. Written assessments will include externally assessed translations of particular passages demonstrating an understanding of the author's intent and style, as well as student-chosen topics that reflect an awareness of context and connections within and with other literature and cultures.

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#-Weighted, ●-Application Required, ▲-Work-Based, *-Successful Completion

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IB SPANISH A (SL)**5541IB Grade 11****5551IB Grade 12****1 Credit per Year#**

Required Background: *Students will take an assessment to ensure proper placement according to prior knowledge and study of Spanish. A recommendation form from the students 10th grade English teacher will also be required*

This is a two-year intensive study of language and literature in Spanish, designed for students who have achieved native-level fluency in speaking, reading, and writing Spanish. Over these two years, students engage in close reading of literary texts, focusing on the relationship between literature and broader societal issues while analyzing the rich complexities and intricacies of the works. They explore how language develops in specific cultural contexts, and how it impacts the world and our understanding of world issues. They also closely examine the ways language is used in the media. This course prepares students for the standard level IB Spanish A Language and Literature internal assessments exam.

Credit by Demonstrated Proficiency

Students in grades 9-12 who speak a language other than English may select to take a language proficiency test to receive world language credit on their high school transcript. Stafford Schools has identified the Standards-based Measurement of Proficiency (STAMP) test as the internationally recognized web-based assessment for language proficiency in Arabic, French, German, Hebrew, Hindi, Italian, Japanese, Korean, Mandarin (Simplified and Traditional), Polish, Portuguese (Brazilian), Russian and Spanish. Speakers of other languages will be tested through Alta Language Services.

Students should be native or heritage speakers, or have substantial exposure outside of school to the target language through reading, writing, speaking, and listening.

Students may earn up to four world language credits by taking this exam. Credits will appear on a student's transcript as "pass". This does not impact a student's GPA in any way. If a student does not earn credit through this exam, their transcript will not be negatively affected.

Proficiency	Credit	Next World Language Level Placement	Next Spanish for Fluent Speakers (SFS) Placement
Novice-Mid	1	Level 2	SFS II
Novice-High	2	Level 3	SFS III
Intermediate-Low	3	Level 4/IB/DE	
Intermediate-Mid	4	AP/IB/DE	

24952 - Other World Language: Heritage Language – I

24953 - Other World Language: Heritage Language – II

24954 - Other World Language: Heritage Language – III

24955 - Other World Language: Heritage Language – IV

Testing is available in the following languages:

Arabic, Amharic, Armenian, Chin, Czech, Filipino (Tagalog), French, German, Haitian-Creole, Hebrew, Hindi, Hmong, Ilocano, Italian, Japanese, Korean, Mandarin (Simplified and Traditional), Maxaa, Polish, Portuguese (Brazilian), Russian, Samoan, Somali Maay Maay, Somali, Spanish, Tamil, Telugu, Turkish, Urdu, Vietnamese, Yup'ik

Students should contact their school counselor for the testing dates. Students from all 5 high schools will be eligible for this opportunity, however, testing will happen twice per year. There is no cost to Stafford students for the first time that they take the test as part of this process. Re-tests are at the expense of the student and the cost varies per test.

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Stafford Schools

Visual and Performing Arts Courses

These courses count toward the “Fine and Practical Arts” graduation credit. All courses may not be offered at all schools due to enrollment and availability. The Visual and Performing Arts programs provide students with a sequential, comprehensive curriculum in the arts. These courses teach students the skills and concepts needed for success in the classroom as well as practical application in the real world. The arts help students learn to creatively solve problems, make decisions, build self-confidence, and develop informed perceptions, while exploring a means for self-expression and supporting social-emotional learning. Emphasis is placed on the artistic process including performing, presenting, producing, responding, and creating. Students gain an appreciation and awareness of different cultures and styles throughout history.

Visual Arts

9120 ART I **Grades 9-12** **1 Credit**

In this foundation course, emphasis is placed on the Elements of Art and Principles of Design. Students use the elements and principles to guide and demonstrate their application of materials and ideas, and talk about artwork they have seen and made. Drawing, painting, graphics, and 3-D activities comprise the curriculum with an emphasis on design and composition in each area.

9130 ART II **Grades 10-12** **1 Credit** **Successful completion of Art I*

In this intermediate course, students continue to refine their skill set with emphasis on individual problem solving and in-depth analysis of their own creative processes. New skills and techniques are introduced and students are encouraged to begin to develop a portfolio for review, display, and assessment.

9130H HONORS ART II **Grades 10-12** **1 Credit** **Successful completion of Art I, instructor's recommendation; identified or eligible for identification as gifted in visual arts or portfolio review by high school staff*

Students are provided with the opportunity to pursue advanced visual arts topics and nurture strengths in visual communication in order to prepare for AP or IB art courses. Honors Art II is designed to stimulate higher level and complex thinking skills, which are used to solve visual problems. The individual portfolio is used to determine the students' strengths and needs and to assist in the development of individualized learning opportunities.

Schools offering course: NSHS, SHS

9140 ART III **Grades 11-12** **1 Credit** **Successful completion of Art II*

In this course, students continue their refinement of skills through the use of different types of media, placing a high emphasis on composition through organization of the elements of art and use of the principles of design. Students are encouraged to explore their personal styles of art making while producing a diverse body of work. Students will document their growth through the continued development of a portfolio (traditional or digital).

9145 ART IV **Grades 11-12** **1 Credit** **Successful completion of Art III*

Art IV is a course designed to increase and develop skills in selected subject areas for the visually mature and

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#-Weighted, ●-Application Required, ▲-Work-Based, *-Successful Completion

Stafford Schools

advanced art student. Students develop personal styles in approach and media and are encouraged to experiment creatively with materials and techniques. Those students applying for advanced studies maintain and present a progressive portfolio.

Additional Courses

9196 SCULPTURE AND CERAMICS

Grades 10-12

1 Credit

****Successful completion of Art I***

The course is designed for students interested in developing more sophisticated skills in working with three-dimensional media. Students will explore a variety of 3-D materials to solve sculpture problems through construction methods of fabrication, assemblage, carving, casting, and modeling. Students will also learn the methods of working with clay such as coiling, slab building, and throwing on the wheel. Through these methods, students are encouraged to explore their personal styles of art making while producing a diverse body of work.

9170 ART HISTORY (NON-STUDIO ELECTIVE)

Grades 10-12

1 Credit

This course is designed for students interested in learning to understand, evaluate, and appreciate art and its history in a non-studio setting. A broad range of artistic styles, media, and ideas from the past and present are used to examine the relationship and meaningful contribution of art to society. Students view significant artworks from around the world through readings, research, slides, videos, and museum visits, while also participating in course discussions, visual presentations, research, and problem solving. Writing skills are important in the description, analysis, and comparison of these works. This course complements courses in the humanities, providing multicultural and interdisciplinary connections.

9190 PHOTOGRAPHY AND GRAPHIC DESIGN I

Grades 9-12

1 Credit

This course allows students to think creatively and solve visual problems while using technology to create expressive artworks. Students explore and practice standard black and white photographic processes by using cameras, films, lighting effects, and applying basic darkroom techniques. They are introduced to digital photographic processes and develop proficiency, using various technologies for art making. Students learn skills in Adobe Creative Suite, along with the history of photography. A portfolio that showcases meaningful designs and photographs will be developed.

Note: Students are required to have access to a digital camera of 8mp or more, a film camera, and purchase necessary film/photographic paper.

Schools offering course: BPHS, SHS

9191 PHOTOGRAPHY AND GRAPHIC DESIGN II

Grades 10-12

1 Credit

****Successful completion of Photography and Graphic Design I***

This course expands knowledge on the study of black and white photography, alternative processes, and the digital process. Students apply an in-depth understanding of equipment and artistic practices to solve complex visual problems. Working with others to design, package, and promote a publication is an important element in this course. Students also learn to critique and evaluate portfolios in both digital and traditional media.

Note: Students are required to have access to a digital camera of 8mp or more, a film camera, and purchase necessary film/ photographic paper.

Schools offering course: BPHS, SHS

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9192 PHOTOGRAPHY AND GRAPHIC DESIGN III

Grades 11-12

1 Credit

****Successful completion of Photography and Graphic Design II***

This course engages students in the advanced study of photographic and technology-based design processes while developing the approach and discipline of a working artist. Students expand their capability in the application of technology to craft expressive original art and generate visual solutions to objective-based problems. A final required portfolio, which shows evidence of technical proficiency, quality, and experience, demonstrates students' commitment to the communication of ideas through digital and photographic media. Students are asked to apply professional exhibition techniques to display personal work.

Note: Students are required to have access to a digital camera of 8mp or more, a film camera, and purchase necessary film/ photographic paper.

Schools offering course: SHS

Music

Note: Ensemble courses (band, chorus, and orchestra) are performance-based courses that involve participation in concerts and other performances and rehearsals outside of class time. There may be a requisite instrumental rental fee and uniform fee for students in these programs.

Band

9232 CONCERT BAND

Grades 9-12

1 Credit

Recommended Background: Previous band experience at the middle school level required

Emphasis in this course is on mastering the skills necessary to meet the intermediate level for the performance of Grade III-IV band literature. Students participate in Virginia Band and Orchestra Directors Association (VBODA) sponsored events and All-County Band auditions. Concerts of traditional and contemporary band works are prepared and performed. Small ensemble and solo work, as well as music theory and history, are components of this course. Students are expected to practice an average of 30 minutes per day.

9233 SYMPHONIC BAND

Grades 9-12

1 Credit

Recommended Background: One or more years of previous band experience; by audition

Emphasis in this course is on mastering the skills necessary to meet the advanced level for the performance of Grade IV-V band literature. Students participate in Virginia Band and Orchestra Directors Association (VBODA) sponsored events and All-County Band auditions. Concerts of traditional and contemporary band works are prepared and performed. Small ensemble and solo work, as well as music theory and history, are components of this course. Students are expected to practice an average of 30 minutes per day.

9234 WIND ENSEMBLE

Grades 9-12

1 Credit

By audition only

This course functions at the artist level in accordance with the Virginia Standards of Learning. Emphasis in this course is on traditional and contemporary works for concert band and wind ensemble at the Grade V-VI level. Students continue their participation in Virginia Band and Orchestra Directors Association (VBODA) sponsored events and All-County Band auditions. Small ensemble and solo work, as well as scales, etudes, music theory, ear training, sight-singing/reading, and music history, are components of this course. The course is based on the size of a traditional Wind Ensemble and is limited to the instrumentation needs of the group. This course is for students who are serious about the study of instrumental music. Private lessons, while not required, are strongly encouraged for

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#-Weighted, ●-Application Required, ▲-Work-Based, *-Successful Completion

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members of this ensemble. Students are expected to practice 30 minutes per day.

9250 PERCUSSION ENSEMBLE

Grades 9-12

1 Credit

Recommended Background: Previous band experience is required

This course is designed to meet the unique needs of the percussion student at the high school level. Students master the techniques required for playing the full spectrum of percussion equipment including drums, mallet instruments, timpani, and the various hand-held “trap” instruments. Special emphasis is placed on the Percussive Arts Society list of 40 rudiments, keyboard proficiency, note and rhythm reading skills, music theory, music history, ear training, and sight-reading. Students are expected to practice a minimum of 30 minutes per day.

9297 JAZZ ENSEMBLE

Grades 10-12

1 Credit

Recommended Background: One or more years of high school band experience; by audition

An advanced-level course, emphasis is on performance techniques unique to jazz music and the history of jazz through the study of traditional and contemporary works. Students participate in Virginia Band and Orchestra Directors Association (VBODA) sponsored events. Some emphasis is given to music theory as it relates to improvisation. Students are involved in solo work and small ensembles. This course is based on the traditional size of a jazz band, or “Big Band”, and is limited in size to the instrumentation needs of the group.

9296 JAZZ WORKSHOP

Grades 10-12

1 Credit

Recommended Background: One or more years of high school band experience; by audition

Jazz workshop is a theory-based lecture/lab that explores compositional techniques and their application in improvisation and music literature based in an improvisatory tradition. Compositional style is approached through aural theory, written theory, music history, and technical development of their individual instrument. Students study song forms, motivic development, phrase structure, chord construction, and voice leading. These compositional elements will be applied to important historical and stylistic musical vehicles that may include: Blues, Swing, Bebop, Modal, and Funk/ Fusion. This course requires students to perform scales, scale patterns, memorized phrases and melodies, and improvised melodies over given chord progressions and song forms. Students are responsible for attending one performance per semester outside of the normal school day.

Schools offering course: CFHS

Chorus

Choral directors may place students in specially-designed and appropriate sections of chorus.

9280 VOCAL ENSEMBLE

Grades 9-12

1 Credit

This course is open to all interested students in grades 9-12 whose voices are within the tenor-bass range. It covers Levels 1 and 2 of the Stafford County Choral Music curriculum.

9260 TREBLE CHORUS

Grades 9-12

1 Credit

This course is open to all interested students in grades 9-12 whose voices are within the treble range. It covers Levels 1 and 2 of the Stafford County Choral Music curriculum.

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9285 CHORALE**Grades 9-12****1 Credit***Auditions may be required*

This course is a choir open to students in grades 9-12. The course covers Levels 2 and 3 of the Stafford County Choral Music curriculum.

9289 MADRIGALS**Grades 10-12****1 Credit***By audition only*

This course is an auditioned choir that is limited to a set number of singers per voice part. The course covers Levels 2, 3, and 4 of the Stafford County Choral Music curriculum.

9290 JAZZ CHOIR**Grades 9-12****1 Credit***Auditions may be required*

This course is a performance choir that focuses on the performance of Jazz, show music, and contemporary literature. This choir may be limited to a set number of singers per voice part. The course includes Levels 2, 3, and 4 of the Stafford County Choral Music curriculum.

9292 CHAMBER CHOIR**Grades 10-12****1 Credit***By audition only*

This course is an auditioned choir that is limited to a set number of singers per voice part. The course covers Levels 2, 3, and 4 of the Stafford County Choral Music curriculum.

Orchestra

9237 CONCERT ORCHESTRA**Grades 9-12****1 Credit***Recommended Background: Previous orchestra experience at the middle school level required*

In this course, emphasis is on mastering the skills necessary for the performance of Grade III-IV string orchestra literature. Students participate in Virginia Band and Orchestra Directors Association (VBODA) sponsored events and All-County Orchestra auditions. Concerts of traditional and contemporary string orchestra works are prepared and performed. Small ensemble and solo work, as well as music theory, and history are components of this course. Students are expected to practice an average of 30 minutes per day.

9238 SYMPHONIC ORCHESTRA**Grades 9-12****1 Credit***Recommended Background: One or more years of previous orchestra experience; by audition*

In this course, emphasis is on mastering the skills necessary for the performance of Grade IV-V string orchestra literature. Students participate in Virginia Band and Orchestra Directors Association (VBODA) sponsored events and All-County Orchestra auditions. Concerts of traditional and contemporary string orchestra works are prepared and performed. Small ensemble and solo work, as well as music theory and history, are components of this course. Students are expected to practice an average of 30 minutes per day.

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#-Weighted, ●-Application Required, ▲-Work-Based, *-Successful Completion

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9239 CHAMBER SINFONIA

Grades 10-12

1 Credit

By audition only

This is an advanced-level course functioning at the artist level in accordance with the Virginia Standards of Learning. Emphasis is on traditional and contemporary works for string orchestra at the Grade IV-VI level. Students continue their participation in Virginia Band and Orchestra Directors Association (VBODA) sponsored events and All-County auditions. Small ensemble and solo work, as well as scales, etudes, music theory, ear training, sight-singing/ reading, and music history, are components of this course. The course is based on the size of a traditional Chamber Orchestra and is limited to the instrumentation needs of the group. This course is for students who are serious about the study of instrumental music. Private lessons, while not required, are strongly encouraged for members of this ensemble. Students are expected to practice an average of 30 minutes per day.

General Courses for Music

9225 MUSIC THEORY

Grades 10-12

1 Credit

Recommended Background: Previous music training required.

Students should have a fundamental understanding of music notation.

The course develops a student's ability to recognize, understand and describe basic elements of music literacy and composition. A knowledge of structural, technical, and historical elements of music is acquired through the study of music from varied periods and cultures. Aural, analytical, and composition skills and techniques will be presented through listening and written exercises. Student theorists will read, notate, compose, and analyze music while engaging in the creative process through performance, written projects, and exercises.

9245 GUITAR I

Grades 9-12

1 Credit

This course introduces students to the fundamentals of guitar. Guitar instruction emphasizes basic technique, music reading, progressions, and music theory. Music literature is selected from classical and contemporary repertoire. This course offers a comprehensive study of all musical styles. Guest artists and field trips to performances and/or seminars may also be part of the curriculum.

Note: Rehearsals and performances may be required of students outside of the school day.

Schools offering course: BPHS, CFHS, MVHS, NSHS

9247 GUITAR II

Grades 10-12

1 Credit

**Successful completion of Guitar I or teacher recommendation*

Students continue to develop their skills on the guitar in this course. Guitar instruction emphasizes intermediate technique, music reading, progressions, and music theory. Music literature is selected from jazz, rock, blues, classical, and contemporary repertoire. Students build a repertoire of solo literature and begin the study of improvisation. Guest artists and field trips to performances and/or seminars may also be part of the curriculum.

Note: Rehearsals and performances may be required of students outside of the school day.

Schools offering course: BPHS, CFHS, MVHS, NSHS

9248 GUITAR ENSEMBLE

Grades 11-12

1 Credit

**Successful completion of Guitar II or teacher recommendation*

This course is designed for guitarists who wish to continue their study of the guitar past the initial year. The course covers advanced skills associated with playing the guitar. An emphasis is placed on ensemble playing (both large and small ensembles). Students will continue to develop and refine their technique and music reading skills and will

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perform music of many styles and difficulty levels. Position playing and jazz improvisation will be introduced in this course as well. Students in this course will be required to participate in guitar performances outside of scheduled class time. Students may enroll in this course for consecutive years to continue their study of the instrument.

Note: Rehearsals and performances may be required of students outside of the school day.

Schools offering course: BPHS, CFHS, MVHS, NSHS

9214 MUSIC TECHNOLOGY I

Grades 9-12

1 Credit

This course develops an understanding of music composition through the use of digital keyboards, MIDI technology, DAW software, and music notation software. Students also develop skills in their creative and technical expression. A portfolio of compositions, arrangements, and recordings representing a variety of styles and compositional situations are developed throughout the course.

Schools offering course: SHS

9298 MUSIC TECHNOLOGY II

Grades 10-12

1 Credit

***Successful completion of Music Technology I or teacher recommendation**

Students develop a deeper understanding of music composition through the use of digital keyboards, MIDI technology, DAW software, and music notation software. Students continue to develop their creative and technical expression skills. A portfolio of compositions, arrangements, and recordings representing a variety of styles and compositional situations is developed throughout the course.

Schools offering course: SHS

Theatre Arts

1410 THEATRE ARTS I

Grades 9-12

1 Credit

In this survey course, students experience dramatic literature and participate in the creative processes of performance and production. Methods of storytelling, play writing, puppetry, and adaptation are used to emphasize skill development and provide theatrical opportunities that allow students to explore areas of personal interest. This is a performance-based course and students are expected to perform in front of an audience of their peers.

1420 THEATRE ARTS II

Grades 10-12

1 Credit

***Successful completion of Theatre Arts I**

In this course, students study and respond to a variety of theatre experiences, including dramatic literature, theatrical styles, and historical period. They begin to develop and refine their communicative, collaborative, analytical, interpretive, and problem-solving skills in this performance-based setting.

Note: Students in this course are highly encouraged to participate in school productions.

1423 THEATRE ARTS III

Grades 11-12

1 Credit

***Successful completion of Theatre Arts II**

Students study theatre and drama as an educational force in this course. They will deepen their artistic abilities through the investigation of acting styles and the process of playwriting, which includes character development, research, dramatic structure, conflict, and resolution.

Note: Students in this course are highly encouraged to participate in school productions.

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#-Weighted, ●-Application Required, ▲-Work-Based, *-Successful Completion

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1426 THEATRE ARTS IV

Grades 11-12 or audition by teacher

1 Credit

****Successful completion of Theatre Arts III***

This is exclusively a performing and directing course. Advanced skills in performing and directing skills will be refined through research, performance, and evaluation.

Note: Students in this course are expected to participate in school productions.

1435 TECHNICAL THEATRE I

Grades 9-12

1 Credit

This course serves as an introduction to the technical aspects of the theatrical experience. Students explore the various physical needs of theatrical productions, including scenic Construction, lighting, sound, costuming, and make up. Smaller projects focus on stage management and production design.

Note: This is not a performance-based class. This is the backstage work of the theatre.

1448 TECHNICAL THEATRE II

Grades 10-12

1 Credit

****Successful completion of Technical Theatre I***

This course utilizes what students have learned in Technical Theatre I in order to build theatrical productions throughout the year. Students serve as the technical crews to assemble the various technical aspects for two major productions, including scenery, lighting, sound, costuming, and makeup. Individual projects focus on stage management and production design.

Note: Participation in school productions is expected.

1450 TECHNICAL THEATRE III

Grades 10-12

1 Credit

****Successful completion of Technical Theatre II***

This course utilizes what students have learned in Technical Theatre I and II in order to serve as student designers and production managers for theatrical productions throughout the year. These students design and oversee the construction of the scenery, lighting, sound, costumes, and make up for two major productions. Individual projects focus on theatre management and technical direction.

Note: Participation in school productions is expected.

Advanced Placement Courses for Art

AP STUDIO ART

9150AP Studio Art (Drawing Portfolio)

9148AP Studio Art (2-D Design Portfolio)

9149AP Studio Art (3-D Design Portfolio)

Grades 11-12

1 Credit#

****Successful completion of Art III***

AP Art is designed for highly motivated art students who plan to major in art in college. Following a highly prescribed curriculum set by the College Board, students prepare one of three portfolios of artwork (drawing, 2-D design, or 3-D design). Students will be prepared and are encouraged to submit the AP Studio Art portfolio for possible college credit.

Note: Students enrolled in this course must be willing to work independently and meet portfolio submission deadlines as established by the instructor.

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#-Weighted, ●-Application Required, ▲-Work-Based, *-Successful Completion

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9151AP AP ART HISTORY (NON-STUDIO ELECTIVE)

Grades 11-12

1 Credit#

****Successful completion of Art History or teacher recommendation***

This course is designed for students interested in learning to understand, evaluate, and appreciate art and its history in a non- studio setting. A broad range of artistic styles, media, and ideas from the past and present are used to examine the relationship and meaningful contribution of art to society. Students learn to look at significant works of arts from around the world with intelligence and sensitivity. Through writing, readings, research, visual presentations, and museum visits, students examine the major forms of artistic expression of the past and of distant cultures, as well as those of our own time and environment. Students will be prepared and are encouraged to take the AP exam for possible college credit.

Advanced Placement Courses for Music

9226AP AP MUSIC THEORY

Grades 11-12

1 Credit#

****Successful completion of Music Theory or teacher recommendation***

AP Music Theory develops a student's ability to recognize, understand, and describe the basic elements of music literacy and composition. This is approached by addressing fundamental aural, analytical, and compositional skills using both listening and written exercises. Building on this foundation, the course progresses to include more creative tasks, such as the harmonization of a melody by selecting appropriate chords, composing a musical bass line to provide two-voice counterpoint, or the realization of figured-bass notation. Students will be prepared and are encouraged to take the AP exam for possible college credit.

International Baccalaureate Courses for Visual and Performing Arts

Students will be prepared and are encouraged to take the year-end IB examination for possible college credit.

Schools offering these courses: BPHS (through 2026-2027) and MVHS.

IB VISUAL ARTS (SL)

9194IB Grade 11

9196IB Grade 12

1 Credit per Course#

****Successful completion of Art II***

****Successful completion of IB year one to go on to IB year two***

This course is intended for highly motivated students committed to serious study of art. The aim is to provide opportunities to develop the aesthetic, imaginative, and creative faculties as well as train visual, perceptual, and critical awareness of art of various cultures. Students create a portfolio that demonstrates intensive concentration in studio work and research in preparation for the external assessment.

IB VISUAL ARTS (HL)

9195IB Grade 11

9197IB Grade 12

1 Credit per Course#

****Successful completion of Art II***

****Successful completion of IB year one to go on to IB year two***

This two-year sequence is intended for highly motivated students committed to serious study of art. The aim of the course is to develop the aesthetic, imaginative, and creative faculties as well as train visual, perceptual, and critical awareness of art of various cultures. Students create a portfolio that demonstrates intensive concentration in studio work and research in preparation for the external assessment.

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#-Weighted, ●-Application Required, ▲-Work-Based, *-Successful Completion

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IB THEATRE ARTS (SL)**1432IB Grade 11****1434IB Grade 12****1 Credit per Course#******Successful completion of Theatre Arts III for IB year one*******Successful completion of IB year one to go on to IB year two***

In this two-year course, students engage in the in-depth study of the nature, theories, and processes of theatre and theatrical production through time and across cultures. Practical and theoretical applications are components of this course. Students will collaborate with peers to create original theatre and staging, and will conduct significant research into and written analysis of the theory of theatre, including specific theorists and practical applications of theory. SL students also explore and perform a solo theatre piece based on theory.

Note: Students in this course are encouraged to participate in school productions.

IB THEATRE ARTS (HL)**1433IB Grade 11****1435IB Grade 12****1 Credit per Course#******Successful completion of Theatre Arts III for IB year one*******Successful completion of IB year one to go on to IB year two***

In this two-year course, students engage in the in-depth study of the nature, theories, and processes of theatre and theatrical production through time and across cultures. Practical and theoretical applications are components of this course. Students will collaborate with peers to create original theatre and staging, and will conduct significant research into and written analysis of the theory of theatre, including specific theorists and practical applications of theory. HL students also explore and perform a solo theatre piece based on theory.

Note: Students in this course are encouraged to participate in school productions.

IB MUSIC (SL)**9294IB Grade 11****9296IB Grade 12****1 Credit per Course#******Successful completion of previous music courses for IB year one*******Successful completion of IB year one to go on to year two*******Successful completion of Music Theory course preferred. Students must be concurrently enrolled in a performance class.***

These two-year courses include the study of all music, including western and world music, and explore the material needed in an entry-level college music theory, appreciation, or history course. Students study examples of representative scores from each period. Students write musical compositions using music notation software to clarify musical concepts taught. A solo or group performance recording is a requirement of this course. This course prepares students for the standard and/or higher level IB Music Exam, which includes listening, written, performance, and composition (for HL) components.

IB MUSIC (HL)**9295IB Grade 11****9297IB Grade 12****1 Credit per Course#******Successful completion of previous music courses for IB year one*******Successful completion of IB year one to go on to year two*******Successful completion of Music Theory course preferred. Students must be concurrently enrolled in a performance class.***

These two-year courses include the study of all music, including western and world music, and explore the material needed in an entry-level college music theory, appreciation, or history course. Students study examples of representative scores from each period. Students write musical compositions using music notation software to clarify musical concepts taught. A solo or group performance recording is a requirement of this course. This course prepares students for the standard and/or higher level IB Music Exam, which includes listening, written, performance, and composition (for HL) components.

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Health, Physical Education, and Driver Education Courses

Physical Education is an academic discipline that involves the study of human movement and its impact on health and quality of life. Physical Education provides all students access to standards-based instruction that promotes health literacy and the motivation to engage in the health-enhancing physical activity needed to achieve and maintain a balanced healthy life.

Health Education increases health literacy, helps students understand how to achieve and maintain a healthy lifestyle, and fosters the motivation, skills, and self-efficacy necessary to make informed and healthy choices, avoid risky behaviors, and build healthy families, relationships, schools and communities.

Driver Education programs in Virginia schools focus on safe driving attitudes, skill development, and appropriate responses to hazards. The Commonwealth's standards for Driver Education require extended, supervised practice with a licensed parent or guardian to develop precision in the application of skills and processes to effectively manage risks.

Two (2) Health and Physical Education credits are required for both the Standard and Advanced Studies diplomas and may be obtained in the 9th and 10th grades.

General Courses

7300 HEALTH AND PHYSICAL EDUCATION 9

Grade 9

1 Credit

Physical Education instruction is required and emphasizes the participation in lifetime fitness activities and how it relates to personal wellness. Activities include badminton, volleyball, tennis, speed ball, dance, flag football, aerobics, soccer, recreational games, basketball, golf, running, and fitness stations. During the health portion of this course, students will study alcohol, tobacco, and drugs, diseases of the body, mental and emotional health, family life, safety and injury prevention and violence prevention.

7400/7405 HEALTH AND PHYSICAL EDUCATION 10

Grade 10

1 Credit

Physical Education instruction is required and emphasizes the participation in lifetime fitness activities and how it relates to personal wellness. Activities include archery, badminton, tennis, golf, bowling, speed ball, soccer, volleyball, dance aerobics, basketball, running, and other fitness activities. Classroom Driver's Education is a part of the health requirement (course code 7405). Other health instruction includes family life, wellness, and healthy living components. In addition, "Behind the Wheel" instruction is offered as an optional program if certain age and licensing requirements are met. The "Behind the Wheel" fee for 2022-2023 is \$225.00.

Elective Courses

7640 STRENGTH AND BODY I

Grades 11-12

1 Credit

This elective is offered for motivated students seeking daily participation in weight training and cardiovascular fitness. This course will provide the student with the opportunity to design and implement individual fitness routines specific to his or her needs. Participants will gain a working knowledge of muscle groups and the exercises that complement them, along with an understanding of how the human body benefits from cardiovascular activity. The course will be held in the weight room while enjoying a variety of additional fitness-based activities such as plyometrics, speed, and agility drills.

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7650 STRENGTH AND BODY II

Grades 11-12

1 Credit

Upon successful completion of Strength and Body I, this elective is offered for motivated students seeking daily participation in weight training and cardiovascular fitness. This course will provide the student with the opportunity to design and implement individual fitness routines specific to his or her needs. Participants will gain a working knowledge of muscle groups and the exercises that complement them, along with an understanding of how the human body benefits from cardiovascular activity. The course will be held in the weight room while enjoying a variety of additional fitness-based activities such as plyometrics, speed, and agility drills.

7643 COMPETITIVE TEAM SPORTS

Grades 11-12

1 Credit

This course is intended for students interested in coaching team sports at various age levels; and/or students interested in becoming physical education teachers. This course offers a higher level of game play in a controlled setting. Students taking this course will develop strategies for game play, experience conditioning specific to various team sports, and participate in game play in several team sports throughout the year. Sports may include, but are not limited to: football, basketball, volleyball, lacrosse, baseball/softball, floor hockey, soccer, field hockey, team handball, Ultimate Frisbee and tchoukball. In addition, students will participate in the development of tournaments for game play as well as coaching peers for the tournaments. Students may also be required to participate in observation hours of any organized team sport activity in the community.

7653 COMPETITIVE INDIVIDUAL SPORTS

Grades 11-12

1 Credit

This course is intended for students interested in coaching individual sports at various age levels; and/or students interested in becoming physical education teachers. This course offers a higher level of game play in a controlled setting. Students taking this course will develop strategies for competition, experience conditioning specific to various individual sports, and participate in individual sports throughout the year. Sports may include track and field, distance running, golf, tennis, badminton, bowling, archery, and disk golf. Students will participate in the development of tournaments for competition as well as coaching peers for these tournaments. Students may also be required to participate in observation hours of any organized individual sport in the community.

7660 SPORTS MEDICINE I

Grades 10-11

1 Credit

Recommended Background: *Successful completion of Biology

This course is a basic introduction into the field of athletic training and sports medicine. Students study the anatomy and physiology of the skeletal and muscular systems, and kinesiology as they relate to the prevention, evaluation and care of athletic injuries. Students learn and practice emergency medical care for athletes, as well as taping techniques.

Note: 12th grade students may be allowed into this course on a case-by-case basis depending on prior coursework and available space.

7662 SPORTS MEDICINE II ▲

Grades 11-12

1 Credit

Required Background: *Successful completion of Sports Medicine I, completion of an application, and an interview.

The focus of this course is the application of knowledge and understanding gained in Sports Medicine I. Students will have hands-on experiences in preventing, recognizing, evaluating, and providing emergency care for athletic injuries to sports team members under the supervision of a certified athletic trainer. A requirement of this course is that the student must serve as a student assistant for the athletic trainer for at least one sport season after school.

Note: This course requires that students devote time outside the scheduled class period to activities

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occurring in the evening and weekends (minimum of 5 hours per week).

7510 SPORT AND FITNESS FOR LIFE I

Grades 11-12

1 Credit

This elective course is offered for students seeking a more advanced experience in Physical Education. This course will provide exposure to non-competitive wellness activities, lifetime sports, as well as various competitive individual and team sports. Wellness activities such as Pilates, yoga, resistive fitness activities, and aerobic exercise. Wellness concepts focusing on nutrition education, body composition, personal fitness technologies, and stress management will be included. Students will be expected to participate in individual and group class work regarding class topics.

7610 SPORT AND FITNESS FOR LIFE II

Grade 12

1 Credit

****Successful completion of Sport and Fitness for Life I***

This elective course is offered for students seeking a more advanced experience in Physical Education. This course will provide exposure to non-competitive wellness activities, lifetime sports, as well as various competitive individual and team sports. Wellness activities such as Pilates, yoga, resistive fitness activities, and aerobic exercise. Wellness concepts focusing on nutrition education, body composition, personal fitness technologies, and stress management will be included. Students will be expected to participate in individual and group class work regarding class topics.

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English Learner Courses

The courses below are designed for English Learner (EL) students to develop English language proficiency, the teaching of academic vocabulary, key concepts, and background knowledge necessary for success in content courses.

Student Credit Options

- Sequential Elective Credit
- World Language Credit(s): Up to three ESOL course credits can count toward World Language credits.
- Science Credit: Environmental Science counts as one laboratory science credit toward either a standard or advanced diploma

4266 ESOL ENVIRONMENTAL SCIENCE

Grades 9-10

1 Credit

This course is designed for Level I and II English Learners to introduce the student to vocabulary, concepts, phenomena, systems and processes to better understand the natural world. The course will build on the middle school science content and investigations to prepare students for successive entry into Biology to earn verified credit. Instruction will build science literacy through inquiry, student data collection and analysis using appropriate tools, laboratory experiences, and field work including a meaningful watershed experience.

5730 ESOL ENGLISH FOR ACADEMIC PURPOSES

Grades 9-12

1 Credit

This course is designed to develop reading, writing, listening, and speaking skills of Level I or II English Learners. This language development course promotes emerging print literacy while building content knowledge and skills for the language arts standards of learning for English. Students enrolled in this course will concurrently enroll in grade-level English.

5732 ESOL ALGEBRA READINESS

Grades 9-12

1 Credit

Note: Available to ELP Level I and II students that meet qualifying criteria

This course is designed to bridge essential number sense and computational proficiency to generalized algebraic reasoning necessary to successfully complete Algebra I. English language learner students will develop the language skills and vocabulary necessary to make connections between complex mathematical ideas in preparation for Algebra I. Students enrolled in this course will concurrently enroll in Alg I.

5715 FOUNDATIONS OF LITERACY

Grades 9-12

1 Credit

This is an elective course designed to provide direct, explicit, and intensive reading and mathematics instruction to English Learners. This course is designated for English Learners with English Language Proficiency (ELP) level 1 or 2 AND a SLIFE designation who have significant gaps in their home language instruction, and literacy. This course will equip students for success in core classes, instruction will focus on the essential components of literacy. Literacy instruction will encompass phonemic awareness, phonics, reading fluency (including oral skills), vocabulary development, and reading comprehension strategies.

5735 FOUNDATIONS OF MATHEMATICS

Grades 9-12

1 Credit

This is an elective course designed to provide direct, explicit, and intensive reading and mathematics instruction to English Learners. This course is designated for English Learners with English Language Proficiency (ELP) level 1 or 2 AND a SLIFE designation who have significant gaps in their home language instruction, and mathematics. This

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course will equip students for success in core classes, instruction will focus on the essential components of mathematics. Math instruction will include essential components of numeracy, computation, and geometry which include counting (including subitizing), comparisons of quantities and figures, decomposing and recomposing, patterning, estimation, geometry, and generalized algebraic reasoning skills.

5722 ENGLISH LANGUAGE DEVELOPMENT CONCEPTS I

Grades 9-12

1 Credit

Entering English learners develop their English language proficiency through intensive instruction that supports content and academic language development of the Virginia SOL Standards utilizing the four domains—reading, writing, listening, and speaking. This course is aligned with the WIDA English language development (ELD) standards and provides academic language instructions through the WIDA Language Standards of social and instructional, language arts, math, science, and social studies.

5724 ENGLISH LANGUAGE DEVELOPMENT CONCEPTS II

Grades 9-12

1 Credit

Emerging English learners develop their English language proficiency through intensive instruction that supports content and academic language development of the Virginia SOL Standards utilizing the four domains—reading, writing, listening, and speaking. This course is aligned with the WIDA English language development (ELD) standards and provides academic language instructions through the Language Standards of language arts, math, science, and social studies.

5726 ENGLISH LANGUAGE DEVELOPMENT CONCEPTS III

Grades 9-12

1 Credit

Developing English learners develop their English language proficiency through intensive instruction that supports content and academic language development of the Virginia SOL Standards utilizing the four domains—reading, writing, listening, and speaking. This course is aligned with the WIDA English language development (ELD) standards and provides academic language instructions through the Language Standards of language arts, math, science, and social studies.

5728 ENGLISH LANGUAGE DEVELOPMENT CONCEPTS IV

Grades 9-12

1 Credit

Expanding English learners develop their English language proficiency through intensive instruction that supports content and academic language development of the Virginia SOL Standards utilizing the four domains—reading, writing, listening, and speaking. This course is aligned with the WIDA English language development (ELD) standards and provides academic language instructions through the Language Standards of language arts, math, science, and social studies.

Additional Credit Opportunities

3186AP AP COMPUTER SCIENCE PRINCIPLES

Grades 9-12

1 Credit#

This course is designed to focus on computational thinking practices, which enables students to engage with the course content by developing computational artifacts and analyzing data, information, or knowledge represented for computational use. The course will emphasize the following elements: connecting computing (to include creative computing), creating computational artifacts, abstracting, communicating, and collaborating. The course was created to be equivalent to a first-semester introductory college computing course. Students will be prepared to take the year-end AP Computer Science Principles exam for possible college credit.

Advanced Placement Capstone Courses

Schools offering courses: CFHS, NSHS, SHS

22110AP AP CAPSTONE – AP SEMINAR

Grades 10-12

1 Credit#

AP Seminar is the first of two courses in the AP Capstone program, and it is designed to further develop inquiry and research skills as applied to topics and issues of global and/or cultural relevance presented by an AP Capstone trained teacher. With this topic or issue as the centerpiece of class discourse, students learn to employ critical thinking skills such as analysis, synthesis, differentiation, and interpretation; students engage in collaborative teamwork and service-learning experiences. Students participating in this program have required tasks that include a team project, an individual presentation, and a written exam. This course may be included in the requirements for academic programs such as, but not limited to, CGS, and Learn and Serve.

22111AP AP CAPSTONE – AP RESEARCH

Grades 11-12

1 Credit#

AP Research is the second of two courses in the AP Capstone program, and it allows students to put the skills acquired in the AP Seminar course to practice in a Capstone Research Project. The course offers an opportunity for students to explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan and conduct a yearlong mentored, research-based investigation to address a research question. This independent study, executed under the mentorship of an AP Capstone trained teacher, culminates in a scholarly academic thesis in which the student defends and articulates his/her position on his/her chosen subject. This course may be included in the requirements for academic programs such as, but not limited to, APPX , CGS, and Learn and Serve.

Independent Study and Internship Programs

High School students can earn additional high school or college credits through a variety of independent study, distance learning, off-site courses, and work-study programs, after an application and review process. Generally, no independent study or alternative credit class can be arranged for classes already in the master course list. These programs work best for students who work well independently or who have a particular vocational interest or ability. For specific information, students should see school counselors. All courses may not be offered at all schools due to enrollment and availability.

9826 ALL CENTURY INDEPENDENT LEARNERS

Grades 9-12

1 Credit

Students may propose a year-long study of a topic of interest, working primarily under the supervision of a licensed teacher; additional teachers or community mentors may be identified and utilized as resources. To earn credit, students must have their proposal approved, document hours, and must complete and present a substantive product. Assessment is on a pass/fail basis.

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0115 GIFTED AND SECONDARY PROGRAMS (GSP) INDEPENDENT STUDY ▲**Grades 11-12****1 Credit**

Students may propose a year-long study of a topic of interest, working under the supervision of the GSP Resource Teacher and other teacher or community mentors. To earn credit, students must document hours and must complete and present a substantive product. Assessment is on a pass/fail basis.

1519G CGS ADVANCED RESEARCH AND WRITING**Grade 12****1 Credit**

The CGS Advanced Research and Writing course allows students enrolled in the CGS program to progress from novice to expert through researching topics of their personal interest and passion. Students progress through the levels of development beginning with a process where they learn the basics of research, research question development, and presentation. As students' skills improve and growth occurs, the emphasis moves from process to product and presentation. Products are not limited to research papers, but all must include a written research component. At the conclusion of the course, students become independent researchers and focus on the development of college-level research products. During this final step, students are supported by an expert-advisor in the field as they work on their projects, and they present their findings to their expert-advisor, the CGS staff, and the community. Credit for the course is granted in the senior year with successful completion of all components of the course.

9828 LEARN AND SERVE I ▲**9840 LEARN AND SERVE II ▲****Grades 10-12****1 Credit**

These courses develop an appreciation of the concept of service to the community and develop skills necessary to evaluate the impact of service to others. These courses have discussions with public officials and community leaders. Students are introduced to the concept of service-learning and design individual and group projects as a part of the class curriculum. Service projects will require time outside of the classroom.

9097 LEADERSHIP**Grades 9-12****1 Credit**

An interdisciplinary course designed to introduce students to the tasks, strategies, and skills of effective leadership. Course activities will move students from theory to the practical processes of leadership. Basic concepts essential to personal development and organizational leadership behavior are included. This includes the concepts of: team-building, teamwork, and team leading. In addition, this course provides students with an awareness and understanding of current issues relating to the nature and tasks of collaborative leadership behavior. Students will be asked to identify an issue or problem and will practice leadership by developing and implementing a community project.

Specialty Center Courses**0600 FRESHMAN SUCCESS 101****Grade 9****1 Elective Credit**

Freshman Success 101 offers the opportunity for students to explore career options through identifying their personal interests and aligning them with academic curriculum, course offerings, and CTE credentials. Students will also engage in character education and enhance their study and organizational skills. Critical elements of this course are also embedded in first-year center required coursework. The course also includes a service learning component.

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1301 COMMUNICATION FOR LEADERSHIP AND PUBLIC SERVICE

Grade 9

1 Elective Credit

This course will develop and enhance students' ability to speak effectively and listen critically. Students will learn more about communication and how it affects human interaction by participating in individual and group learning activities. Students will learn to write and deliver a variety of speeches and learn to critique themselves and others. Group activities emphasize leadership styles and critical thinking skills. Students develop into ethical and effective communicators, whose integrity and leadership will affect positive change.

Career and Technical Education and Industry Credentials

Stafford Schools offers a wide variety of rigorous and engaging Career and Technical Education (CTE) programs designed to improve academic and technical skills attainment to support students interested in pursuing employment, enlistment, or enrollment after high school. CTE offers leadership opportunities through Career and Technical Student Organizations and delivers instruction through realistic, hands-on applications through state approved forms of Work-Based Learning (WBL). All students are encouraged to seek CTE courses that provide a foundation for their career plans and interests. Courses are offered based on labor market needs, school personnel, enrollment, and availability of resources.

CTE instruction provides relevance through hands-on experiences that prepare students for high-skill, high-wage, and in-demand careers including: employment in the workforce, enlistment in the military, or enrollment in a post-secondary institution/program.

CTE courses are offered in the following program areas:

- Agriculture
- Business and Information Technology
- Career Connections
- Family and Consumer Science
- Health and Medical Science
- Marketing
- Junior Reserve Officer Training Corps (JROTC)
- Technology Education
- Trade and Industrial Education

Workplace Readiness Skills

Virginia's 22 Workplace Readiness Skills (WRS) for the Commonwealth reinforce learning in the classroom and essential durable skills. Attendance, self-discipline, and safety awareness are vital to the successful enrollment and completion of CTE courses. The three core WRS areas include:

- Personal qualities and abilities, like creativity, work ethic, and problem solving;
- Interpersonal skills, like conflict resolution, teamwork, and respect for diversity; and
- Professional competencies, like information security, professionalism, and career and life management.

CTE Completer

Students pursuing either an Advanced Studies Diploma or a Standard Diploma enhance their career plans by enrolling in CTE courses. Sequential electives must be selected from the same discipline or subject area to qualify as sequential electives, i.e. both courses from Agriculture, or both from Business, or both from Marketing, etc.

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CTE Industry Credentials

All students are offered opportunities to earn an industry credential. Credential offerings are based on state alignment to the course, teacher licensure/certification, and funding. Credentials provide students with evidence of advanced educational preparation through industry-validated programs, add value to a transcript for postsecondary education, and demonstrate to a potential employer the student's workforce preparedness. Students should contact their CTE teacher or counselors for more details.

A credential is defined as:

- State-Issued Professional License required for entry into a specific occupation as determined by a Virginia state licensing agency such as Cosmetology, Certified Nurse Aide (CNA), etc.
- Industry Certification from a recognized industry, trade, or professional association validating essential skills of a particular occupation. For example: ServSafe Food Protection Manager Certification offered by the National Restaurant Association, and/or stackable industry certifications leading to a credential such as: Automotive Service Excellence (ASE) Entry-Level Certification Tests, Microsoft Office Specialist (MOS) Examinations; etc.
- Occupational Competency Assessment, a national standardized assessment of skills/knowledge in a specific career and/or technical area such as: NOCTI, Electrical Level One Assessment (National Center for Construction Education and Research (NCCER), etc.
- Workplace Readiness Skills CTE Consortium of States (CTECS).

CTE Industry Credentials

Stafford Schools offer students opportunities to earn an industry credential. Credential offerings are based on state alignment to the course, teacher licensure/certification, and funding. Students should contact their CTE teacher or counselors for more details.

Course Title	Course	Industry Credential Offered
Accounting I	6320	CTECS Workplace Readiness
Accounting II	6321	CTECS Workplace Readiness
Advanced Manufacturing Systems II	8427	CTECS Workplace Readiness
Aerospace Engineering (PLTW)	8428	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Architectural Drawing and Design	8437	CTECS Workplace Readiness
Auto Body Technology I	8676	CTECS Workplace Readiness
Auto Body Technology II	8677	Automotive Service Excellence (ASE) or CTECS Workplace Readiness
Auto Body Technology III	8678	Automotive Service Excellence (ASE) or CTECS Workplace Readiness
Automotive Technology I	8502	Automotive Service Excellence (ASE) or CTECS Workplace Readiness
Automotive Technology II	8507	Automotive Service Excellence (ASE) or CTECS Workplace Readiness
Automotive Technology III	8508	Automotive Service Excellence (ASE) or CTECS Workplace Readiness

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Course Title	Course	Industry Credential Offered
Biomedical Innovations (PLTW)	8382	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Business Law	6131	CTECS Workplace Readiness
Business Management	6135	CTECS Workplace Readiness
DE Business Management	6135DE	CTECS Workplace Readiness
Cabinetmaking I	8604	CTECS Workplace Readiness
Cabinetmaking II	8605	CTECS Workplace Readiness
Carpentry I	8601	CTECS Workplace Readiness
Carpentry II	8602	CTECS Workplace Readiness
Carpentry III	8603	CTECS Workplace Readiness
Child Development and Parenting	8232	CTECS Workplace Readiness
Civil Engineering and Architecture (PLTW)	8430	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Communication Systems	8415	CTECS Workplace Readiness
Computer Integrated Manufacturing (PLTW)	8442	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Computer Information Systems I	6612	Microsoft Office Specialist (MOS) Student Choice Test or CTECS Workplace Readiness
Computer Information Systems II	6613	Microsoft Office Specialist (MOS) Student Choice Test or CTECS Workplace Readiness
Construction Trades	9071	CTECS Workplace Readiness
Cosmetology I	8745	CTECS Workplace Readiness
Cosmetology II	8746	Virginia Cosmetology State License Exam or CTECS Workplace Readiness
Criminal Justice I	8702	CTECS Workplace Readiness
Criminal Justice II	8703	CTECS Workplace Readiness
Culinary Arts I	8275	National Restaurant Association (NRF) ServSafe or CTECS Workplace Readiness
Culinary Arts II	8276	National Restaurant Association (NRF) ServSafe or CTECS Workplace Readiness
Culinary Arts Specialization	8279	END of Course American Culinary Federation (ACF), if applicable or CTECS Workplace Readiness
Cybersecurity I	6302	CTECS Workplace Readiness
Cybersecurity II	6304	CompTIA Network+ or CTECS Workplace Readiness

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Course Title	Course	Industry Credential Offered
Cybersecurity III	6306	CompTIA Network+, CompTIA Security+, or CTECS Workplace Readiness,
DE VA Teachers for Tomorrow I	9062 9062D	CTECS Workplace Readiness
DE VA Teachers for Tomorrow II	9072 9072D	Teacher Praxis Core Test or CTECS Workplace Readiness
Database Design and Management	6660S	CTECS Workplace Readiness
Design, Multimedia, and Web Technologies I	6630	Microsoft Office Specialist (MOS) Student Choice Test or CTECS Workplace Readiness
Design, Multimedia, and Web Technologies II	6631	Microsoft Office Specialist (MOS) Student Choice Test or CTECS Workplace Readiness
Digital Applications	6611	CTECS Workplace Readiness
Digital Electronics (PLTW)	8440	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Digital Visualization	8459	CTECS Workplace Readiness
Drafting: Fundamentals	8530	CTECS Workplace Readiness
Drafting: Mechanical	8531	American Design Drafting Association (ADDA), Mechanical or CTECS Workplace Readiness
Drafting: Architectural	8532	American Design Drafting Association (ADDA), Architectural or CTECS Workplace Readiness
Drafting: Advanced	8562	American Design Drafting Association (ADDA), Architectural or CTECS Workplace Readiness
Early Childhood Education and Services I	8285	CTECS Workplace Readiness
Early Childhood Education and Services II	8286	National Occupational Competency Testing Institute (NOCTI) Early Childhood or CTECS Workplace Readiness
Economics and Personal Finance	6120	WISE Financial Literacy
Electricity I	8533	CTECS Workplace Readiness
Electricity II	8534	CTECS Workplace Readiness
Electricity III	8535	CTECS Workplace Readiness
Emergency Medical Technician I	8333	CTECS Workplace Readiness
Emergency Medical Technician II, III	8334/ 8335	Emergency Medical Technician (EMT) State License or CTECS Workplace Readiness
Emergency Medical Telecommunication	8337	Emergency Telecommunicator Certification (ETC) or CTECS Workplace Readiness
Employment for Education I	9085	CTECS Workplace Readiness
Engineering Analysis and Applications	8451	CTECS Workplace Readiness

Course Title	Course	Industry Credential Offered
Engineering Design and Development (PLTW)	8443	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Engineering Drawing and Design	8436	CTECS Workplace Readiness
Engineering Exploration	8450	CTECS Workplace Readiness
Engineering Practicum	8453	CTECS Workplace Readiness
Engineering Studies	8491	CTECS Workplace Readiness
Family Relations	8225	CTECS Workplace Readiness
Fashion Marketing I	8140	CTECS Workplace Readiness
Fashion Marketing II	8145	CTECS Workplace Readiness
Firefighter I and II	8705/8706	Firefighter I and II Certification Examination or CTECS Workplace Readiness
Geospatial Technology II	8424	CTECS Workplace Readiness
Graphic Imaging Technology I	8660	SkillsUSA PrintED Graphic Communications or CTECS Workplace Readiness
Graphic Imaging Technology II	8661	SkillsUSA PrintED Graphic Communications or CTECS Workplace Readiness
Greenhouse Plant Production and Management	8035	CTECS Workplace Readiness
Health Assisting Careers	8331	National Occupational Competency Testing Institute (NOCTI) Health Assistant or CTECS Workplace Readiness
Heating, Ventilation, Air Conditioning and Refrigeration I	8550	CTECS Workplace Readiness
Horticulture Sciences	8034	CTECS Workplace Readiness
Human Body Systems (PLTW)	8380	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
IB Business and Management and Supervision (SL)	IB6135	CTECS Workplace Readiness
Imaging Technology	8455	CTECS Workplace Readiness
Information Technology Fundamentals	6670	TestOut IT Fundamentals Pro Certification or CTECS Workplace Readiness
Introduction to Engineering Design (PLTW)	8439	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Introduction to Fashion Careers	8248	CTECS Workplace Readiness
Introduction to Health and Medical Sciences	8302	CTECS Workplace Readiness

Course Title	Course	Industry Credential Offered
Introduction to Interior Design	8255	CTECS Workplace Readiness
Java Programming	6661	Certiport IT Specialist Certification Exam or CTECS Workplace Readiness
Landscaping	8036	CTECS Workplace Readiness
Life Planning	8227	CTECS Workplace Readiness
Manufacturing Systems	8425	CTECS Workplace Readiness
Marketing	8120	CTECS Workplace Readiness
Strategic Marketing	8130	CTECS Workplace Readiness
Masonry I	8512	CTECS Workplace Readiness
Masonry II	8513	CTECS Workplace Readiness
Masonry III	8514	CTECS Workplace Readiness
Master Barbering I	8743	CTECS Workplace Readiness
Master Barbering II	8744	Virginia Master Barbers State License Exam or CTECS Workplace Readiness
Medical Assistant I	8345	CTECS Workplace Readiness
Medical Interventions (PLTW)	8381	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Military Science I (JROTC)	7913	Armed Services Vocational Aptitude Battery (ASVAB) or CTECS Workplace Readiness
Military Science II (JROTC)	7916	Armed Services Vocational Aptitude Battery (ASVAB) or CTECS Workplace Readiness
Military Science III (JROTC)	7918	Armed Services Vocational Aptitude Battery (ASVAB) or CTECS Workplace Readiness
Military Science IV (JROTC)	7919	Armed Services Vocational Aptitude Battery (ASVAB) or CTECS Workplace Readiness
Nurse Aide I	8360	CTECS Workplace Readiness
Nurse Aide II	8362	Certified Nurse Aide (C.N.A.) Exam or CTECS Workplace Readiness
Nutrition and Wellness	8229	CTECS Workplace Readiness
Office Specialist I	6740	CTECS Workplace Readiness
Office Specialist II	6741	CTECS Workplace Readiness
Office Specialist III	6742	CTECS Workplace Readiness
Plumbing I	8551	CTECS Workplace Readiness

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Course Title	Course	Industry Credential Offered
Principles of Biomedical Science (PLTW)	8379	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Principles of Business and Marketing	6115	CTECS Workplace Readiness
Principles of Engineering (PLTW)	8441	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Production Systems	8447	CTECS Workplace Readiness
Programming I	6640	CTECS Workplace Readiness
Programming I DE	6640DE	CTECS Workplace Readiness
Programming II	6641	CTECS Workplace Readiness
DE Programming II	6641DE	CTECS Workplace Readiness
Small Engine Technology I	8725	CTECS Workplace Readiness
Small Engine Technology II	8726	CTECS Workplace Readiness
Sports and Entertainment Marketing	8175	CTECS Workplace Readiness
Sports and Entertainment Management	8177	CTECS Workplace Readiness
Technical Drawing and Design	8435	CTECS Workplace Readiness
Television and Media Production I	8688	CTECS Workplace Readiness
Television and Media Production II	8689	CTECS Workplace Readiness
Television and Media Production III	8690	CTECS Workplace Readiness

Career and Technical Education Courses

CTE Course Offerings Key and Note:

- Application required

NOTE: Number of credits indicates the number of instructional blocks in which instruction is delivered

9062DE DE VIRGINIA TEACHERS FOR TOMORROW I ▲

Grades 11

1 Credit

Please refer to Teachers for Tomorrow Pathway

Teachers for Tomorrow (TfT) is an approved Virginia Department of Education (VDOE) program offered to high school juniors and seniors interested in pursuing a career in education. The program is designed to attract high school students to the field of education through exposure to a world-class curriculum and hands-on experience that focuses on teaching. This course sequence provides an overview of the development of human beings from birth to adolescence to explore K-12 education. Students build a foundation for the structure and governance of teaching, and how to apply professional teaching techniques in the classroom..

9072DE DE VIRGINIA TEACHERS FOR TOMORROW II

Grades: 12

1 Credit

Required Background: DE Virginia Teachers for Tomorrow I

Students will continue to explore careers in Education and Training. The primary focus of the class is to act as the teacher applying teaching methods and strategies previously learned. This course allows students to prepare for careers in education as they research post-secondary options, learn about the teacher certification process, and participate in a practicum experience.**NOTE: Stafford Schools will offer a letter of intent to hire students who successfully complete this program, complete a College/University Education program, and are eligible to earn a teacher license.**

Junior Reserve Officer Training Corps (JROTC)

Stafford Schools offers Junior Reserve Officer Training Corps (JROTC) programs for four branches of the United States Military. Students interested in participating in JROTC can only enroll in the branch offered at their high school. A JROTC curriculum consists of three components: Aerospace Science (AS), Leadership Education (LE) and Wellness.

Air Force JROTC (Housed at North Stafford High School)

AS is the main component of the AFJROTC program and includes Basic Aviation History and Advanced, Advanced Science of Flight, Exploring Space, Global Awareness, and/or Survival. AS acquaints students with the historical, scientific, and technical aspects of aerospace. LE is the AFJROTC curriculum component aimed at developing leadership skills; LE acquaints students with the practical application of life skills to include discipline, responsibility, leadership, followership, citizenship, customs and courtesies, cadet corps activities, study habits, time management, communication skills, and leadership and management studies. Basic military drill is incorporated for each level course. The Wellness component is keyed to the abilities of the individual students with the goal of meeting or exceeding the Presidential Physical Fitness Standards. The objectives of AFJROTC are to educate and train high school cadets in citizenship; promote community service; instill responsibility, character and self-discipline; and provide instruction in air and space fundamentals. The basic history course is taught every year, and the advanced courses are rotated annually.

7913AF AIR FORCE MILITARY SCIENCE I

Grades 9-12

1 Credit

This is the basic Aerospace Science (AS) course for all new cadets. It is an aviation history course focusing on the development of flight throughout the centuries. It starts with ancient civilizations, then progresses through time to modern day. The emphasis is on civilian and military contributions to aviation; the development, modernization, and transformation of the Air Force; and a brief astronomical and space exploration history. It is interspersed with concise

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overviews of the principles of flight to include basic aeronautics, aircraft motion and control, flight power, and rockets. Throughout the course, there are readings, videos, hands-on activities, and in-text and student workbook exercises to guide in the reinforcement of the materials. The leadership portion includes heritage, organization, and traditions of the Air Force; individual self-control, citizenship in the United States, and wellness, health and fitness. AS I cadets are welcome to serve as Group Staff trainees.

7916AF AIR FORCE MILITARY SCIENCE II

Grades 10-12

1 Credit

Recommended Background: Air Force Military Science I

This advanced course is designated to acquaint the student with the aerospace environment, the human requirements of flight, principles of aircraft flight, and principles of navigation. The course begins with a discussion of the atmosphere and weather. After developing an understanding of the environment, how that environment affects flight is introduced. Discussions include the forces of lift, drag, thrust, and weight. Students also learn basic navigation including map reading, course plotting, and the effects of wind. The portion on the Human Requirements of Flight contains information on human physiology. The leadership portion of the course concentrates on Life Skills and Career Opportunities. Topics include choosing one's path, job searching, financial planning, and career opportunities. AS III cadets serve as trainers in class and are encouraged to serve on Group Staff.

7918AF AIR FORCE MILITARY SCIENCE III

Grades 10-12

1 Credit

Recommended Background: Air Force Military Science II

This science course includes up-to-date information in space science and space exploration. The course begins with the interest in astronomy and early ideas of the heavens, through the Renaissance, and on to modern astronomy. It provides an in-depth study of the Earth, Sun, stars, Moon, and solar system, including the terrestrial and the outer planets. It discusses issues critical to travel in the upper atmosphere such as orbits and trajectories, unmanned satellites, and space probes. It investigates the importance of entering space and discusses manned and unmanned space flights, focusing on concepts surrounding spaceflight, space vehicles, launch systems, and space missions. The course covers human aspects of spaceflight, focusing on the human experience in space. It also examines advances in space technology, including robotics in space, the Mars Rover, and commercial uses of space.

7919AF AIR FORCE MILITARY SCIENCE IV

Grades 10-12

1 Credit

Recommended Background: Air Force Military Science III

This is a customized course about the world's cultures. The course is specifically created for the US Army, Marine Corps, Navy, and Air Force JROTC programs. It acquaints students with world cultures through the study of world affairs, regional studies, and cultural awareness. The course delves into history, geography, religions, languages, culture, political systems, economics, social issues, environmental concerns, and human rights. It looks at major events and significant figures that have shaped each region. Throughout the course, there are readings, video segments, hands-on activities, other optional activities, technology enrichment, and assessments to guide in the reinforcement of the materials. 21st century skills as defined by the Partnership for 21st Century Skills are integrated into the course. The leadership portion of the course provides exposure to the fundamentals of management.

Army JROTC (Housed at Colonial Forge High School)

The Army Junior Reserve Officers' Training Corps (JROTC) Program of Instruction focuses on the development of better citizens by building skills in leadership, citizenship, life success, geography, physical fitness/wellness, first aid, and national security issues in a structured, interactive environment. The Army JROTC program is a cooperative effort on the part of the Department of the Army, the Department of Education, and host institutions to provide secondary school students opportunities for total development.

The program produces successful students and productive adults while fostering in each school a more constructive and disciplined learning environment. Army JROTC is the centerpiece of the Department of Defense's commitment to America's Promise for Youth through its emphasis on service learning, community service and teen anti-drug efforts. Mastery of these concepts is accomplished through classroom and hands-on instruction, placement of cadets in key leadership positions, and participation in co-curricular Teams. Satisfactory completion of the program can lead to

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advanced placement credit in ROTC Programs (Collegiate level) or advanced rank in the US Armed Forces.

7913AR ARMY MILITARY SCIENCE I

Grades 9-12

1 Credit

The first level course engages students in the practice of basic citizenship customs, traditions and in the exploration of opportunities for non-military and military service. The course consists of three units of instruction: Citizenship in Action, Leadership Theory and Application, and Foundation for Success. These modules orient cadets to the purpose of the Army JROTC program, their roles as cadets and the organization of the Department of Defense. Cadet leadership potential is further developed through the application of leadership principles, values, and strategies. Cadets learn to develop and expand their abilities to resolve conflict and prevent violence. This unit helps cadets prepare for life after high school by reinforcing the importance of career and personal financial planning.

7916AR ARMY MILITARY SCIENCE II

Grades 10-12

1 Credit

Recommended Background: Army Military Science I

The second level of Military Science builds on the first year of instruction. The curriculum focuses on Wellness, Fitness and First Aid where cadets are provided information and strategies needed to take responsibility for their physical and mental wellness, learn how to assess their level of fitness, develop plans for nutrition and exercise improvement habits, and learn strategies to control stress. This unit also helps cadets to make responsible choices about substance use and measures and develop proficiency in providing basic first aid. In Geography, Map Skills, and Environmental Awareness, cadets learn map reading and land navigational skills and develop global awareness as they compare physical, political, economic and cultural elements of continents, regions, and countries.

7918AR ARMY MILITARY SCIENCE III

Grades 11-12

1 Credit

Recommended Background: Army Military Science II

The third level of Military Science instruction incorporates Citizenship in American History and Government, while continuing to expand the cadet's knowledge acquired in previous units. The curriculum builds on the basic skills and interest for participation in civic and political life. Cadets actively engage in the curriculum to explore the origins, structure, rights, and responsibilities of the American constitutional government. Cadets learn to apply problem solving strategies to current political and social issues. In addition, cadets are placed in positions of greater responsibility within the chain of command and staff to manage administrative and leadership responsibilities.

7919AR ARMY MILITARY SCIENCE IV

Grade 12

1 Credit

Recommended Background: Army Military Science III

The fourth level of Military Science provides an opportunity for cadets to apply the knowledge learned during the previous three years of instruction. Cadets serve as assistant instructors for selected subjects. Fourth year cadets are responsible for the daily cadet Administration of the Corps of Cadets and perform in command and staff positions. Key components of the fourth year of instruction are development and implementation of Service Learning and Community Service initiatives within the secondary school environment and surrounding communities. Level IV cadet leaders serve as lead planners for the annual Military Ball, Awards Ceremony, major field trips and Co-Curricular Team competitions.

Marine Corps JROTC (Housed at Mountain View High School)

The Marine Corps JROTC (MCJROTC) is a cadet-run organization that teaches basic leadership, discipline, self-confidence, and encourages teamwork. Cadets are taught basic military knowledge, rules, regulations, and etiquette. Cadets are given opportunities to gain leadership roles and join MCJROTC teams. There is no obligation to join the military by taking MCJROTC courses, but cadets receive multiple benefits if they do decide to join any of the four services.

MCJROTC cadets also participate in a number of outside activities throughout the school year and during the

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summer months. These opportunities are designed to stimulate learning by hands-on experience and to reinforce classroom instruction. Some of these co- curricular activities include the Drill, Air Rifle Marksmanship, CyberPatriot, and Raider Challenge Teams as well as community service events. Military/leadership training and orientation visits to various military bases and local colleges may be conducted during the summer months.

7913MC MARINE CORPS MILITARY SCIENCE I

Grades 9-11

1 Credit

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.

7916MC MARINE CORPS MILITARY SCIENCE II

Grades 10-12

1 Credit

Recommended Background: Marine Corps Military Science I

This second course builds on the general introduction provided in Marine Corps I, to further develop the traits of citizenship and leadership in cadets, and to introduce cadets to technical areas of marine science. The course provides ongoing history, communication techniques, disciplined study habits, management skills, first aid, drug abuse prevention, map reading, physical fitness, and workplace readiness skills.

7918MC MARINE CORPS MILITARY SCIENCE III

Grades 11-12

1 Credit

Recommended Background: Marine Corps Military Science II

This third course broadens the understanding of students in the operative principles of military leadership, the concept and significance of teamwork, the intrinsic value of good order and discipline in the accomplishment of objectives, the fundamentals of American democracy, and to expand their understanding of marine academic subjects. The course provides ongoing instruction in leadership and discipline, Military Justice, International Law and the Sea, National Strategy, Maneuvering Board, Challenges of Future, Marine Research, Electricity, and Marine Electronics.

7919MC MARINE CORPS MILITARY SCIENCE IV

Grade 12

1 Credit

Recommended Background: Marine Corps Military Science III

This fourth course focuses solely on practical leadership. The intent is to assist students in understanding leadership and improving their leadership skills by putting them in positions of leadership, under supervision, then helping them analyze the reasons for their varying degrees of success throughout the year. Classroom activities include seminars, reading assignments, classroom presentations, and practical work with younger cadets. The course curriculum includes instruction in theoretical and applied aspects of leadership, training, and evaluation of performance. Students will become aware of the techniques used to create motivation, develop goals and activities for a work group, and the proper ways to set a leadership example. Cadets will also apply these principles when dealing with younger cadets in the areas of military drill and inspections, athletic events, and in other school activities.

Navy JROTC (Housed at Brooke Point and Stafford High Schools)

NJROTC is a cadet-run organization that teaches basic leadership, discipline, self-confidence, and encourages teamwork. Cadets are taught basic military knowledge, rules, regulations, and etiquette. Cadets are given opportunities to gain leadership roles and join JROTC teams. There is no obligation to join the military by taking JROTC courses, but cadets receive multiple benefits if they do decide to join any of the four services.

NJROTC cadets also participate in a number of outside activities throughout the school year and during the summer months. These opportunities are designed to stimulate learning by hands-on experience and to reinforce classroom instruction. Some of these activities include: School and local activities such as drill teams, rifle teams, orienteering,

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unit athletics, parades, field days, and nonpolitical community activities. Military/leadership training, orientation visits to various naval and military bases, and cruises aboard U.S. naval vessels may be conducted during the summer months.

7913NA NAVY MILITARY SCIENCE I

Grades 9-11

1 Credit

This first course introduces students to the meaning of citizenship, the elements of leadership, and the value of scholarship in attaining life goals; engenders a sound appreciation for the heritage and traditions of America, with recognition that the historically significant role of sea power will be important in America's future; and develops in each cadet a growing sense of pride in his/her organization, associates, and self. These elements are pursued at the fundamental level. The course includes Maritime Geography, Sea Power, Introductions to Navigation, Health Education, First Aid, and Drug, Alcohol, and Tobacco Abuse Prevention.

7916NA NAVY MILITARY SCIENCE II

Grades 10-12

1 Credit

Recommended Background: Navy Military Science I

This second course builds on the general introduction provided in Naval Science 1, to further develop the traits of citizenship and leadership in cadets, introduce cadets to technical areas of naval science, and engender a deeper awareness of the vital importance of the world oceans to the continued well-being of the United States. The course provides ongoing instruction in leadership theory, Naval Orientation, Citizenship, Maritime History, and Nautical Sciences including Oceanography, Meteorology, Astronomy and Physical Science.

7918NA NAVY MILITARY SCIENCE III

Grades 11-12

1 Credit

Recommended Background: Navy Military Science II

This third course broadens the understanding of students in the operative principles of military leadership, the concept and significance of teamwork, the intrinsic value of good order and discipline in the accomplishment of objectives, the fundamentals of American democracy, and to expand their understanding of naval academic subjects. The course provides ongoing instruction in leadership and discipline, Military Justice, International Law and the Sea, National Strategy, Maneuvering Board, Challenges of Future, Navy Research, Electricity, and Naval Electronics.

7919NA NAVY MILITARY SCIENCE IV

Grade 12

1 Credit

Recommended Background: Navy Military Science II

This fourth course focuses solely on practical leadership. The intent is to assist students in understanding leadership and improving leadership skills through leadership positions, under supervision, then helping them analyze the reasons for their varying degrees of success throughout the year. Classroom activities include seminars, reading assignments, classroom presentations, and practical work with younger cadets. The course curriculum includes instruction in theoretical and applied aspects of leadership, training, and evaluation of performance. Students will become aware of the techniques used to create motivation, develop goals and activities for a work group, and the proper ways to set a leadership example. Cadets will also apply these principles when dealing with younger cadets in the areas of military drill and inspections, athletic events, and in other school activities.

Agriculture and Natural Resources

Future Farmers of America (FFA) is the co-curricular organization for horticulture students.

8034 HORTICULTURE SCIENCES •

Grades 10-12

1 Credit

Students develop the necessary knowledge, skills, habits, and attitudes for entry-level employment and advancement in areas such as floriculture, landscape design, greenhouse operation, nursery plant production, and turf management. They receive instruction in using soil and other plant-growing media and in identifying, propagating, and growing horticultural plants in the greenhouse and land laboratory.

Schools offering course: NSHS

8035 GREENHOUSE PLANT PRODUCTION AND MANAGEMENT

Grades 10-12

2 Credits

Recommended Background: Horticulture Sciences

Students enrolled in this course learn the operating procedures for a greenhouse. Units of instruction in this course include identification of plants; growing greenhouse crops; producing and maintaining nursery crops; establishing, maintaining, and designing landscape planting; establishing and maintaining turf grass; and operating a flower shop and garden center.

Schools offering course: NSHS

8036 LANDSCAPING

Grades 11-12

2 Credits

Recommended Background: Horticulture Sciences

In this course, students develop 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.

Schools offering course: NSHS

Business and Information Technology

Future Business Leaders of America (FBLA) is the co-curricular organization for Business and IT students.

6320 ACCOUNTING I

Grades 10-12

1 Credit

Recommended Background: Digital Applications

Students study the basic principles, concepts, and practices of the accounting cycle for various business structures with an emphasis on sole proprietorships and partnerships. Students learn fundamental accounting procedures using manual and electronic systems.

6321 ACCOUNTING II

Grades 11-12

1 Credit

Required Background: Accounting I

Students gain in-depth knowledge of accounting procedures and techniques used to solve problems and make financial decisions for various business structures with an emphasis on corporations. Students also learn to use accounting and/or spreadsheet software to analyze and interpret business applications.

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6131 BUSINESS LAW**Grades 11-12****1 Credit**

Students examine the foundations of the American legal system by learning concepts related to laws affecting business and individuals. Topics include contracts, individual rights and responsibilities, crimes, law enforcement, and the courts.

6135 BUSINESS MANAGEMENT**Grades 10-12****1 Credit**

Students study management concepts and leadership styles as they explore business functions, economics, various business structures, and management responsibilities. Supervision, human relations, communication, and employability skills are enhanced.

6135DE DE BUSINESS MANAGEMENT**Grades 10-12****1 Credit#**

This dual enrollment course exposes students to the functions and topics of modern business, including: economics, management, finance, accounting, marketing, production, international business, and small business. Students study management concepts and leadership styles as they explore various business structures and management responsibilities. Supervision, human relations, communication, decision making and employability skills are enhanced in this one year dual enrollment course.

6612 COMPUTER INFORMATION SYSTEMS I**Grades 9-12****1 Credit*****Recommended Background: Digital Applications***

Students use introductory word processing, spreadsheet, database, and presentation software to complete practical application and software integration activities. They explore computer concepts, operating systems, and emerging technologies.

6613 COMPUTER INFORMATION SYSTEMS II**Grades 10-12****1 Credit*****Required Background: Computer Information Systems I***

Students apply problem solving through advanced word processing, spreadsheet, database, presentation, and integration of software. They learn advanced computer concepts, operating systems, and emerging technologies..

6302 CYBERSECURITY I**Grades 10-12****1 Credit*****Required Background: Information Technology Fundamentals***

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. 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. Skills related to information technology basics, Internet fundamentals, network systems, computer maintenance/upgrading/troubleshooting, computer applications, programming, graphics, Web page design, and interactive media are introduced.

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6304 CYBERSECURITY II**Grades 11-12****1 Credit*****Required Background: Cybersecurity I***

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. This course may cover software-based network operating systems, such as Windows Server or Linux, to prepare students with a foundation in computer network administration.

6306 CYBERSECURITY III**Grades 11-12****1 Credit*****Required Background: Cybersecurity II***

Students explore security analysis and network security, monitoring and detecting security incidents in information systems and networks. The course introduces tools and tactics to manage cybersecurity risks, identify common threats, evaluate an organization's security, collect and analyze cybersecurity intelligence, and handle cybersecurity incidents. Students will understand threats, attacks and vulnerabilities, architecture and design considerations in a business environment, implementation of security operations, risk and incident response, ethics, and cryptography. Instruction will emphasize preparation for industry certification.

6660S DATABASE DESIGN AND MANAGEMENT**Grades 10-11****1 Credit*****Required Background: Information Technology Fundamentals***

This course includes database design and Structured Query Language (SQL) programming. Students study database fundamentals, including database development, modeling, design, and normalization. In addition, students are introduced to database programming with SQL. Students gain the skills and knowledge needed to use features of database software and programming to manage and control access to data.

Schools offering: BPHS**6630 DESIGN, MULTIMEDIA, AND WEB TECHNOLOGIES I****Grades 10-12****1 Credit*****Recommended Background: Digital Applications or Computer Information Systems I***

Students develop skills in creating desktop publications, multimedia presentations/projects, and websites using industry standard application software. Students incorporate principles of layout and design in completing publications and projects.

6631 DESIGN, MULTIMEDIA, AND WEB TECHNOLOGIES II**Grades 10-12****1 Credit*****Required Background: Design, Multimedia, and Web Technologies I***

Students develop advanced skills in creating interactive media, Web sites, and publications for print and electronic distribution. Students design portfolios that may include business cards, newsletters, mini- pages, Web pages, multimedia presentations/ projects, calendars, and graphics.

6611 DIGITAL APPLICATIONS**Grades 9-12****1 Credit**

This course is designed for secondary school students to develop real-life, outcome-driven approach skills for digital citizenship, basic computer operations, keyboarding, application software (word processing, spreadsheets,

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multimedia applications, databases), and career exploration. This course promotes skills that can be applied across the curriculum and offers preparation relevant to 21st century skills and post-secondary education.

6120 ECONOMICS AND PERSONAL FINANCE (also listed under History and Social Sciences)

Grades 10-12

1 Credit

This course presents economic concepts, the interdependence of the world's economies, and skills necessary to navigate the financial decisions faced to make informed decisions related to career exploration, budgeting, banking, credit, insurance, spending, taxes, saving, investing, buying/leasing a vehicle, living independently, and inheritance. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success. The course will assist in the development of thinking skills that include analyzing real-world situations, economic reasoning, decision-making, and problem-solving. In order to assist in meeting diploma requirements for graduation, all students will take the WISE Financial Literacy test (state-approved industry credential) and complete an online learning experience through completion of the Ever-Fi Financial Literacy module.

NOTE: This course is a graduation requirement for all students.

6670 INFORMATION TECHNOLOGY FUNDAMENTALS

Grades 9-11

1 Credit

Information Technology Fundamentals introduces the essential technical and professional skills required for students to pursue programs leading to professional careers and information technology certifications. The course introduces skills related to digital technology, digital applications, maintenance/upgrading/ troubleshooting, and networking fundamentals. Students also explore ethical issues related to computers and Internet technology and examine web pages and game design.

6661 JAVA PROGRAMMING

Grade 12

1 Credit

Students continue to study Java in preparation for industry certification. Students will also complete an independent or collaborative project where they develop a program to benefit their community. Students may have the opportunity to participate in a mentorship with industry professionals.

Schools offering course: STAT IT and Cyber4+; BPHS and CFHS

6115 PRINCIPLES OF BUSINESS AND MARKETING

Grades 9-10

1 Credit

Students explore the roles of business and marketing in the global economy. They learn to make decisions as consumers, wage earners, and citizens. Students will also enhance their interpersonal, communication, and employability skills.

6640 PROGRAMMING I

Grades 10-12

1 Credit

Recommended Background: Digital Applications or Computer Information Systems I

Students explore computer concepts, use logic procedures, and implement programming procedures using one or more programming languages, such as Visual Basic. In addition, HTML is used to program Web pages.

6640DE DE PROGRAMMING I

Grades 11-12

1 Credit#

Required Background: Information Technology Fundamentals

This dual enrollment course provides an exploration of construction, algorithm development, coding, debugging, and documentation of console and graphical user interface applications, principles and practices of software

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development. Includes instruction in critical thinking, problem solving skills, and essential programming logic in structured and object-oriented design using contemporary tools.

Schools offering course: STAT IT and Cyber4+; BPHS and CFHS

6641 PROGRAMMING II

Grades 11-12

1 Credit

Required Background: Programming I

Building on a foundation of programming skills, students will use object-oriented programming to develop applications for Windows, database, multimedia, games, mobile, and/or Web environments. Students will have the opportunity to explore and create applications related to the information technology and game design industries.

6641DE DE PROGRAMMING II

Grades 11-12

1 Credit#

Required Background: Programming I

Dual Enrollment courses that provide skills for solving complex problems and working with advanced topics using object-oriented programming. Topics include data structures, graphical user interfaces, simple database connectivity, sorting, and searching.

6640S STAT PROGRAMMING

Grades 10-12

1 Credit

Required Background: Information Technology Fundamentals

This speciality course is exclusive to the STAT Information Technology cohort. This course teaches the fundamentals of programming through computer concepts, use logic procedures, and implement programming procedures using one or more programming languages. Students use object-oriented programming to develop database applications, interactive multimedia applications including game applications, mobile applications, and web applications. Students continue to develop their employability skills as they research pathways for continuing education and careers in the information technology industry.

School offering course: BPHS

Marketing

Distributive Education Clubs of America (DECA) is the co- curricular organization for marketing students.

9085 EMPLOYMENT FOR EDUCATION I ▲

Grades 9-11

1 Credit

Required Background: Application and Interview

This course is available to 11th and 12th grade students to complete an application and interview process, and if selected, will be enrolled by their case manager. The course enables students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students will learn ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self-advocacy, customer-service, and life skills. Students explore labor market needs through an applied employment education format and participate in work-based learning experiences.

8140 FASHION MARKETING I

Grades 10-12

1 Credit

Recommended Background: Interest in fashion career

Students develop general marketing skills necessary for successful employment in fashion marketing, general marketing skills applied to the apparel and accessories industry, and specialized skills unique to fashion marketing. Personal selling, sales promotion, purchasing, physical distribution, market planning, and product/ service technology are part of this course.

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#-Weighted, ●-Application Required, ▲-Work-Based, *-Successful Completion

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8145 FASHION MARKETING II**Grades 11-12****1 Credit*****Required Background: Fashion Marketing I***

Students with a career interest in fashion marketing gain in-depth knowledge of the apparel and accessories industry and skills important for supervisory-management employment in apparel businesses. They develop advanced skills unique to fashion marketing and advanced general marketing skills applied to the apparel and accessories industry. Professional selling, sales promotion, buying, merchandising, marketing research, product/ service technology, and supervision related to the content are part of this course.

8120 MARKETING**Grades 10-12****1 Credit**

Students are introduced to the functions and foundations involved in the marketing of goods, services, and ideas and achieve the skills necessary for successful marketing employment. Students study risk management, selling, promotion, pricing, purchasing, marketing-information management, product/service planning, distribution, and financing. Foundation skills include economics, human resources, and marketing and business abilities necessary for success in marketing occupations.

8130 STRATEGIC MARKETING**Grades 11-12****1 Credit*****Required Background: Marketing***

Students learn to leverage marketing activities to best differentiate themselves and their businesses. They will participate in supervisory and management activities focusing on the marketing mix, purchasing, financing, human resources, global marketing, pricing, distribution, selling, operations research, and promotion. Students will prepare for marketing careers and postsecondary education, continuing to enhance self-presentation, communication, and leadership skills. Students will participate in Work-Based Learning and DECA co-curricular events as a part of the course.

8175 SPORTS AND ENTERTAINMENT MARKETING**Grades 10-12****1 Credit**

Students are introduced to the functions and foundations involved in the marketing of goods and services as they relate to the sports, entertainment, and recreational marketing field. Students develop skills in the areas of marketing analysis, event marketing, communications, and human relations.

8177 SPORTS AND ENTERTAINMENT MANAGEMENT**Grades 11-12****1 Credit*****Required Background: Sports and Entertainment Marketing***

Students will continue their study of the sports, entertainment, and recreation (SER) industry including the impact of electronic commerce and international marketing in this area. Other topics include market research, market segmentation, and sponsorship as well as planning, implementing, and evaluating SER events, working with agents and personal managers, and appraising the role of labor unions in SER. Additional study will be focused on developing a career plan in the sports, entertainment, and recreation area.

Health and Medical Sciences

HOSA-Future Health Professionals is the co-curricular organization for Health and Medical Sciences students.

8333 EMERGENCY MEDICAL TECHNICIAN I •▲

Grades 11-12

1 Credit

Recommended Background: Introduction to Health and Medical Sciences

This program is accredited by the Virginia Office of Emergency Medical Services (OEMS) and requires students to be 16 years of age by the first day of school, provide documentation of immunizations and a negative drug screen, capability to read technical reading level of at least grade 10, and a social security number. In these courses, students become skilled in identifying and dealing with emergencies such as bleeding, fractures, airway obstruction, and cardiac arrest. Instruction emphasizes proper care and use of common emergency equipment and safe methods for lifting, moving, and transporting injured persons. Supervised on-the-job training and patient-care experiences are part of the instructional program. Program completers may take the EMT state certification examination administered by the Virginia Department of Health. Students are encouraged but not required to consider membership with a volunteer rescue organization. NOTE: The EMT courses require students to devote time outside the school day to participate in related activities occurring in the evening and on weekends. Cardiopulmonary Resuscitation (CPR) certification is required prior to the start of class through AHA Healthcare provider or ARC Professional Cardiopulmonary Resuscitation.

Schools offering course: CFHS, SHS

8334 EMERGENCY MEDICAL TECHNICIAN II ▲

Grades 11-12

1 Credit

Note: See description above. Students must be concurrently enrolled in EMT I and EMT II.

Schools offering course: CFHS, SHS

8335 EMERGENCY MEDICAL TECHNICIAN III ▲

Grade 12

1 Credit

Required Background: *Successful completion of EMT I and II and Instructor Endorsement

EMT III is designed as a preparatory course for higher levels of EMS training such as Advanced EMT and Paramedic. Coursework builds on material from EMT I/II; more in-depth lessons on patient assessments techniques, disease processes, and pharmacology are included. Advanced skills including ECG interpretation and advanced airway management are learned. Additionally, students will be introduced to EMS education and teaching methodology. Students will re-certify in Healthcare Provider CPR, and have the opportunity to earn additional certifications as part of the course. Students will earn all Continuing Education hours required for EMT recertification.

Schools offering course: CFHS

8337 EMERGENCY MEDICAL TELECOMMUNICATIONS

Grades 10-12

1 Credit

Emergency Medical Telecommunications is designed to develop entry-level skills needed in a telecommunication environment for rescue, fire, and police. The course provides the beginning telecommunicator with an understanding of situations encountered in an emergency communications environment. Upon completion, the student will be able to: summarize issues involving the telecommunication's role and responsibilities as a member of health and public safety environment; summarize issues involving available resources to a telecommunicator; the importance of maintaining confidentiality, liability and legal issues involving emergency telecommunicators and their agencies; summarize the process of stress management for inside and outside a communications department/center.

Schools offering course: CFHS, SHS

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#-Weighted, •-Application Required, ▲-Work-Based, *-Successful Completion

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8331 HEALTH ASSISTING CAREERS •▲**Grades 10-12****2 Credits*****Recommended Background: Introduction to Health and Medical Sciences and teacher recommendation***

Students enrolled in the two-credit Health Assistant class study families of health careers such as dental, medical, nursing, allied health, and related occupations and continue to develop basic skills common to careers in health care. Opportunities are provided for students to further explore their interests in various health care fields through shadowing experiences and selected skills practiced in health care facilities based on their particular areas of interest. Students must meet work site health requirements including a negative PPD (Tuberculosis screening test) prior to clinical placement. A uniform is required to be worn in clinical areas.

Schools offering course: BPHS**8302 INTRODUCTION TO HEALTH AND MEDICAL SCIENCES****Grades 9-12****1 Credit**

This course emphasizes the development of basic skills common to health care. Students explore the diverse opportunities available in the healthcare industry, as well as the educational requirements, personal characteristics, and professional responsibilities for specific fields of interest. The anatomy, physiology, and pathophysiology of the human body, medical terminology, infection control, and legal, ethical, and consumer issues pertaining to health care are studied. CPR and First Aid certifications are obtained. Upon successful completion of this course, the student may enroll in EMT I, Health Assistant I, Nursing Aide I, or Medical Assistant I. This course is designed for any student interested in any aspect of the healthcare industry.

8345 MEDICAL ASSISTANT I •▲**Grades 11****2 Credits*****Recommended Background: Introduction to Health and Medical Sciences or Health Assisting Careers***

Students develop basic skills and techniques to assist the physician and/or other medical professionals in patient examinations, basic emergency care, simple laboratory tests, preparation for minor surgical procedures, and administrative duties and will gain foundation knowledge in basic anatomy and physiology, medical ethics and legal responsibilities. Students also explore medical assisting career pathways.

Schools offering course: MVHS**8346 MEDICAL ASSISTANT II •▲****Grades 12****2 Credits*****Required Background: Medical Assistant I***

In this course, students apply and implement medical-assisting skills and techniques learned in Medical Assistant I. They learn management of health records, collection and analysis of laboratory specimens, special diagnostic testing related to basic diseases and disorders, and care and use of equipment. Advanced on-the-job clinical experience in a healthcare facility is a part of the course. Successful completion of Medical Assistant I and Medical Assistant II, may lead to employment in a healthcare setting and an industry credential.

Schools offering course: MVHS**8360 NURSE AIDE I •▲****Grades 11-12****2 Credits*****Required Background: Introduction to Health and Medical Sciences (including clinical experience)***

This course emphasizes advanced skills obtained in a variety of health care facilities under the supervision of an instructor. Communication and interpersonal skills, infection-control, safety and emergency procedures, recognition of changes in body functioning, personal care needs of both the long-term care and acute care patient are studied. The legal aspects of practice as a certified nurse aide and occupational health and safety measures are also included.

Students will be required to purchase a scrub uniform and white shoes without a logo. A description and cost of the

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uniform will be provided by the instructor during the first week of class. Additional requirements include a watch with a second hand, have a negative PPD (Tuberculosis screening test), a urine drug screen test, flu shot, TB test, and receive a COVID-19 vaccine prior to clinical placement. All screenings, tests and vaccines must be dated after August of the school year they are entering. This course is approved by the State Board of Nursing and will qualify the student for participation in Virginia Nurse Aide Competency Evaluation Program (required for certification). Transportation to the clinical sites is provided.

Schools offering course: NSHS

8362 NURSE AIDE II ▲

Grades 11-12

2 Credits (concurrent enrollment with Nurse Aide I)

Note: See description above. Students must be concurrently enrolled in Nurse Aide I and Nurse Aide II.

Schools offering course: NSHS

Family and Consumer Sciences

Family, Career and Community Leaders of America (FCCLA) is the co-curricular organization for Family and Consumer Sciences students.

8232 CHILD DEVELOPMENT AND PARENTING

Grades 10-12

1 Credit

Students focus on assessing the impact of the parenting role in society, taking responsibility for individual growth within the parenting role, preparing for a healthy emotional and physical beginning for parent and child, and meeting developmental needs of children and adolescents.

8275 CULINARY ARTS I •▲

Grades 10-11

2 Credits

This course is designed to teach basic skills in the area of culinary arts. Labs offer hands-on experience in all areas of the food service industry. Students will be able to enter the food service job market or continue their education in the culinary arts field.

Note: The work in this course requires that the student comply with the regulations of the Virginia Health Department in preparing and serving food sold to the public.

Schools offering course: BPHS, MVHS, SHS

8276 CULINARY ARTS II ▲

Grades 11-12

2 Credits

Required Background: Culinary Arts I and students must successfully pass ServSafe Manager Certification Exam

This course provides instruction in skills related to food preparation, development of personal qualities for job success, and a working knowledge of employment opportunities in the food industry.

Note: The work in this course requires that the student comply with the regulations of the Virginia Health Department in preparing and serving food sold to the public.

Schools offering course: BPHS, MVHS, SHS

8279 CULINARY ARTS SPECIALIZATION

Grade 12

2 Credits

Required Background: Culinary Arts II and students must successfully pass the Culinary Arts II end-of-the-year assessment and have the teacher's recommendation.

This course provides students with an opportunity to enhance their skills in planning menus, applying nutritional principles, implementing sanitation and safety standards, and exploring careers. Students have the prospect of specializing in areas based on the student's post secondary education or career goals. Critical thinking, practical problem solving, and entrepreneurial opportunities within the field of culinary arts are emphasized.

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Note: The work in this course requires that the student comply with the regulations of the Virginia Health Department in preparing and serving food sold to the public. In addition, students must interview with the instructor prior to enrollment to determine an area of specialization.

Schools offering course: *BPHS, MVHS, SHS*

8285 EARLY CHILDHOOD, EDUCATION, AND SERVICES I •▲

Grades 10-11

2 Credits

Students prepare for employment or continued education in the field of childcare and early childhood education. Emphasis will be placed on development, implementation, and evaluation of learning activities through first-hand experiences working with young children in an on-site lab setting. National Child Development Associate Credential competencies and state validated education competencies are the framework for the course.

Schools offering course: *BPHS, NSHS*

8286 EARLY CHILDHOOD, EDUCATION, AND SERVICES II ▲

Grades 11-12

2 Credits

Required Background: *Early Childhood, Education, and Services I*

This course is an extension of Early Childhood Education I. It is recommended for those students interested in child-related careers. Emphasis will be placed on occupational functions of early childhood educators. Students continue to obtain on-site lab experiences.

Schools offering course: *BPHS, NSHS*

8225 FAMILY RELATIONS

Grades 9-12

1 Credit

Students enrolled in Family Relations focus on identifying factors that build and maintain relationships, developing communication patterns that enhance family, friend, and work-related relationships, dealing effectively with family and peer stressors and conflicts.

8248 INTRODUCTION TO FASHION CAREERS

Grades 9-12

1 Credit

Students in Introduction to Fashion Careers focus on identifying and exploring the individual careers within the apparel, accessory, and textile design, manufacturing, and merchandising industry. Units of study include the relationships that exist among all areas of the clothing industry; related global and economic issues; apparel, accessory, and textile technology; exploration of careers, including entrepreneurial opportunities in related areas; and the skills and personal characteristics necessary for success in careers in the apparel, accessory, and textile design, manufacturing, and marketing industry.

8255 INTRODUCTION TO INTERIOR DESIGN

Grades 9-12

1 Credit

The home furnishings and design competencies focus on careers that relate to the elements and principles of design, cultural impact on the environment, decision-making skills for housing and home furnishings, development of artistic skills, and environmental issues. Emphasis will be placed on basic math, science, and communication skills.

8227 LIFE PLANNING

Grades 9-12

1 Credit

This course equips students with the skills needed to face the challenges of today's society. Students will develop a life- management plan which includes developing career, community, and life connections; healthy relationships; financial planning; and leadership within the community. Critical thinking and practical problem solving are

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emphasized through relevant life applications.

8229 NUTRITION AND WELLNESS

Grades 9-12

1 Credit

Students focus on making choices that promote good health, analyzing relationships between psychological and social needs and food choices, choosing foods that promote wellness, obtaining and storing food for self and family, preparing and serving nutritious meals and snacks, selecting and using equipment for food preparation, and identifying strategies to promote optimal nutrition and wellness of society. Teachers highlight the basic skills of math, science, and communication when appropriate in the content.

Technology and Engineering Education

Technology Student Association (TSA) is the co-curricular organization for Technology Education students.

**Successful completion of the technical drawing and design course is required for several courses within technology and engineering education.*

8415 COMMUNICATION SYSTEMS

Grades 9-12

1 Credit

Communication Systems provides experiences in the fields of imaging technology, graphic productions, video and media, technical design, and various modes of communicating information through the use of data. Students develop critical-thinking and problem-solving skills using the universal systems model. Students also learn about the impact of communication on society and potential career fields relating to communications. High-quality work-based learning (HQWBL) will provide experiential learning opportunities.

Schools offering course: CFHS

8437 ARCHITECTURAL DRAWING AND DESIGN

Grades 10-12

1 Credit

Required Background: Technical Drawing and Design

This course offers the student an opportunity to simulate the role of an architect by solving a residential design problem using a series of steps called “the design process.” The student will learn and follow accepted architectural design principles and drawing practices to arrive at their individual solution to the design problem. Classroom activities will include sketching preliminary ideas, drawing a presentation floor plan and presentation elevation drawing, and building a scaled architectural model. Architectural- related occupations will be explored during the year. Drawing/ modeling tools and supplies are provided.

Schools offering course: BPHS, CFHS, MVHS, NSHS

8435 TECHNICAL DRAWING AND DESIGN

Grades 9-12

1 Credit

This course provides the student a working knowledge of the language, tools, and practices of technical drawing. Technical drawing is the universal language of design. The focus of this course is to teach the student how to graphically communicate ideas using lines, symbols, and notations. In addition, the student will learn how to visualize and project objects in two-dimensional and three-dimensional form. Traditional drawing equipment and a computer-aided drafting and design (CADD) system will be used to teach technical drawing concepts. This course will give the student an opportunity to explore a skill that is creative, practical, and useful in industrial design, architecture, technical illustration, engineering, construction, and computer graphics.

Schools offering course: BPHS, CFHS, MVHS, NSHS, SHS

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8459 DIGITAL VISUALIZATION**Grades 10-12****1 Credit**

Students will gain experiences related to computer animation by solving problems involving 3D object manipulation, storyboarding, texture mapping, lighting concepts, and environmental geometry. They will produce animations that include interdisciplinary projects related to science, engineering, and the entertainment industry. A major emphasis will be the production of a portfolio that showcases examples of original student work. Students are encouraged to pursue Technical Drawing and Design, Communication Systems, or Imaging Technology prior to taking this course.

Schools offering course: CFHS**8450 ENGINEERING EXPLORATION****Grades 9-11****1 Credit**

This course will enable students to examine technology and engineering fundamentals related to solving real-world problems. Students will be exposed to a variety of engineering specialty fields and related careers to determine whether they are good candidates for postsecondary educational opportunities in engineering. Students will gain a basic understanding of engineering history and design, using mathematical and scientific concepts. Students will participate in hands-on projects in a laboratory setting as they communicate information through team-based presentations, proposals, and technical reports.

Schools offering course: CFHS, MVHS, SHS**8451 ENGINEERING ANALYSIS AND APPLICATION****Grades 10-12****1 credit*****Required Background: Engineering Exploration***

Engineering Analysis and Applications is the second of a possible four-course sequence that will allow students to apply the engineering design process to areas of the designed world and examine engineering systems. Students will participate in STEM-based, hands-on projects as they communicate information through team-based presentations, proposals, and technical reports.

Schools offering course: SHS**8491 ENGINEERING STUDIES****Grades 10-12****1 Credit*****Required Background: Engineering Exploration or Engineering Practicum***

To learn the applications and design process of engineering, students form engineering teams and select a group design problem. Each team uses communications, graphics, mathematics, and community resources to solve problems. Each team learns appropriate information in order to complete a project. Projects may be models, systems, or products that creatively solve an engineering problem. Engineering Exploration or Engineering Practicum.

Schools offering course: CFHS, MVHS, SHS**8436 ENGINEERING DRAWING AND DESIGN****Grades 10-12****1 Credit*****Required Background: Technical Drawing and Design***

This course is an extension of Technical Drawing and Design in that the student will continue to learn technical drawing concepts with the aid of a CAD system. Lessons are initially arranged at the beginner skill level and progress to the intermediate skill level. The student will use AutoCAD for two-dimensional drawing applications, while three-dimensional solid modeling will be performed with Autodesk Inventor software. The student will be engaged in real-life projects while developing teamwork, design, and problem-solving skills. Several engineering-related occupations will be explored during the year.

Schools offering course: BPHS, CFHS, MVHS, NSHS, SHS

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8453 ENGINEERING PRACTICUM**Grades 12****1 Credit*****Required Background: Engineering Analysis and Applications or Engineering Studies***

This course will enable students to examine technology and engineering fundamentals related to solving real-world problems. Students examine ethics and intellectual property and design a practicum project, a culmination of knowledge and skill gained in the previous engineering courses. In addition, students continue to investigate engineering specialty fields and related careers to determine whether they are good candidates for postsecondary educational opportunities in engineering. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills.

Schools offering course: SHS**8424 GEOSPATIAL TECHNOLOGY II****Grades 11-12****1 Credit*****Required Background: Geospatial Technology I***

Students further explore and analyze the natural and human-made world, from local to global and beyond. Students use various tools, processes, and techniques to create, store, access, manipulate, and revise data to solve human challenges. Data is created, collected, and used to analyze spatial relationships. These experiences employ real-world spatial analysis models and guidelines for integrating, interpreting, analyzing, and synthesizing data, with a focus on both the implications and the limitations of such technologies. These experiences also include interfacing to network-based data management systems.

Schools offering course: SHS**8455 IMAGING TECHNOLOGY****Grades 9-12****1 Credit*****Recommended Background: Communication Systems***

This course covers the principles of design in the creation of images. Students explore the development of imaging as a communication medium and its evolution into the digital realm. Image-editing software allows students to enhance images and develop a portfolio. Investigation focuses on career exploration and the application of photographic and imaging technology across various industries.

Schools offering: CFHS**8425 MANUFACTURING SYSTEMS I****Grades 9-12****1 Credit**

This course provides an orientation to careers in various fields of manufacturing. Emphasis will be placed on the major systems in manufacturing, including design, working drawings, manufacturing processes, material handling, production planning, measurement systems, labor issues, occupational safety, and quality control. Students participate in teams and produce manufacturing projects that demonstrate critical elements of manufacturing systems.

Schools offering course: BPHS, MVHS**8427 ADVANCED MANUFACTURING SYSTEMS II****Grades 10-12****1 Credit*****Required Background: Manufacturing Systems I or Production Systems***

Students develop an in-depth understanding of automation and its applications in manufacturing. Activities center on flexible manufacturing processes and Computer Integrated Manufacturing (CIM). Students also learn basic computer aided design (CAD) skills and apply those skills toward manufacturing projects. The student will use all facets of the design process to produce a product through a study of basic concepts of manufacturing technology by experiences in forming, separating, combining, assembling and finishing materials used in the production of manufactured goods. Students are expected to use skills and knowledge to design and develop a manufacturing system that can produce

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consumer products.

Schools offering course: BPHS

8447 PRODUCTION SYSTEMS

Grades 9-12

1 Credit

Students understand how products are designed, manufactured, and marketed to the public. This course will also give students the opportunity to experience the construction trades such as drafting, carpentry, cabinetmaking, line production, and assembly line production techniques. A working knowledge of design and problem solving, research and development processes, and materials will be an integral part of this course.

Schools offering course: MVHS

AP + Project Lead The Way (PLTW) Student Recognition

Students who complete the requirements of their chosen pathway earn the AP + PLTW student recognition, a qualification that demonstrates to colleges and employers that the student is ready for advanced coursework and interested in careers in this discipline.

To earn the recognition, the student must satisfactorily complete three courses in the pathway – one AP course; one PLTW course; and a third course, either AP or PLTW – and earn a qualifying score of 3 or higher on the AP Exam(s) and a score of Proficient or higher on the PLTW End of Course (EOC) assessment(s).

Level	Engineering	Biomedical Sciences
AP Courses	AP Biology, AP Calculus AB, AP Calculus BC, AP Chemistry, AP Environmental Science, AP Physics 1: Algebra-Based, AP Physics 2: Algebra-Based	AP Biology AP Chemistry
PLTW Courses	Introduction to Engineering Design Principles of Engineering, Aerospace Engineering, Civil Engineering and Architecture, Computer Integrated Manufacturing, Digital Electronics	Principles of Biomedical Science Human Body Systems Medical Interventions

Project Lead The Way (PLTW)

8428 AEROSPACE ENGINEERING – PLTW

Grades 10

1 Credit#

Required Background: Introduction to Engineering Design

The course explores the evolution of flight, flight fundamentals, navigation and control, aerospace materials, propulsion, space travel, orbital mechanics, ergonomics, remotely operated systems and related careers. In addition, the course presents alternative applications for aerospace engineering concepts.

Schools offering course: NSHS

8382 BIOMEDICAL INNOVATION - PLTW ▲

Grade 12

2 Credits#

Required Background: Biology, Chemistry and one of the following: AP Chemistry, AP Biology, Physics/AP Physics, Anatomy and Physiology, plus teacher recommendations and letter of interest AND/OR one or more PLTW courses and teacher recommendation

In this capstone course, students apply their knowledge and skills to answer questions or solve problems related to the biomedical sciences. Students design innovative solutions for the health challenges of the 21st century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project and may work with a mentor or advisor from a university, hospital, physician's office, or industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the

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local business and healthcare community.

Schools offering course: NSHS

8430 CIVIL ENGINEERING AND ARCHITECTURE - PLTW

Grades 11-12

1 Credit#

Required Background: Introduction to Engineering Design and Principles of Engineering or Digital Electronics

Students are introduced to the independent fields of civil engineering and architecture. Students learn through project-based and problem-based lessons including project planning, site planning, and building design. Software utilized includes AutoCAD, Autodesk Inventor Professional, and Autodesk Revit, Viz, and Architectural Desktop.

Schools offering course: NSHS

8442 COMPUTER INTEGRATED MANUFACTURING – PLTW

Grades 11-12

1 Credit#

Required Background: Introduction to Engineering Design and Digital Electronics

Students learn concepts of robotics and automated manufacturing by creating three-dimensional designs with modeling software and producing models of their designs. Students use Computer Numerical Control (CNC) equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing and design analysis are included. **Schools offering course: NSHS**

8440 DIGITAL ELECTRONICS – PLTW

Grades 10-12

1 Credit#

Required Background: Introduction to Engineering Design

Students use physical and computer simulations to learn about the logic of electronics as they design, test, and construct circuits and devices. Students apply control system programming and explore sequential logic and digital circuitry fundamentals. Topics in computer circuitry are also presented, including circuitry analysis and an exploration into diodes, transmitters, and operational amplifiers.

Schools offering course: NSHS

8443 ENGINEERING DESIGN AND DEVELOPMENT – PLTW ▲

Grade 12

2 Credits#

Required Background: Introduction to Engineering Design, Principles of Engineering, Digital Electronics, and Computer Integrated Manufacturing

In this capstone course, teams of students, guided by community mentors, work together to research, design, and construct solutions to engineering problems. Students synthesize knowledge, skills, and abilities through an authentic engineering experience. Students are expected to develop and formally present a three-dimensional design project and a team-oriented project that are critiqued by an evaluation committee. Fundamental concepts of robotics used in automated manufacturing and design analysis are included.

Schools offering course: NSHS

8380 HUMAN BODY SYSTEMS - PLTW

Grades 10-12

1 Credit#

Required Background: Biology and teacher recommendation AND/OR Principles of Biomedical Sciences-PLTW and teacher recommendation

Students examine the processes, structures, and interactions of the human body systems to learn how they work together to maintain homeostasis (internal balance) and good health. Using real-world cases, students take on the role of biomedical professionals and work together to solve medical mysteries. Hands-on projects include designing experiments, investigating the structures and functions of body systems, and using data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation. Important concepts covered in the course are communication, transport of substances, locomotion, metabolic processes,

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defense, and protection. Exploring science in action, students build organs and tissues out of clay on a skeletal manikin throughout the year.

Schools offering course: NSHS

8439 INTRODUCTION TO ENGINEERING DESIGN - PLTW

Grades 9-11

1 Credit#

Required Background: Completion of Algebra I

Students use a problem-solving model to improve existing products and invent new ones. Using sophisticated three-dimensional modeling software, students communicate the details of the products. Emphasis is placed on analyzing potential solutions and communicating ideas to others. This course is the first in a series being implemented for students seeking a more in-depth, hands-on knowledge of engineering and engineering technology-based careers.

Schools offering course: NSHS

8381 MEDICAL INTERVENTIONS - PLTW

Grades 11-12

1 Credit#

Required Background: Biology, Algebra II and Chemistry completed or concurrently enrolled and teacher recommendations AND/OR one or more PLTW courses and teacher recommendation; Anatomy and Physiology enrolled concurrently strongly recommended

Students investigate the variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the lives of a fictitious family. The course is a "How-To" manual for maintaining overall health and homeostasis in the body as students explore: how to prevent and fight infection; how to screen and evaluate the code in human DNA; how to prevent, diagnose and treat cancer; and how to prevail when the organs of the body begin to fail. Students are exposed to a wide range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Lifestyle choices and preventive measures are emphasized as well as the important role scientific thinking and engineering design play in the development of interventions of the future.

Schools offering course: NSHS

8379 PRINCIPLES OF BIOMEDICAL SCIENCE – PLTW

Grades 9-11

1 Credit#

Recommended Background: Biology or concurrently enrolled in Biology

This course is designed to provide an overview of all the courses in the Biomedical Science Program and to lay the scientific foundation necessary for student success in the subsequent courses. Students explore concepts of human medicine, research processes, bioinformatics and human physiology. Hands-on projects enable students to investigate human body systems and various health conditions, including heart disease, diabetes, sickle cell disease and infectious diseases. Over the length of the course, students work together to investigate a crime scene and analyze autopsy reports in order to determine the factors that led to the death of a fictional person. After pinpointing those factors, the students investigate lifestyle choices and medical treatments that might have prolonged the person's life. The key biological concepts embedded in the curriculum include homeostasis, metabolism, inheritance of traits and DNA, feedback systems, and defense against disease.

Schools offering course: BPHS

8441 PRINCIPLES OF ENGINEERING - PLTW

Grades 11-12

1 Credit#

Required Background: Introduction to Engineering Design; Algebra II, which may be taken concurrently, Digital Electronics, or Aerospace Engineering

Students develop an understanding of the engineering profession and the fundamental aspects of engineering problem solving. Students study the historical and current impacts of engineering on society as well as ethical implications. Mathematical and scientific concepts will be applied to fundamental engineering topics, including mechanics and electrical circuit theory.

Schools offering course: NSHS

SCHOOL KEY: BPHS=Brooke Point CFHS=Colonial Forge MVHS=Mountain View NSHS=North Stafford SHS=Stafford

#-Weighted, ●-Application Required, ▲-Work-Based, *-Successful Completion

Stafford Schools

Trade and Industrial Education

SkillsUSA is the co-curricular organization for Trade and Industrial students.

STAFFORD SCHOOLS BOOTS PROGRAM

Building Trades introduces students to skills in the core areas of residential construction: masonry, carpentry, electricity, drafting, HVAC (heating, ventilation, and air conditioning) and plumbing. Students emphasize safety by utilizing the Occupational Safety and Health Administration (OSHA) expectations. Students will also learn current residential building codes associated with the trades. The Bringing Occupational Opportunities to Students (BOOTS) program is led by teachers at Stafford High School. The BOOTS program is the only program of its kind in the local area. BOOTS program prepares students for careers in construction trades.

AUTO BODY TECHNOLOGY

Courses are taught by Automotive Service Excellence (ASE) Certified Instructors

The Auto Body Technology program is a 4-year program. Students will complete a pre-test prior to being admitted as required by Automotive Service Excellence (ASE). The program is open to students that are eligible for grade 9. Eligible 10th and 11th grade applicants may be considered if space is available. The Auto Body Technology program can accept up to 20 students per section

8676 AUTO BODY TECHNOLOGY I – COLLISION AND REPAIR •

Grades 10-11

2 Credits

Students are taught non-structural analysis, damage repair, and welding. Students learn body and frame construction, and the use of hand and power tools. Students work with a variety of materials, using metal finishing and body filling techniques to prepare surfaces and repair panels. Students learn automotive history, practice shop safety, gain career skills, and use custom techniques.

Schools offering course: NSHS

8677 AUTO BODY TECHNOLOGY II – PAINTING AND REFINISHING

Grades 11-12

4 Credits

Required Background: Auto Body Technology I

In this course, students are taught to repair, mask, and refinish auto body components and entire vehicles. In addition, they use spray guns and personal safety equipment, apply undercoats and topcoats, work with a variety of materials, and gain career skills. Students continue to improve skills in welding and body repair.

Schools offering course: NSHS

8678 AUTO BODY TECHNOLOGY III – COLLISION AND REPAIR AND PAINTING AND REFINISHING

Grade 12

4 Credits

Required Background: Auto Body Technology II

Students further apply the tasks/competencies learned in Auto Body Technology I and II. This course may also be used as a capstone course in which students may perfect their auto body skills and move toward employment in the industry. Students who successfully complete this program sequence will be prepared to take and pass the respective ASE exam.

Schools offering course: NSHS

AUTOMOTIVE TECHNOLOGY

Courses are taught by Automotive Service Excellence (ASE) Certified Instructors

The Automotive Technology program is a 4-year program. Students will complete a pre-test prior to being admitted as required by Automotive Service Excellence (ASE). The program is open to students that are eligible for grade 9. Eligible 10th and 11th grade applicants may be considered if space is available. The Automotive Technology program can accept up to 20 students per section.

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#-Weighted, •-Application Required, ▲-Work-Based, *-Successful Completion

Stafford Schools

8502 AUTOMOTIVE TECHNOLOGY I •**Grades 10-11****1 Credit**

Students learn all aspects of repair, safety, and customer service by concentrating on the four primary ASE certified areas: Brakes, Steering and Suspension, Electrical/Electronics and light duty vehicle repair.

Schools offering course: BPHS, NSHS

8507 AUTOMOTIVE TECHNOLOGY II**Grades 11-12****2 Credits**

Required Background: Automotive Technology I

Students will learn to repair fuel, electrical, cooling, brake, drive train, and suspension systems. Instruction is also given in the adjustment and repair of individual components and systems such as radiators, transmission, and fuel injectors. Students will have the opportunity to apply for job shadowing and internships with local automotive businesses through the Automotive Youth Educational Systems (AYES) program.

Schools offering course: BPHS, NSHS, SHS

8508 AUTOMOTIVE TECHNOLOGY III**Grade 12****2 Credits**

Required Background: Automotive Technology II

Students will continue to master skills related to suspension and steering, brakes, electrical/ electronic systems, and engine performance.

Schools offering course: BPHS, NSHS, SHS

8743 MASTER BARBERING I •**Grade 11 (Grade 10, if space is available)****3 Credits**

Required Background: Regular attendance is required in order to meet the clinical lab hours. Based on requirements from the Virginia Board of Cosmetology

Barbering is the study of hair, scalp, and skin. Students study and prepare in a clinical lab setting, using mannequins and live models for manipulative practice. The program emphasizes safety and sanitation, communication, and management skills. Related areas of study include physiology, ethics, and professional image. Students develop skills in hair shaping, finger waves, and face shaving. Students also learn the principles of sterilization, sanitation, and bacteriology. Successful completion of required state competencies and hours prepare the students for the Master Barbering II program. Must have a score of 70% or higher to advance on to Master Barbering II.

Schools offering course: MVHS

8744 MASTER BARBERING II**Grades 11-12****4 Credits**

Required Background: Passing score of 70% Barbering I and regular attendance is required to meet clinical hours. Based On requirements from the Virginia Board of Cosmetology

Students apply their knowledge of barbering skills in a clinical lab setting, using mannequins and live models for manipulative practice. Students develop skills and technical knowledge relating to hair coloring, facials, and selection of commercial materials. Mastery of 840 hours and successful completion of 490 required state competencies prepare the students for the Virginia state licensing exam.

Schools offering course: MVHS

8604 CABINETMAKING I •**Grades 10-11****1 Credit**

Students learn workshop and tool safety and employability skills as they practice reading blueprints; estimating and selecting materials; cutting and shaping stock; assembling, fastening, and installing components; and finishing

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#-Weighted, •-Application Required, ▲-Work-Based, *-Successful Completion

Stafford Schools

surfaces. The technical, problem-solving, leadership, and creative skills learned in cabinetmaking can be applied in industries well beyond the construction trades and professions and prepare the student for lifelong learning and success.

Schools offering course: NSHS

8605 CABINETMAKING II

Grades 11-12

2 Credits

Required Background: Cabinetmaking I

Students continue to learn workshop and tool safety and enhance their employability skills as they interpret blueprints; estimate and select materials; cut and shape stock; assemble, fasten, and install components; install interior finishes; apply wood veneers and plastic laminates; finish surfaces; and transport and install cabinets. The technical, problem-solving, leadership, and creative skills learned in Cabinetmaking can be applied in industries well beyond construction trades and professions and can prepare the student for lifelong learning and success.

Schools offering course: NSHS

8601 CARPENTRY I •

Grades 10-11

BPHS – 1 Credit

SHS▲ – 2 Credits

Recommended Background: Construction Trades

Instruction in this course includes the theory and practical application of blueprints and building plans, estimating materials, and finishing of a structure. Proper use of power tools will be demonstrated. Students must successfully complete the 10-hour OSHA Safety Course and comply with OSHA standards throughout the course to be eligible for Carpentry II. Students enrolled at Stafford High School are provided the opportunity to work on the construction of a new home through the BOOTS program (Bringing Occupational Opportunities to Students).

Schools offering course: BPHS, SHS

8602 CARPENTRY II ▲

Grades 11-12

2 Credits

Required Background: Carpentry I

This course includes instruction in the skills that provide additional practical experiences related to the complete structural aspect of a building or dwelling and its finishing work. Students will be expected to comply with all OSHA and class safety practices. Students enrolled at Stafford High School are provided the opportunity to work on the construction of a new home through the Bringing Occupational Opportunities to Students (BOOTS) program.

Schools offering course: BPHS, SHS

8603 CARPENTRY III ▲

Grades 12

2 Credits

Required Background: Carpentry II

This course expands on Carpentry I and II. Qualified students have the opportunity for work-based experience and to work on the construction of a new home through the Bringing Occupational Opportunities to Students (BOOTS) program. Construction management skills will also be stressed throughout the duration of the school year with the intent for students to enter the construction business upon completion. OSHA and class safety practices are mandatory and enforced.

Schools offering course: SHS

9071 CONSTRUCTION TRADES

Grades 9

1 Credit

This introductory course is for students considering a career in the construction industry. Construction Trades prepares students to construct buildings, and other structures using materials such as metal, wood, stone, brick,

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Stafford Schools

concrete and composition substances. Students focus on completing a 9 weeks rotation exploring each of the following trade areas: masonry, carpentry, electricity and the last rotation will be chosen by the student according to his/her interests. Core safety will be taught in all areas.

Schools offering course: SHS

8745 COSMETOLOGY I •

Grades 10-11

3 Credits

Required Background: Regular attendance is required in order to meet the clinical lab hours. Based- on requirements from the Virginia Board of Cosmetology

In this course, students study and prepare in a clinical lab setting, using mannequins, and live models for skill practice. Students develop skills in hair shaping, finger waves, manicuring, and pedicures. Related areas of study include physiology, ethics, and professional image. Students also learn the principles of sterilization, sanitation, and bacteriology. They develop required safety procedures and study professional ethics. Regular attendance is essential to be successful in this program.

NOTE: (Grade 10, if space available)

Schools offering course: MVHS, SHS

8746 COSMETOLOGY II

Grades 11-12

4 Credits

Required Background: Passing score of 70% or above in Cosmetology I and regular attendance is required to meet clinical hours. Based on requirements from the Virginia Board of Cosmetology

Students develop skills and technical knowledge relating to hair coloring, hair pressing, facials, cosmetic make-up, and selection of commercial materials. Beauty salon management procedures are also studied. Upon successful completion of 525 required state competencies and 840 hours, students are prepared to take the Virginia Board of Cosmetology licensing exam.

Schools offering course: MVHS, SHS

8702 CRIMINAL JUSTICE I

Grades 11

1 Credit

Students learn the principles, techniques, and practices for pursuing careers within the criminal justice services system. Also provided in this course is an overview of the conflicts, coordination, and interdependency of the major components of the criminal justice system.

Schools offering course: BPHS, NSHS

8703 CRIMINAL JUSTICE II

Grades 12

1 Credit

Required Background: Criminal Justice I

Students will expand upon the course content developed in Criminal Justice I. In addition, this course introduces students to a career in law enforcement. Topics may include crime scene investigation, use of force continuum, criminal law court system and procedures, police concepts and skills, corrections concepts and skills, communication, security, and understanding and working with special populations.

Schools offering course: BPHS, NSHS

8530 DRAFTING: FUNDAMENTALS (formerly Drafting I) ▲

Grades 9-11

1 Credit

This course is recommended for students who are interested in technical fields such as architecture, engineering, construction. The course emphasizes fundamental mechanical drawing concepts and techniques. The projection, visualization, and interpretation of two-dimensional and three-dimensional objects are explored. The student is also introduced to computer-aided drafting (CAD) using Autodesk drafting software. This course is a prerequisite for all other drafting courses.

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#-Weighted, •-Application Required, ▲-Work-Based, *-Successful Completion

Stafford Schools

Schools offering course: SHS

8531 DRAFTING: MECHANICAL (formerly Drafting II) ▲

Grades 10-12

2 Credits

Required Background: Drafting Fundamentals

This course focuses on creating mechanical drawings for manufacturing purposes. New skills learned include developing auxiliary views, reading tolerances, applying and interpreting weld symbols, specifying fasteners, additive manufacturing (3D printing) and the logic of mechanical assembly. Using 2D and 3D computer-aided design (CAD) software is integral to this course. Portfolio projects will be interspersed throughout the course, culminating in a design project of the student's own design solutions. All students will take the ADDA International Drafter Certification Exam as part of this program.

Schools offering course: SHS

8532 DRAFTING: ARCHITECTURAL (formerly Drafting III) ▲

Grades 11-12

2 Credits

Required Background: Drafting Fundamentals

This course focuses on the creation of code compliant architectural drawings focusing on residential design. The student learns to prepare site plans, floor and foundation plans, electrical plans, elevations, wall sections and structural details. Both manual and CAD techniques are taught and utilized, with the focus on CAD using Autodesk design software. Portfolio projects will be interspersed throughout the course, culminating with the student's own residential house design. All students will take the ADDA International Architectural Drafter Certification Exam as part of this program.

Schools offering course: SHS

8562 DRAFTING: ADVANCED (formerly Drafting IV)

Grades 11-12

2 Credits

Required Background: Drafting Fundamentals AND Drafting Mechanical or Drafting Architectural

Building on competencies taught in Drafting, students master the theory and manipulative skills necessary to produce complete and accurate drawings based on the ideas and sketches of engineers, architects, and designers. Students focus on performing architectural drafting as well as mechanical drafting and design operations, using manual drafting, computer-aided design and drafting (CADD), and additive manufacturing (3D printing) techniques. High-quality work-based learning (HQPWL) will provide experiential learning opportunities.

Schools offering course: SHS

8533 ELECTRICITY I • ▲

Grades 10-11

2 Credits

Recommended Background: Construction Trade

Students develop the skills and technical knowledge relating to test equipment, electrical circuits, single phase alternating current, residential wiring, estimating cost of labor and material, low voltage systems, wiring single family dwellings, and the use of the National Electrical Code. Students learn basic electrical terms. Students are provided the opportunity to work on the construction of a new home through the BOOTS program (Bringing Occupational Opportunities to Students). Students must successfully complete the 10-hour OSHA Safety Course and comply with OSHA standards throughout the course to be eligible for Electricity II.

Schools offering course: SHS

8534 ELECTRICITY II ▲

Grades 11-12

2 Credits

Required Background: Electricity I

Students develop the skills and technical knowledge of commercial wiring, installation of and maintaining conduit systems, appliance and motor service, industrial wiring, control wiring, transformers, three-phase circuitry, and low voltage control systems. Students are provided the opportunity to work on the construction of a new home through the Bringing Occupational Opportunities to Students (BOOTS) program. OSHA and class safety practices are mandatory and enforced.

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Schools offering course: SHS

8535 ELECTRICITY III ▲

Grades 12

2 Credits

Required Background: Electricity II

This course expands on Electricity I and II. Qualified students have the opportunity for work-based experience and to work on the construction of a new home through the Bringing Occupational Opportunities to Students (BOOTS) program. OSHA and class safety practices are mandatory and enforced.

Schools offering course: SHS

8705 FIREFIGHTING I ● ▲

Grades 11-12

2 Credits

Required Background: *Stafford Fire and Rescue and National Fire Protection Association (NFPA) requires students to be at least 16 years old by July 1 and pass the NFPA 1582 medical physical. Additional requirements include parent/guardian consent and CPR, HAZMAT operations, and Mayday Awareness certifications.*

Stafford Schools offers a High School Firefighter program (HSFP) through a partnership with Stafford County Fire and Rescue. Firefighting is one of the most dangerous jobs in the world and, therefore, requires complete discipline and attention to achieving the academic and professional standards necessary to successfully fight live fires, address hazardous-materials incidents, and conduct search-and-rescue operations. This course challenges students academically, mentally, and physically and meets the standards of National Fire Protection Association (NFPA) 1001-2013 leading to Firefighting I certification. Students must enroll in FFI (Semester I) and FFII (Semester II) consecutively in the same year. Firefighting will be offered on an every other day schedule. Counselors must verify students have a plan to meet required credits necessary for graduation before they are eligible to participate in the program. The program is application based and includes stringent requirements by Stafford Fire and Rescue and NFPA. The program is contingent on the availability of funding/staffing.

8706 FIREFIGHTING II ● ▲

Grades 11-12

2 Credits

Note: *See description above.*

Required Background: *Completion of Firefighting I and passing Certification Exam*

8660 GRAPHIC IMAGING TECHNOLOGY I ● ▲

Grades 10-11

2 Credits

This course introduces students to the various areas of the printing field. These areas will include layout and design, desktop publishing, film processing, plate making, offset press operation, bindery, and digital photography. Students focus on the history of graphic imaging.

Schools offering course: NSHS

8661 GRAPHIC IMAGING TECHNOLOGY II ▲

Grades 11-12

2 Credits

Required Background: *Graphic Imaging Technology I*

This course introduces students to the various areas of the printing field. In the first semester, students will develop skills relating to desktop publishing, layout and design, film processing, plate-making, offset press operation, bindery, screen printing, and digital photography. In the second semester, students will apply all skills learned in a production setting.

Schools offering course: NSHS

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#-Weighted, ●-Application Required, ▲-Work-Based, *-Successful Completion

Stafford Schools

8503 HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION I

Grades 10-11

1 Credit

Recommended Background: Construction Trades

Students are taught to professionally install, repair, and maintain the operating conditions of heating, ventilation, air-conditioning, and refrigeration (HVACR) systems. Students work with piping and tubing, study the principles of heat and electricity, install duct systems, and comply with U.S. Environmental Protection Agency (EPA) regulations.

Schools offering course: SHS

8512 MASONRY I • ▲

Grades 10-11

2 Credits

Recommended Background: Construction Trades

Students develop skills and technical knowledge for laying block and brick, concrete construction, reading blueprints, completing straight wall and corner work, as well as estimating labor and materials. Students are provided the opportunity to work on the construction of a new home through the BOOTS program (Bringing Occupational Opportunities to Students). Students must successfully complete the 10-hour OSHA Safety Course and comply with OSHA standards throughout the course to be eligible for Masonry II.

Schools offering course: SHS

8513 MASONRY II ▲

Grades 11-12

2 Credits

Required Background: Masonry I

A continuation of Masonry I, students are given additional instruction in the knowledge and skills of mixing and pouring concrete, building arches and columns, stone masonry and required competencies for masonry workers. Students are provided the opportunity to work on the construction of a new home through the Bringing Occupational Opportunities to Students (BOOTS) program. OSHA and class safety practices are mandatory and enforced.

Schools offering course: SHS

8514 MASONRY III ▲

Grades 12

2 Credits

Required Background: Masonry II

This course expands on Masonry I and II. Qualified students have the opportunity for off-site work-based experience and to work on the construction of a new home through the Bringing Occupational Opportunities to Students (BOOTS) program. Fundamentals of construction management will be emphasized, including planning, estimating and problem solving on an actual construction job site. OSHA and class safety practices are mandatory and enforced. Hilti certification will be offered in addition to a state-approved industry credential.

Schools offering course: SHS

8551 PLUMBING I

Grades 10-11

1 Credit

Recommended Background: Construction Trades

Students are introduced to the plumbing profession and practice mathematical calculations required for plumbing systems. They learn to safely assemble, install, and repair pipes and fittings, and are introduced to installing fixtures of heating, water, and drainage systems, according to specification and plumbing codes.

Schools offering course: SHS

8725 SMALL ENGINE TECHNOLOGY I ▲

Grades 9-12

1 Credit

Students will study the theory, repair and applications of small 4 stroke/cycle internal combustion engines. Students

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#-Weighted, •-Application Required, ▲-Work-Based, *-Successful Completion

Stafford Schools

will operate a Small Engine Repair business, repairing customer's outdoor power equipment. Units will cover safety, engine theory, engine troubleshooting, engine repair, parts location/order, small business operation.

Schools offering course: SHS

8726 SMALL ENGINE TECHNOLOGY II ▲

Grades 10-12

2 Credits

Required Background: Small Engine Technology 1

Students will expand on the study of small engine repair from Small Engine Repair I. Units of study will include two-stroke/cycle engine theory and repair, engine rebuild, engine modifications, hydraulics, chainsaw repair and maintenance, string trimmer repair and maintenance, go-kart and mini-bike repair, outdoor power equipment business operation.

Schools offering course: SHS

8688 TELEVISION AND MEDIA PRODUCTION I

Grades 9-12

1 Credit

This course combines public speaking and other communication skills with the study of video technology primarily used in broadcast journalism. Students receive training in written and verbal communication as it applies to broadcast journalism as well as instruction in the use and maintenance of electronic equipment used in broadcast television. Students will produce a variety of programming, including radio spots, live television interviews, in-house news broadcasts, broadcast television packages, and a variety of live coverage videography.

Note: Course requires time outside the scheduled class period for activities occurring in the evening and on weekends.

8689 TELEVISION AND MEDIA PRODUCTION II

Grades 10-12

1 Credit

2 Credits

Required Background: Television and Media Production I

This course is designed for the student interested in pursuing a career in broadcast technology or broadcast journalism. Experiences will be structured to simulate a private local company in the community, allowing the students to take on the responsibility of the day-to-day tasks. This simulation could include coverage of school and community events, developing a clientele through the creation of promotional and informational presentations, and daily production of live announcements for the school.

Note: Course requires time outside the scheduled class period for activities occurring in the evening and on weekends.

8690 TELEVISION AND MEDIA PRODUCTION III

Grades 11-12

1 Credit (140 Hours)

2 Credits (280 Hours)

Required Background: Television and Media Production II

Students will demonstrate mastery of media production knowledge and skills. They will function as media producers by creating original productions as they develop and market programs for target audiences. They will investigate the dynamic media production.

Note: Course requires time outside the scheduled class period for activities occurring in the evening and on weekends.

8691 TELEVISION AND MEDIA PRODUCTION INTERNSHIP ▲

Grade 12

1 Credit

Required Background: Television and Media Production II

This course is designed to provide students with the practical and principle knowledge of community television

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#-Weighted, ●-Application Required, ▲-Work-Based, *-Successful Completion

Stafford Schools

production through participation in the development of programming for the Stafford Educational Channel. Course content will emphasize the exploration of advanced concepts and processes involved in managing and maintaining a PEG television station to include video and audio media production and editing with emphasis on hands-on experience in studio and field production, as well as, video and audio post-production. Students will also qualify for employment opportunities as Video Production Technicians within the Stafford County Public School System.

Note: The work in Television and Media Production Internship requires that students be willing and able to devote considerable time outside of the scheduled class period to activities occurring in the evening and on weekends. Schools offering course: BPHS, NSHS

Index of High School Courses

*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High					
*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ENGLISH					
GENERAL COURSES					
ALL	1130	English 9	1.0	9	
Center	1130C	Center English 9	1.0	9	
Center	1130HC	Center Honors English 9	1.0	9	
ALL	1130H	Honors English 9	1.0	9	
ALL	1140	English 10	1.0	10	
Center	1140C	Center English 10	1.0	10	
Center	1140CH	Center Honors English 10	1.0	10	
ALL	1140H	Honors English 10	1.0	10	
ALL	1150	English 11	1.0	11	
Center	1150C	Center English 11	1.0	11	
Center	1150HC	Center Honors English 11	1.0	11	
ALL	1150H	Honors English 11	1.0	11	
ALL	1160	English 12	1.0	12	
Center	1160C	Center English 12	1.0	12	
Center	1160HC	Center Honors English 12	1.0	12	
ADVANCED PLACEMENT COURSES					
ALL	1140AP	AP English 10: Seminar	1.0	10	
ALL	1196AP	AP English: Language and Composition	1.0	11	
ALL	1195AP	AP English: Literature and Composition	1.0	12	
DUAL ENROLLMENT COURSES					
ALL	1177DE	DE Honors English Composition	1.0	11-12	
COMMONWEALTH GOVERNOR'S SCHOOL COURSES					
ALL	1130G	English 9: Honors English 9	1.0	9	
ALL	1140G	English 10: Honors English 10	1.0	10	
ALL	1196APG	English 11: AP English Language and Composition	1.0	11	
ALL	1195APG	English 12: AP English Literature and Composition	1.0	12	
INTERNATIONAL BACCALAUREATE COURSES					
B-M	1151IB 1161IB	IB Language and Literature (HL)	1.0 per year	11-12	Successful completion of English or Honors English courses for IB year one Successful completion of IB year one to go on to IB year two
ELECTIVE ENGLISH COURSES					
ALL	1300	Oral Communication	1.0	10-12	
Center	1301	Communication for Leadership and Public Service	1.0	9	

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ALL	1200	Journalism I	1.0	9-12	
ALL	1210	Journalism II	1.0	10-12	Successful completion of Journalism I and service on the school's publication staff
ALL	1211	Journalism III	1.0	11-12	Successful completion of Journalism II and service on the school's publication staff
ALL	1212	Journalism IV	1.0	12	Successful completion of Journalism III and service on the school's publication staff
ALL	1215	Photojournalism I	1.0	9-12	
ALL	1216	Photojournalism II	1.0	10-12	Successful completion of Photojournalism I and service on the school's publication staff
ALL	1217	Photojournalism III	1.0	11-12	Successful completion of Photojournalism II and service on the school's publication staff
ALL	1218	Photojournalism IV	1.0	12	Successful completion of Photojournalism III and service on the school's publication staff
ALL	1171	Creative Writing I	1.0	9-12	
ALL	1165	Creative Writing II	1.0	10-12	Successful completion of Creative Writing I and service on the school's publication staff
ALL	1181-1184	Reading Across the Content Areas I-IV	1.0	9-12	
ALL	9491-9494	Developmental Reading	1.0	9-12	
ALL	1515-1516	English Review	1.0	11-12	
ALL	1178	Advanced Writing	1.0	10-12	
HISTORY AND SOCIAL SCIENCES					
GENERAL COURSES					
ALL	2215	World History and Geography I	1.0	9	
Center	2215C	Center World History and Geography I	1.0	9	
Center	2215HC	Center Honors World History and Geography I	1.0	9	
ALL	2215H	Honors World History and Geography I	1.0	9	
ALL	2216	World History and Geography II	1.0	10	
Center	2216C	Center World History and Geography II	1.0	10	
Center	2216HC	Center Honors World History and Geography II	1.0	10	
ALL	2216H	Honors World History and Geography II	1.0	10	
ALL	2360	Virginia and U.S. History	1.0	11	
Center	2360C	Center Virginia and U.S. History	1.0	11	
ALL	2440	Virginia and U.S. Government	1.0	12	
Center	2440C	Center Virginia and U.S. Government	1.0	12	
ADVANCED PLACEMENT COURSES					
ALL	2380AP	AP Modern World History	1.0	10	

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ALL	2319AP	AP United States History	1.0	11-12	
ALL	2450AP	AP Comparative Government and Politics	1.0	12	
ALL	2445AP	AP United States Government/Politics	1.0	12	
ALL	2212AP	AP Human Geography	1.0	9-12	
ALL	2902AP	AP Psychology	1.0	11-12	
ALL	2802AP	AP Microeconomics	1.0	11-12	
ALL	2803AP	AP Macroeconomics	1.0	11-12	Successful completion of AP Microeconomics or Economics and Personal Finance
ALL	2399AP	AP European History	1.0	10-12	
DUAL ENROLLMENT COURSES					
ALL	2360DE	DE United States History	1.0	11	
ALL	2440DE	DE United States Government	1.0	12	
COMMONWEALTH GOVERNOR'S SCHOOL COURSES					
ALL	2399APG	AP European History	1.0	9	
ALL	2445APG	AP U.S. Government	1.0	10	
ALL	2319APG	AP U.S. History	1.0	11-12	
ALL	2212APG	AP Human Geography	1.0	12	
INTERNATIONAL BACCALAUREATE COURSES					
B-M	2806IB	IB Economics (SL) with Personal Finance	1.0	11-12	
B-M	1197IB 1198IB	IB Theory of Knowledge	1.0 per year	11-12	Successful completion of IB year one to go on to IB year two
B-M	2360IB 2361IB	IB History (HL)	1.0 per year	11-12	Successful completion of World History or Honors World History and preferably AP US Government Successful completion of IB year to go on to IB year two
B-M	2847IB	IB Social and Cultural Anthropology (SL)	1.0	11-12	Successful completion of previous social studies courses
B-M	2903IB	IB Psychology (SL)	1.0	11-12	Successful completion of previous social studies courses
B-M	6135IB	IB Business Management (SL)	1.0	11-12	Successful completion in prior business math courses
HISTORY AND SOCIAL SCIENCES ELECTIVE COURSES					
ALL	2372	African American History	1.0	10-12	
ALL	2998	Exploring Local History	1.0	11-12	
ALL	2996	Global Issues	1.0	11-12	
ALL	2500	Sociology	1.0	10-12	
ALL	2900	Psychology	1.0	10-12	

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
MATHEMATICS					
GENERAL COURSES					
ALL	3130	Algebra I	1.0	9-10	
C	3130H	Honors Algebra I	1.0	9	
ALL	3143	Geometry	1.0	9-12	Successful completion of Algebra I
Center	3143C	Center Geometry	1.0	9-12	Successful completion of Algebra I
Center	3143HC	Engineering Honors Geometry	1.0	9-12	Successful completion of Algebra I
ALL	3143H	Honors Geometry	1.0	9-10	Successful completion of Algebra 1
ALL	3134	Algebra, Functions, and Data Analysis	1.0	10-12	Successful completion of Algebra I
ALL	3135	Algebra II	1.0	9-12	Successful completion of Geometry or Algebra, Functions, and Data Analysis
Center	3135H	Engineering Honors Algebra II	1.0	9-12	Successful completion of Geometry
ALL	3135H	Honors Algebra II	1.0	9-10	Successful completion of Geometry
ALL	3138	Data Science	1.0	10-12	Successful completion of Algebra II
ALL	3160	Algebra III with Trigonometry	1.0	11-12	Successful completion of Algebra II
ALL	3162	Pre-calculus: Math Analysis with Trigonometry	1.0	10-12	Successful completion of Algebra II
ALL	3190	Statistics/Probability with Discrete Topics	1.0	11-12	Successful completion of Algebra II
ALL	3199	Calculus	1.0	11-12	Successful completion of Algebra III w/Trigonometry or Pre-calculus: Math Analysis with Trigonometry
ADVANCED PLACEMENT COURSES					
ALL	3192AP	AP Statistics	1.0	11-12	Successful completion of Algebra II
ALL	3177AP	AP Calculus AB	1.0	11-12	Successful completion of Pre-calculus: Math Analysis with Trigonometry
ALL	3178AP	AP Calculus BC	1.0	11-12	Successful completion of Pre-calculus: Math Analysis with Trigonometry
ALL	3185AP	AP Computer Science A	1.0	10-12	Successful completion of Algebra II
DUAL ENROLLMENT COURSES					
ALL	3196DE	DE Quantitative and Statistical Reasoning	1.0	11-12	Successful completion of Algebra II
ALL	3162DE	DE Pre-Calculus	1.0	11-12	Successful completion of Algebra II
ALL	3178DE	DE Calculus I	1.0	11-12	Successful completion of Pre-calculus: Math Analysis with Trigonometry
COMMONWEALTH GOVERNOR'S SCHOOL COURSES					
C-N-S	3135G	Mathematics 9: Honors Algebra II	1.0	9	
C-N-S	3143G	Mathematics 10: Honors Geometry with Trigonometry	1.0	10	
C-N-S	3162G	Honors Pre-Calculus w/Discrete	1.0	10-12	

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
		Topics			
C-N-S	3162APG	AP Pre-Calculus	1.0	10-12	
C-N-S	3177APG	AP Calculus AB w/Special Topics	1.0	11	
C-N-S	3178APG	AP Calculus BC and Multivariable Calculus	1.0	12	
C-N-S	3192APG	AP Statistics	1.0	12	
INTERNATIONAL BACCALAUREATE COURSES					
B-M	3185IB	IB Computer Science (SL)	1.0	11-12	Successful completion of AP Computer Science A
B-M	3164IB 3196IB	IB Mathematics: Applications and Interpretation (SL)	1.0	11-12	Successful completion of Algebra II for IB year one Successful completion of IB year one to go on to IB year two
B-M	3167IB 3198IB	IB Mathematics: Analysis and Approaches (SL)	1.0	11-12	Successful completion of Pre-calculus: Math Analysis with Trigonometry for IB year one Successful completion of IB year one to go on to IB year two
B-M	3165IB 3195IB	IB Mathematics: Applications and Interpretation (HL)	1.0	11-12	Successful completion of Pre-calculus: Math Analysis with Trigonometry Successful completion of IB year one to go on to IB year two
B-M	3168IB 3197IB	IB Mathematics: Analysis and Approaches (HL)	1.0	11-12	Successful completion of Pre-calculus: Math Analysis with Trigonometry. Successful completion of IB year one to go on to IB year two
SCIENCE					
GENERAL COURSES					
ALL	4210	Earth Science	1.0	9-10	May be taken concurrently with Biology
ALL	4210H	Honors Earth Science	1.0	9	May be taken concurrently with Biology
ALL	4265	Environmental Science	1.0	9-11	May be taken concurrently with Biology and Earth Science
ALL	4310	Biology	1.0	9-10	May be taken concurrently with Earth Science
ALL	4310H	Honors Biology	1.0	9-10	May be taken concurrently with Earth Science
ALL	4410	Chemistry	1.0	10-12	Algebra II must either be completed or taken concurrently
ALL	4410H	Honors Chemistry	1.0	10-11	Algebra II must either be completed or taken concurrently.
ALL	4510	Physics	1.0	11-12	Algebra II or higher must be completed or taken concurrently
ALL	4510H	Honors Physics	1.0	11-12	Algebra II or higher must be completed or taken concurrently
ADVANCED PLACEMENT COURSES					
ALL	4370AP/4370A PL	AP Biology/Lab	1.0/1.0.0	10-12	Successful completion of Biology and Chemistry
ALL	4470AP/4470A PL	AP Chemistry/Lab	1.0/1.0	11-12	Successful completion of Algebra II and Chemistry
ALL	4573AP	AP Physics 1	1.0	12	
ALL	4574AP	AP Physics 2	1.0	12	

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ALL	4270AP	AP Environmental Science	1.0	10-12	Successful completion two laboratory sciences and Algebra 1
DUAL ENROLLMENT COURSES					
ALL	4220DE	DE Environmental Science	1.0	11-12	
ALL	4320DE	DE Biology	1.0	11-12	
ALL	4420DE	DE Chemistry	1.0	11-12	
COMMONWEALTH GOVERNOR'S SCHOOL COURSES					
C-N-S	4270APG	AP Environmental Science	1.0	9	
C-N-S	4370APG	AP Biology	1.0	10	
C-N-S	4420GDE	DE Chemistry	1.0	11	
C-N-S	4573APG	AP Physics 1	1.0	12	
INTERNATIONAL BACCALAUREATE COURSES					
B-M	4390IB 4390IB	IB Biology (HL)	1.0 per course	11-12	Successful Completion of Biology, Chemistry, Algebra I and II or Honors Biology, Chemistry, Algebra I and II courses for IB year one Successful completion of IB year one to go on to IB year two
B	4380IB	IB Biology 11 (SL)	1.0	11	Successful Completion of Biology or Honors Biology, Chemistry (may be taken concurrently), Algebra I and II courses for IB year one
B	4381IB	IB Biology 12 (SL)	1.0	12	Successful completion of IB Biology 11 (SL)
M	4490IB 4491IB	IB Chemistry (HL)	1.0 per course	11-12	Successful completion of Chemistry, Biology, Algebra I and II or Honors Chemistry, Biology, Algebra I and II courses for IB year one Successful completion of IB year one to go on to IB year two
B	4480IB	IB Chemistry 11 (SL)	1.0	11	Successful completion of Chemistry, Biology, Algebra I and Algebra II or Honors Chemistry, Biology, Algebra I and Algebra II
B	4481IB	IB Chemistry 12 (SL)	1.0	12	Successful completion of IB Chemistry 11 (SL)
B	4590IB 4591IB	IB Physics (HL)	1.0 per course	11-12	Successful completion of Physics, Algebra I and Algebra II or Honors Physics, Algebra I and Algebra II Successful completion of IB year one to go on to IB year two
B-M	4580IB	IB Physics 1 (SL)	1.0	11	Successful completion of Algebra I and Algebra II
B-M	4581IB	IB Physics 2 (SL)	1.0	12	Successful completion of IB Physics 1 (SL)
B-M	4281IB	IB Environmental Systems and Societies (SL)	1.0	11-12	Successful completion of Biology or Chemistry or Honors Biology or Honors Chemistry
SCIENCE ELECTIVE COURSES					
ALL	4340	Biology II: Ecology	1.0	11-12	Successful completion Biology or Environmental Science
ALL	4330	Biology II: Anatomy and Physiology	1.0	11-12	Successful completion of Biology

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ALL	4240	Earth Science II: Geology	1.0	10-12	Successful completion of Earth Science or Environmental Science
ALL	4250	Earth Science II: Oceanography	1.0	11-12	Successful completion of Earth Science or Environmental Science
WORLD LANGUAGE					
GENERAL COURSES					
ALL	5990	American Sign Language Level I	1.0	10-12	
ALL	5995	American Sign Language Level II	1.0	10-12	Successful completion of prior level
ALL	5997	American Sign Language Level III	1.0	11-12	Successful completion of prior level
ALL	5110	French Level I	1.0	8-12	
ALL	5120	French Level II	1.0	9-12	Successful completion of prior level
ALL	5130	French Level III	1.0	10-12	Successful completion of prior level
ALL	5140	French Level IV	1.0	11-12	Successful completion of prior level
ALL	5210	German Level I	1.0	8-12	
ALL	5220	German Level II	1.0	9-12	Successful completion of prior level
ALL	5230	German Level III	1.0	10-12	Successful completion of prior level
ALL	5240	German Level IV	1.0	11-12	Successful completion of prior level
ALL	5310	Latin Level I	1.0	8-12	
ALL	5320	Latin Level II	1.0	9-12	Successful completion of prior level
ALL	5330	Latin Level III	1.0	10-12	Successful completion of prior level
ALL	5340	Latin Level IV	1.0	11-12	Successful completion of prior level
ALL	5510	Spanish Level I	1.0	8-12	
ALL	5520	Spanish Level II	1.0	9-12	Successful completion of prior level
ALL	5530	Spanish Level III	1.0	10-12	Successful completion of prior level
ALL	5540	Spanish Level IV	1.0	11-12	Successful completion of prior level
ALL	5511	Spanish for Fluent Speakers Level I	1.0	8-12	Students will take an assessment to ensure proper placement according to prior knowledge and study of Spanish
ALL	5521	Spanish for Fluent Speakers Level II	1.0	9-12	Students will take an assessment to ensure proper placement according to prior knowledge and study of Spanish
ALL	5531	Spanish for Fluent Speakers Level III	1.0	10-12	Students will take an assessment to ensure proper placement according to prior knowledge and study of Spanish
ADVANCED PLACEMENT COURSES					
C-N-S	5170AP	AP French	1.0	11-12	Successful completion of French Level IV
C-N-S	5270AP	AP German	1.0	11-12	Successful completion of German Level IV
C-N-S	5370AP	AP Latin (Virgil)	1.0	11-12	Successful completion of Latin Level IV

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
C-N-S	5570AP	AP Spanish	1.0	11-12	Successful completion of Spanish Level IV or Spanish for Fluent Speakers III
DUAL ENROLLMENT COURSES					
ALL	XXXXDE	DE Intermediate French IV (GCC FRE 201 and 202)	1.0	11-12	Successful completion of French III
ALL	XXXXDE	DE Intermediate German IV (GCC GER 201 and 202)	1.0	11-12	Successful completion of German III
ALL	XXXXDE	DE Intermediate Spanish IV (GCC SPA 201 and 202)	1.0	11-12	Successful completion of Spanish III or Spanish for Fluent Speakers III
INTERNATIONAL BACCALAUREATE COURSES					
B-M	5542IB	IB Spanish B IV	1.0	10 or 11	Successful completion of three sequential levels of the target language
B-M	5142IB	IB French B IV	1.0	10 or 11	Successful completion of three sequential levels of the target language
B-M	5242IB	IB German B IV	1.0	10 or 11	Successful completion of three sequential levels of the target language
B-M	5552IB	IB Spanish B V (SL)	1.0	11 or 12	Successful completion of IB target language B course
B-M	5152IB	IB French B V (SL)	1.0	11 or 12	Successful completion of IB target language B course
B-M	5252IB	IB German B V (SL)	1.0	11 or 12	Successful completion of IB target language B course
B-M	5562IB	IB Spanish B V (HL)	1.0	12	Successful completion of previous IB target language B course and Teacher Recommendation
B-M	5162IB	IB French B V (HL)	1.0	12	Successful completion of previous IB target language B course and Teacher Recommendation
B-M	5262IB	IB German B V (HL)	1.0	12	Successful completion of previous IB target language B course and Teacher Recommendation
B-M	5340IB 5350IB	IB Latin (SL)	1.0 credit per year	11-12	Successful completion of three sequential levels of Latin courses for IB year one Successful completion of IB year one to go on to IB year two.
B-M	5541IB 5551IB	IB Spanish A (SL)	1.0 credit per year	11-12	Students will take an assessment to ensure proper placement according to prior knowledge and study of Spanish. A recommendation form from the students 10th grade English teacher will also be required
VISUAL AND PERFORMING ARTS					
GENERAL COURSES FOR ART					
ALL	9120	Art I	1.0	9-12	
ALL	9130	Art II	1.0	10-12	Successful completion of Art I
N-S	9130H	Honors Art II	1.0	10-12	Successful completion of Art I, instructor's recommendation; identified or eligible for identification as gifted in visual arts or portfolio review by high school staff
ALL	9140	Art III	1.0	11-12	Successful completion of Art II
ALL	9145	Art IV	1.0	11-12	Successful completion of Art III
B-C-N-S	9196	Sculpture and Ceramics	1.0	10-12	Successful completion of Art I
ALL	9170	Art History (Non-Studio Elective)	1.0	10-12	
B-S	9190	Photography and Graphic Design I	1.0	9-12	

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
S	9191	Photography and Graphic Design II	1.0	10-12	Successful completion of Photography and Graphic Design I
S	9192	Photography and Graphic Design III	1.0	10-12	Successful completion of Photography and Graphic Design II
GENERAL COURSES FOR BAND					
ALL	9232	Concert Band	1.0	9-12	Previous band experience at the middle school level required
ALL	9233	Symphonic Band	1.0	9-12	One or more years of previous band experience; by audition
ALL	9234	Wind Ensemble	1.0	9-12	By audition only
ALL	9250	Percussion Ensemble	1.0	9-12	Previous band experience is required
ALL	9297	Jazz Ensemble	1.0	10-12	One or more years of previous band experience; by audition
C	9296	Jazz Workshop	1.0	10-12	One or more years of previous band experience; by audition
GENERAL COURSES FOR CHORUS					
ALL	9280	Vocal Ensemble	1.0	9-12	
ALL	9260	Treble Chorus	1.0	9-12	
ALL	9285	Chorale	1.0	9-12	Auditions may be required
ALL	9289	Madrigals	1.0	10-12	By audition only
ALL	9290	Jazz Choir	1.0	9-12	Auditions may be required
ALL	9292	Chamber Choir	1.0	10-12	By audition only
GENERAL COURSES FOR ORCHESTRA					
ALL	9237	Concert Orchestra	1.0	9-12	Previous orchestra experience at the middle school level required
ALL	9238	Symphonic Orchestra	1.0	9-12	One or more years of previous orchestra experience; by audition
ALL	9239	Chamber Sinfonia	1.0	10-12	By audition only.
GENERAL COURSES FOR MUSIC					
ALL	9225	Music Theory	1.0	10-12	Previous music training required. Students should have a fundamental understanding of music notation.
ALL	9245	Guitar I	1.0	9-12	
ALL	9247	Guitar II	1.0	10-12	Successful completion of Guitar I or teacher recommendation
B-C-M-N	9248	Guitar Ensemble	1.0	11-12	Successful completion of Guitar II or teacher recommendation
S	9214	Music Technology I	1.0	9-12	
S	9298	Music Technology II	1.0	10-12	Successful completion of Music Technology I
GENERAL COURSES FOR THEATRE ARTS					
ALL	1410	Theatre Arts I	1.0	9-12	
ALL	1420	Theatre Arts II	1.0	10-12	Successful completion of Theatre Arts I

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ALL	1423	Theatre Arts III	1.0	11-12	Successful completion of Theatre Arts II
ALL	1426	Theatre Arts IV	1.0	11-12	Successful completion of Theatre Arts III
ALL	1435	Technical Theatre I	1.0	9-12	
ALL	1448	Technical Theatre II	1.0	10-12	Successful completion of Technical Theatre I
ALL	1450	Technical Theatre III	1.0	10-12	Successful completion of Technical Theatre II
ADVANCED PLACEMENT COURSES FOR ART					
ALL	9150AP	AP Studio Art (Drawing Portfolio)	1.0	11-12	Successful completion of Art III 2-D or 3-D and teacher recommendation
ALL	9148AP	AP Studio Art (2-D Design Portfolio)	1.0	11-12	Successful completion of Art III 2-D or 3-D and teacher recommendation
ALL	9149AP	AP Studio Art (3-D Design Portfolio)	1.0	11-12	Successful completion of Art III
ALL	9151AP	AP Art History (Non-Studio Elective)	1.0	11-12	Successful completion of Art History or teacher recommendation
ADVANCED PLACEMENT COURSES FOR MUSIC					
ALL	9226AP	AP Music Theory	1.0	11-12	Successful completion of Music Theory or teacher recommendation
INTERNATIONAL BACCALAUREATE COURSES FOR VISUAL AND PERFORMING ARTS					
B-M	9194IB 9196IB	IB Visual Arts (SL)	1.0 per course	11-12	Successful Completion of Art II Successful completion of IB year one to go on to IB year two
B-M	9195IB 9197IB	IB Visual Arts (HL)	1.0 per course	11-12	Successful completion of Art II Successful completion of IB year one to go on to IB year two
B-M	1432IB 1434IB	IB Theatre Arts (SL)	1.0 per course	11-12	Successful completion of Theatre Arts III for IB year one Successful completion of IB year one to go on to IB year two
B-M	1433IB 1435IB	IB Theatre Arts (HL)	1.0 per course	11-12	Successful completion of Theatre Arts III for IB year one Successful completion of IB year one to go on to IB year two
B-M	9294IB 9296IB	IB Music (SL)	1.0 per course	11-12	Successful completion of previous music courses for IB year one Successful completion of IB year one to go on to year two Successful completion of Music Theory course preferred. Students must be concurrently enrolled in a performance class
B-M	9295IB 9297IB	IB Music (HL)	1.0 per course	11-12	Successful completion of previous music courses for IB year one Successful completion of IB year one to go on to year two Successful completion of Music Theory course preferred. Students must be concurrently enrolled in a performance class
HEALTH AND PHYSICAL EDUCATION AND DRIVER EDUCATION					
ALL	7300	Health and Physical Education 9	1.0	9	
ALL	7400/ 7405	Health and Physical Education 10	1.0	10	

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ALL	7640	Strength and Body I	1.0	11-12	
ALL	7650	Strength and Body II	1.0	12	
ALL	7643	Competitive Team Sports	1.0	11-12	
ALL	7653	Competitive Individual Sports	1.0	11-12	
ALL	7660	Sports Medicine I	1.0	10-11	Successful completion of Biology
ALL	7662	Sports Medicine II	1.0	11-12	Successful completion of Sports Medicine I; completion of application and interview, be available five hours a week after school
ALL	7510	Sport and Fitness for Life I	1.0	11-12	
ALL	7610	Sport and Fitness for Life II	1.0	12	Successful completion of Sport and Fitness for Life I
ENGLISH FOR SPEAKERS OF OTHER LANGUAGES (ESOL)					
ALL	4265	ESOL Environmental Science	1.0	9-10	
ALL	5730	ESOL English for Academic Purposes	1.0	9-12	
ALL	5732	ESOL Algebra Readiness	1.0	9-12	
ALL	5715	Foundations of Literacy	1.0	9-12	
ALL	5735	Foundations of Mathematics	1.0	9-12	
ALL	5722	English Language Development Concepts I	1.0	9-12	
ALL	5724	English Language Development Concepts II	1.0	9-12	
ALL	5726	English Language Development Concepts III	1.0	9-12	
ALL	5728	English Language Development Concepts IV	1.0	9-12	
ADDITIONAL CREDIT OPPORTUNITIES					
ALL	3186AP	AP Computer Science Principles	1.0	9-12	
C-N-S	22110AP	AP Capstone – AP Seminar	1.0	10-12	
C-N-S	22111AP	AP Capstone – AP Research	1.0	11-12	
ALL	9826	All Century Independent Learners	1.0	9-12	
ALL	0115	Gifted and Accelerated Programs (GSP) Independent Study	1.0	11-12	
C-N-S	1519G	CGS Advanced Research and Writing	1.0	12	
ALL	9828	Learn and Serve I	1.0	10-12	
ALL	9840	Learn and Serve II	1.0	10-12	
ALL	9097	Leadership	1.0	9-12	
CAREER AND TECHNICAL EDUCATION					

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
B-M	9062DE	DE Virginia Teachers for Tomorrow I	1.0	11	
B-M	9072DE	DE Virginia Teachers for Tomorrow II	1.0	12	Completion of Virginia Teachers for Tomorrow I
JUNIOR RESERVE OFFICERS' TRAINING CORPS (JROTC)					
N	7913AF	Air Force Military Science I	1.0	9-12	
N	7916AF	Air Force Military Science II	1.0	10-12	Air Force Military Science Level I
N	7918AF	Air Force Military Science III	1.0	10-12	Air Force Military Science Level II
N	7919AF	Air Force Military Science IV	1.0	10-12	Air Force Military Science Level III
C	7913AR	Army Military Science I	1.0	9-12	
C	7916AR	Army Military Science II	1.0	10-12	Army Military Science I
C	7918AR	Army Military Science III	1.0	11-12	Army Military Science II
C	7919AR	Army Military Science IV	1.0	12	Army Military Science III
M	7913MC	Marine Corps Military Science I	1.0	9-11	
M	7916MC	Marine Corps Military Science II	1.0	10-12	Marine Corps Military Science I
M	7918MC	Marine Corps Military Science III	1.0	11-12	Marine Corps Military Science II
M	7919MC	Marine Corps Military Science IV	1.0	12	Marine Corps Military Science III
B-S	7913NA	Navy Military Science I	1.0	9-11	
B-S	7916NA	Navy Military Science II	1.0	10-12	Navy Military Science I
B-S	7918NA	Navy Military Science III	1.0	11-12	Navy Military Science II
B-S	7919NA	Navy Military Science IV	1.0	12	Navy Military Science III
AGRICULTURE AND NATURAL RESOURCES					
N	8034	Horticulture Sciences	1.0	10-11	
N	8035	Greenhouse Plant Production and Management	2.0	11-12	Horticulture Sciences
N	8036	Landscaping	2.0	11-12	Horticulture Sciences
BUSINESS AND INFORMATION TECHNOLOGY					
ALL	6320	Accounting I	1.0	10-12	Recommended: Digital Applications
ALL	6321	Accounting II	1.0	11-12	Accounting I
ALL	6131	Business Law	1.0	11-12	
ALL	6135	Business Management	1.0	10-12	
B-C	6135DE	DE Business Management	1.0	10-12	
ALL	6612	Computer Information Systems I	1.0	9-12	Recommended: Digital Applications
ALL	6613	Computer Information Systems II	1.0	10-12	Computer Information Systems I

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ALL	6302	Cybersecurity I	1.0	10-12	Information Technology Fundamentals
ALL	6304	Cybersecurity II	1.0	11-12	Cybersecurity I
ALL	6306	Cybersecurity III	1.0	11-12	Cybersecurity II
B	6660S	Database Design and Management	1.0	10-11	Information Technology Fundamentals
ALL	6630	Design, Multimedia, and Web Technologies I	1.0	10-12	Recommended: Digital Applications or Computer Information Systems I
ALL	6631	Design, Multimedia, and Web Technologies II	1.0	10-12	Design, Multimedia, and Web Technologies I
ALL	6611	Digital Applications	1.0	9-12	
ALL	6120	Economics and Personal Finance	1.0	10-12	This course is a graduation requirement for students who enter high school in 2011 and all subsequent years.
ALL	6670	Information Technology Fundamentals	1.0	9-11	
B-C	6661	Java Programming	1.0	12	
ALL	6115	Principles of Business and Marketing	1.0	9-10	
ALL	6640	Programming I	1.0	10-12	Recommended: Digital Applications or Computer Information Systems I
B-C	6640 DE	DE Programming I	1.0	10-12	
ALL	6641	Programming II	1.0	11-12	Programming I
B-C	6641DE	DE Programming II	1.0	11-12	DE Programming I or Programming I
B	6640S	STAT Programming	1.0	10-12	Information Technology Fundamentals
MARKETING					
ALL	9085	Employment for Education I	1.0	9-11	Application and Interview
ALL	8140	Fashion Marketing I	1.0	10-12	Interest in fashion career recommended
ALL	8145	Fashion Marketing II	1.0	11-12	Fashion Marketing I
ALL	8120	Marketing	1.0	10-12	
ALL	8130	Strategic Marketing	1.0	11-12	Marketing
ALL	8175	Sports and Entertainment Marketing	1.0	10-12	
ALL	8177	Sports and Entertainment Management	1.0	11-12	Sports and Entertainment Marketing
HEALTH AND MEDICAL SCIENCES					
C-S	8333	Emergency Medical Technician I	1.0	11-12	Recommended Background: Introduction to Health and Medical Sciences. Students must be 16 years of age by the first day of school in order to enroll in EMT I. Emergency Medical Technician I must be completed to enroll in EMT II
C-S	8334	Emergency Medical Technician II	1.0	11-12	See prerequisite above. MUST be concurrently enrolled in EMT I and EMT II
C	8335	Emergency Medical Technician III	1.0	12	Successful completion of EMT I and EMT II/ Instructor Endorsement
C-S	8337	Emergency Medical Telecommunications	1.0	10-12	

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B	8331	Health Assisting Careers	2.0	10-12	Recommended: Introduction to Health and Medical Sciences and teacher recommendation
ALL	8302	Introduction to Health and Medical Sciences	1.0	9-12	
M	8345	Medical Assistant I	2.0	11	Recommended: Introduction to Health and Medical Sciences or Health Assisting Careers
M	8346	Medical Assistant II	2.0	12	Medical Assistant I
N	8360	Nurse Aide I	2.0	11-12	Recommended: Introduction to Health and Medical Sciences (including clinical experience)
N	8362	Nurse Aide II	2.0	11-12	MUST be concurrently enrolled in Nurse Aide I and Nurse Aide II
FAMILY AND CONSUMER SCIENCES					
ALL	8232	Child Development and Parenting	1.0	10-12	
B-M-S	8275	Culinary Arts I	2.0	10-11	
B-M-S	8276	Culinary Arts II	2.0	11-12	Culinary Arts I and students must successfully pass ServSafe Manager Certification Exam
B-M-S	8279	Culinary Arts Specialization	2.0	12	Culinary Arts II and Students must successfully pass the Culinary Arts II end-of- the-year assessment and have the teacher's recommendation.
B-N	8285	Early Childhood, Education, and Services I	2.0	10-11	
B-N	8286	Early Childhood, Education, and Services II	2.0	11-12	Early Childhood Education I
ALL	8225	Family Relations	1.0	9-12	
ALL	8248	Introduction to Fashion Careers	1.0	9-12	
ALL	8255	Introduction to Interior Design	1.0	9-12	
ALL	8227	Life Planning	1.0	9-12	
ALL	8229	Nutrition and Wellness	1.0	9-12	
TECHNOLOGY AND ENGINEERING EDUCATION					
B-C-M-N	8437	Architectural Drawing and Design	1.0	10-12	Technical Drawing and Design
C	8415	Communication Systems	1.0	9-12	
C	8459	Digital Visualization	1.0	10-12	Recommended: Technical Drawing and Design, Communication Systems or Imaging Technology
C-M-S	8450	Engineering Exploration	1.0	9-11	
S	8451	Engineering Analysis and Application	1.0	10-12	Engineering Exploration
C-M-S	8491	Engineering Studies	1.0	10-12	Engineering Exploration or Engineering Practicum
ALL	8436	Engineering Drawing and Design	1.0	10-12	Technical Drawing and Design
S	8453	Engineering Practicum	1.0	12	Engineering Analysis and Applications or Engineering Studies
S	8424	Geospatial Technology II	1.0	11-12	Geospatial Technology I
C	8455	Imaging Technology	1.0	9-12	Recommended: Communication Systems

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B-M	8425	Manufacturing Systems I	1.0	9-12	
B	8427	Advanced Manufacturing Systems II	1.0	10-12	Manufacturing Systems or Production Systems
M	8447	Production Systems	1.0	9-12	
ALL	8435	Technical Drawing and Design	1.0	9-12	
PROJECT LEAD THE WAY (PLTW)					
N	8428	Aerospace Engineering - PLTW	1.0	10	Introduction to Engineering Design
N	8382	Biomedical Innovation-PLTW	2.0	12	Biology, Chemistry and one of the following: AP Chemistry, AP Biology, Physics/AP Physics, Anatomy and Physiology, plus teacher recommendations and letter of interest AND/OR one or more PLTW courses and teacher recommendation
N	8430	Civil Engineering and Architecture – PLTW	1.0	11-12	Introduction to Engineering Design and Principles of Engineering or Digital Electronics
N	8442	Computer Integrated Manufacturing – PLTW	1.0	11-12	Introduction to Engineering Design and Digital Electronics
N	8440	Digital Electronics - PLTW	1.0	10-12	Introduction to Engineering Design
N	8443	Engineering Design and Development - PLTW	2.0	12	Introduction to Engineering Design, Principles of Engineering, Digital Electronics, and Computer Integrated Technology
N	8380	Human Body Systems-PLTW	1.0	10-12	Biology and teacher recommendation AND/OR Principles of Biomedical Sciences- PLTW and teacher recommendation
N	8439	Introduction to Engineering Design – PLTW	1.0	9-11	
N	8381	Medical Interventions-PLTW	1.0	11-12	Biology, Algebra II and Chemistry completed or concurrently enrolled and teacher recommendations AND/OR one or more PLTW courses and teacher recommendation; Anatomy and Physiology enrolled concurrently strongly recommended
B	8379	Principles of Biomedical Sciences- PLTW	1.0	9-11	
N	8441	Principles of Engineering-PLTW	1.0	11-12	Introduction to Engineering Design; Algebra II, which may be taken concurrently, and Digital Electronics
TRADE AND INDUSTRIAL EDUCATION					
N	8676	Auto Body Technology I – Collision and Repair	2.0	10-11	
N	8677	Auto Body Technology II – Painting and Refinishing	4.0	11-12	Auto Body Technology I
N	8678	Auto Body Technology III – Collision and Repair and Painting and Refinishing	4.0	12	Auto Body Technology II
B-N	8502	Automotive Technology I	1.0	10-11	
B-N-S	8507	Automotive Technology II	2.0	11-12	Automotive Technology I
B-N-S	8508	Automotive Technology III	2.0	12	Automotive Technology II
M	8743	Master Barbering I	3.0	11	Regular attendance is required in order to meet the clinical lab hours. Grade 10 if space is

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					available.
M	8744	Master Barbering II	4.0	11-12	Passing score of 70% or above in Mastering Barbering I and regular attendance is required to meet clinical hours.
N	8604	Cabinetmaking I	1.0	10-11	
N	8605	Cabinetmaking II	2.0	11-12	Cabinetmaking I
B-S	8601	Carpentry I	BPBS - 1.0 SHS - 2.0	10-11	Construction Trades
B-S	8602	Carpentry II	2.0	11-12	Carpentry I
S	8603	Carpentry III	2.0	12	Carpentry II
S	9071	Construction Trades	1.0	9	
M-S	8745	Cosmetology I	3.0	10-11	Regular attendance is required in order to meet the clinical lab hours.
M-S	8746	Cosmetology II	4.0	11-12	Passing score of 70% or above in Cosmetology I and regular attendance is required to meet clinical hours.
B-N	8702	Criminal Justice I	1.0	11	
B-N	8703	Criminal Justice II	1.0	12	Criminal Justice I
S	8530	Drafting: Fundamentals	1.0	9-11	
S	8531	Drafting: Mechanical	2.0	10-12	Drafting: Fundamentals
S	8532	Drafting: Architectural	2.0	11-12	Drafting: Fundamentals:
S	8562	Drafting: Advanced	2.0	11-12	Drafting Fundamentals AND Drafting Mechanical or Drafting Architectural
S	8533	Electricity I	2.0	10-11	Construction Trades recommended; Algebra I, Part I recommended
S	8534	Electricity II	2.0	11-12	Electricity I
S	8535	Electricity III	2.0	12	Electricity II
All	8705	Firefighting I	2.0	11-12	Students must be at least 16 years old by the first day of the course offering. Enrollment also requires parental/guardian consent. Additional requirements, including CPR, HAZMAT operations, and Mayday Awareness, are stipulated for those students seeking NFPA Firefighter I certification.
All	8706	Firefighting II	2.0	11-12	Successful completion of Firefighting I and Certification Exam
N	8660	Graphic Imaging Technology I	2.0	10-11	
N	8661	Graphic Imaging Technology II	2.0	11-12	Graphic Imaging Technology I
S	8503	Heating, Ventilation, Air Conditioning and Refrigeration I	1.0	10-11	Construction Trades recommended
S	8512	Masonry I	2.0	10-11	Construction Trades recommended
S	8513	Masonry II	2.0	11-12	Masonry I
S	8514	Masonry III	2.0	12	Masonry II
S	8551	Plumbing I	1.0	10-11	Construction Trades recommended
S	8725	Small Engine Technology I	1.0	9-12	

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
S	8726	Small Engine Technology II	2.0	10-12	Small Engine Technology I
ALL	8688	Television and Media Production I	1.0	9-12	
ALL	8689	Television and Media Production II	1.0/2.0	10-12	Television and Media Production I
ALL	8690	Television and Media Production III	1.0/2.0	11-12	Television and Media Production II
B-N	8691	Television and Media Production–Internship	1.0	12	Television and Media Production II

Compliance with State Code and Regulations

Stafford Schools maintains compliance with all staffing and instructional time requirements as outlined in the *Code of Virginia*, Standards of Quality, and Standards of Accreditation.

NOTICE

The Stafford County School Board does not unlawfully discriminate against any person on the basis of race, color, national origin, political affiliation, religion, sex, pregnancy, childbirth or related medical conditions, marital status, mental or physical disability, age, genetic information, sexual orientation, gender identity, or any other characteristic prohibited by state and/or federal law. Inquiries regarding non-discrimination should be directed to the Title IX Coordinator/Human Resources, Stafford Schools, 31 Stafford Avenue, Stafford, VA 22554. Phone: (540) 658-6560 Fax: (540) 658- 5970. Reasonable accommodation upon request.