



Program of Studies 2023-2024

#ElevateStafford

Dear Stafford County Families,

Welcome to Stafford County Public Schools, where students 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. This diverse partnership extends education outside the classroom through internships, career and technical education, work-based learning opportunities, college readiness programs, and military preparatory courses that provide for the unique needs of every student.

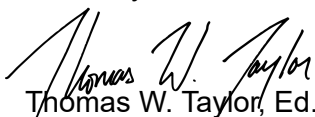
The information in the following pages provides connections between classes offered in our schools and community industries, helping our students create a roadmap to graduation and a potential future career from the very first day they enter our school system.

The Virginia Board of Education implemented 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.

Our 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). Program and course selection should consider the student's abilities, interests, post-secondary goals, and state graduation requirements.

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

Sincerely,



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

STAFFORD COUNTY PUBLIC SCHOOLS

School Board Members

Ms. Patricia Healy, Chair, Rock Hill District

Ms. Maureen Siegmund,
Garrisonville District

Ms. Susan Randall, Vice-Chair,
George Washington District

Dr. Elizabeth Warner,
Griffis-Widewater District

Ms. Maya Guy, Aquia District

Ms. Alyssa Halstead, Hartwood District

Dr. Sarah Chase, Falmouth 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

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 2023-2024 Program of Studies would not be possible without the expertise of and collaboration among Stafford Schools' staff from the Department of School Leadership, Department of Academic Programs, Department of Research, Evaluation, and Strategic Improvement, school principals, and school counseling directors.

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School Contact Information

Elementary School Contact Information

SCHOOL	PRINCIPAL	TELEPHONE
Anne E. Moncure Elementary	Greg Machi	(540) 658-6300
Anthony Burns Elementary	Caroline Goddard	(540) 658-6800
Conway Elementary	JR Raybold	(540) 361-1455
Falmouth Elementary	Sallie Burch	(540) 373-7458
Ferry Farm Elementary	Alissa Fraser	(540) 373-7366
Garrisonville Elementary	Alexis White	(540) 658-6260
Grafton Village Elementary	Michael Sidebotham	(540) 373-5454
Hampton Oaks Elementary	Susan Weiderhold	(540) 658-6280
Hartwood Elementary	Brian Raska	(540) 752-4441
Kate Waller Barrett Elementary	Rachel Novak	(540) 658-6464
Margaret Brent Elementary	Brian Fitzgerald	(540) 658-6790
Park Ridge Elementary	Keana Butler	(540) 658-6320
Rockhill Elementary	Terri Rivero	(540) 658-6360
Rocky Run Elementary	Nick Roman	(540) 286-1956
Stafford Elementary	Stefanie Sanders	(540) 658-6340
Widewater Elementary	Karen Bingham	(540) 658-6380
Winding Creek Elementary	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	Vacant	(540) 658-5910
Stafford Middle	Scott Elchenko	(540) 658-6210
T. Benton Gayle Middle	Katie Werner	(540) 373-0383

High School Contact Information

SCHOOL	PRINCIPAL	TELEPHONE
Brooke Point High School	Tim Roberts	(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, Ed.D.	(540) 658-6150
Stafford High School	Allen Hicks	(540) 371-7200
Phoenix Center	William Boatwright	(540) 286-8985

School Schedules

TIER 1 7:30 A.M. - 2 P.M.		TIER 2 8:30 A.M. - 3 P.M.		TIER 3 9:30 A.M. - 4 P.M.		EARLY CHILDHOOD EDUCATION	
All High Schools:	1 Elementary School:	16 Elementary Schools:	KWBES	All Middle Schools:	RTMS	North Star:	Rising Star:
	BPHS		MBES		SHMS		
	CFHS		ABES		SMS		
	MVHS		CES		TBGMS		
	NSHS		FFES				
	SSHS		GES				
			SES			Afternoon Half Day 11 a.m. - 2 p.m.	Afternoon Half Day 12:45 - 3:45 p.m.
			GVES			Whole Day 7:45 a.m. - 2 p.m.	Whole Day 9:30 a.m.-3:45 p.m.
			HOES				
			WCES				
			HES				
			WES				



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.

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;
- 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; and
- successfully complete two sequential electives to satisfy graduation requirements. Courses used to satisfy this requirement may be in any discipline as long as the courses are not specifically required for graduation.

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;
- 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; and
- successfully complete two sequential electives to satisfy graduation requirements. Courses used to satisfy this requirement may be in any discipline as long as the courses are not specifically required for graduation.

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 & 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 & 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](#).

Awards for Exemplary Performance

Students who demonstrate outstanding achievement may be eligible for one of the following Virginia Board of Education's (VBOE) awards:

1. 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), or International Baccalaureate (IB) courses.
2. The **VBOE Seal** will be awarded to students who complete the requirements for a Standard Diploma or Advanced Studies Diploma with an average grade of "A."
3. The **VBOE Career and Technical Education (CTE) Seal** will be awarded to students who earn a Standard Diploma, Advanced Studies Diploma or complete a prescribed sequence of courses in a CTE concentration or specialization that they choose and maintain a "B" or better average in those courses; or (i) pass an examination or an occupational competency assessment in a CTE concentration or specialization that confers certification or occupational competency credential from a recognized industry, trade or professional association or (ii) acquire a professional license in that CTE field from the Commonwealth of Virginia. The VBOE shall approve all professional licenses and examinations to satisfy these requirements.
4. The **VBOE Career & Technical Education 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.
5. The **VBOE 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 (i) successfully complete a

50 hour or more work-based learning opportunity in a STEM area, and (ii) satisfy all requirements for a Career and Technical Education 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 (iii) 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.

6. The **VBOE Seal for Excellence in Science and the Environment** is awarded to students who enter the ninth grade for the first time in the 2018-2019 year and thereafter who earn either a Standard or Advanced Studies Diploma and (i) 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; (ii) complete laboratory or field-science research and present that research in a formal, juried setting; and (iii) 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.
7. The **Governor’s School Diploma Seal** is for students who successfully complete the Commonwealth Governor’s School (CGS) program.
8. The **Governor’s STEM Academies Seal** is awarded to students who successfully complete the Stafford Academy for Technology (STAT) program.
9. **IB Seals** are awarded to students who successfully complete course requirements for the International Baccalaureate Programme.
10. **APPX Seals** are awarded to students who successfully complete course requirements for the Advanced Placement Program of Excellence.
11. The **VBOE Seal of Biliteracy** certifies attainment of a high level of proficiency by a graduating high school student in one or more languages in addition to English. This seal is awarded to students who earn either a Virginia board-approved diploma and (i) pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level; and (ii) are proficient at the intermediate mid-level or higher in one or more languages other than English, as demonstrated through an assessment from a list to be approved by the Superintendent of Public Instruction. For the purposes of this article, “foreign language” means a language other than English and includes American Sign Language.
12. To qualify for the **Virginia Department of Education (VDOE) Early College Scholars** program, a student must (i) have a “B” average or better; (ii) pursue an Advanced Studies Diploma; (iii) and take and complete college-level coursework (i.e., AP, DE, or IB) that will earn at least 15 transferable college credits. The program is supported by Virtual Virginia and the Commonwealth College Course Collaborative. Students receive a certificate upon graduation from the Early College Scholar Program.
13. The **VBOE Seal for Excellence in Civics Education** is awarded to students who meet each of the following four criteria: (i) Satisfy the requirement to earn a Standard Diploma or an Advanced Studies Diploma; (ii) Complete Virginia & United States History and Virginia & United States Government courses with a grade of “B” or higher; (iii) 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; and 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; and (iv) have good attendance and no disciplinary infractions as determined by local school board policies.

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 SOL and Growth Assessments

Elementary Grade Level	Virginia Standards of Learning or Growth Assessment	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 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 SOL 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 and Grade 8 Writing	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 graduation requirements.

High School SOL Assessments

State SOL assessments are given upon completion of the courses listed in the following tables for Standard and Advanced Studies Diplomas

English 11	All Diplomas	History*	All Diplomas
Reading, Literature/Research	Grade 11	World History to 1500 AD; World Geography	Grade 9, 10 or 11
Writing**	Grade 11	World History from 1500 AD; World Geography	
		Virginia and US History	

* Students must obtain a verified credit from one course in this content area to meet graduation requirements.

** Students may earn a verified credit in Writing through a writing performance assessment option.

Science*	All Diplomas	Mathematics*	All Diplomas
Earth Science	Grade 9, 10, or 11	Algebra I	Grade 7, 8, 9 or 10**
Biology		Geometry	Grade 8, 9, 10 or 11**
Chemistry		Algebra II	Grade 9, 10, 11, or 12

* Students must obtain a verified credit from one course in this content area to meet graduation requirements.

Screening and Other Assessments

State-required Screening Assessments

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

Phonological Awareness Literacy Screening (PALS) Assessment

PALS-K is a measure of students' knowledge of several essential literacy fundamentals: phonological awareness, alphabet recognition, knowledge of letter sounds, and spelling. PALS-K 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.

PALS 1-3 is used with students in 1st through 3rd grades 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 County Public 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 EL 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, teach academic vocabulary, and provide content background knowledge to help students be successful in their content courses. These courses include English for Academic Purposes, foundational courses in science and social studies, Concept courses in science and social studies, ESOL Reading and Writing Strategies, ESOL Algebra Readiness, and ESOL Environmental Science. All of these courses are described in this document.

Gifted Education Services

Gifted 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.

At the elementary level, gifted resource teachers support and provide appropriately challenging academic learning through a variety of services, including working directly with students, families, and classroom teachers. Annually, gifted students participate in the Gifted & Talented Festival to showcase 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 explore ways to further 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 may be clustered with intellectual, like-minded peers to facilitate and support differentiation in the classroom. Independent study opportunities are offered to gifted students in high school.

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 County Public 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:

Kindergarten

M = Meeting standards
P = Progressing
B = Beginning

Grades 1-3 (Social & Work Habits)

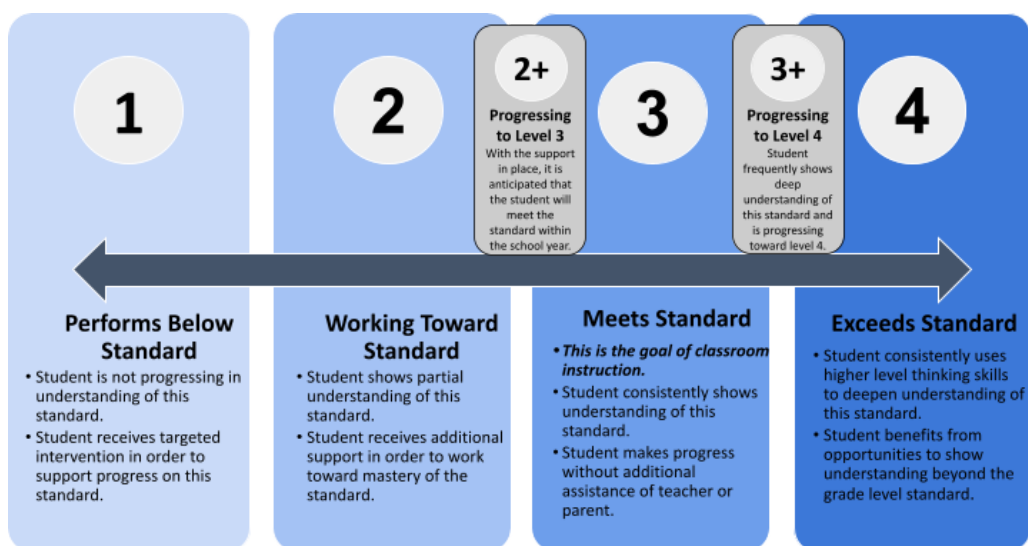
4 = Exceeding expectations
3 = Meeting expectations
2 = Working toward expectations
1 = Performing below expectations

Grades 1-5 (Academic Subjects)

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

Grades 4-5 (Social & Work Habits)

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



Secondary Grading Scale and Grade Point Average Calculation

Stafford Schools 10-POINT GRADING SCALE			
	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

A student's Grade Point Average (GPA) is calculated by adding up the number of quality points the student earned and dividing it by the number of courses the student took. For example, a student who earned 2 As, 3 Bs, 2 Cs, and a D+ would earn 24.25 quality points. This score would be divided by the 8 courses the student took and therefore he/she would earn 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), college 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 SCPS 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

Many of the courses offered are sequential and may recommend successful completion of related coursework. Successful completion 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.



High School Program

High School Program

General Course Information

High School Academies and Pathways

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 academies that provide multiple pathways that match students' interests and postsecondary goals, beginning with the class of 2028 (current seventh graders). Changes to programmatic offerings aligned with new high school academies and pathways will not impact students that entered high school prior to 2023-2024 and are not reflected in this document. First-time ninth-grade students in 2023-2024 and beyond that choose to attend a specialty 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.
- 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 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 County Public 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 a SCPS online course with an SCPS 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](#).

NCAA Initial Eligibility and Academic Requirements

Division I Academic Eligibility

To be eligible to compete in NCAA sports during your first year at a Division I school, you must graduate high school and meet ALL the following requirements:

- Complete 16 core courses:
 - o 4 years of English
 - o 3 years of mathematics (Algebra 1 or higher)
 - o 2 years of natural/physical science (including one year of lab science if your high school offers it)
 - o 1 year of additional English, math or natural/physical science
 - o 2 years of social science
 - o 4 years of additional courses from any area above- (English, math, natural/physical science, social science, foreign/world language, comparative religion or philosophy)
- Complete 10 core courses, including seven in English, math or natural/physical science, before your seventh semester. Once you begin your seventh semester, you may not repeat or replace any of those 10 courses to improve your core-course GPA.
- Earn at least a 2.3 GPA in your core courses.
- Earn an SAT combined score or ACT sum score matching your core-course GPA on the Division I sliding scale, which balances your test score and core-course GPA. If you have a low test score, you need a higher core-course GPA to be eligible. If you have a low core-course GPA, you need a higher test score to be eligible.

Division II Academic Eligibility

To be eligible to compete in NCAA sports during your first year at a Division II school, you must meet academic requirements for your core courses, grade-point average (GPA) and test scores. The requirements are changing for students who enroll full-time at a Division II school after August 1, 2018.

If you enroll BEFORE August 1, 2018

You must graduate high school and meet **ALL** the following requirements:

- Complete 16 core courses:
 - o 3 years of English.
 - o 2 years of math (Algebra 1 or higher).
 - o 2 years of natural or physical science (including one year of lab science if your high school offers it).
 - o 3 additional years of English, math or natural or physical science
 - o 2 years of social science

- o Four years of additional courses from any area above (English, math, natural or physical science, social science, foreign/world language, comparative religion or philosophy)
- Earn at least a 2.2 GPA in your core courses.
- Earn a SAT combined score of 820 or an ACT sum score of 68. Remember, if you took the SAT on or after March 2016 you need to compare your score on the College Board concordance table. The 820 score is after the concordance table is applied.

AFTER August 1, 2018

You must graduate high school and meet ALL the following requirements:

- Complete 16 core courses:
 - o Three years of English.
 - o Two years of math (Algebra 1 or higher).
 - o Two years of natural or physical science (including one year of lab science if your high school offers it).
 - o Three additional years of English, math or natural or physical science
 - o Two years of social science
 - o Four additional years of English, math, natural or physical science, social science, foreign language (World Language), comparative religion or philosophy
- Earn at least a 2.2 GPA in your core courses.
- Earn a SAT combined score or ACT sum score matching your core-course GPA on the Division II sliding scale, which balances your test score and core-course GPA. If you have a low test score, you need a higher core-course GPA to be eligible. If you have a low core-course GPA, you need a higher test score to be eligible.

Play Division III Sports

Division III schools provide an integrated environment focusing on academic success while offering a competitive athletics environment. Division III rules minimize potential conflicts between athletics and academics and focus on regional in-season and conference play.

While Division III schools do not offer athletics scholarships, 75 percent of Division III student-athletes receive some form of merit or need-based financial aid. If you are planning to attend a Division III school, you do not need to register with the NCAA Eligibility Center. Division III schools set their own admissions standards.

Other Important Information:

Students enrolling at an NCAA Division I or II institution for the first time also need to complete the amateurism questionnaire through the Eligibility Center website. Students need to request final amateurism certification prior to enrollment. For more information regarding the rules please visit the [NCAA site](#) or the [NCAA Eligibility Center](#). Questions may be directed to the NCAA Eligibility Center.

Sliding Scales for NCAA Eligibility

DIVISION I FULL QUALIFIER SLIDING SCALE				DIVISION I FULL QUALIFIER SLIDING SCALE				DIVISION I FULL QUALIFIER SLIDING SCALE		
Core GPA	SAT	ACT Sum		Core GPA	SAT	ACT Sum		Core GPA	SAT	ACT Sum
3.550	400	37		3.025	710	51		2.500	900	68
3.525	410	38		3.000	720	52		2.475	910	69
3.500	430	39		2.975	730	52		2.450	920	70
3.475	440	40		2.950	740	53		2.425	930	70
3.450	460	41		2.925	750	53		2.400	940	71
3.425	470	41		2.900	750	54		2.375	950	72
3.400	490	42		2.875	760	55		2.350	960	73
3.375	500	42		2.850	770	56		2.325	970	74
3.350	520	43		2.825	780	56		2.300	980	75
3.325	530	44		2.800	790	57		2.275	990	76
3.300	550	44		2.775	800	58		2.250	1000	77

3.275	560	45		2.750	810	59		2.225	1010	78
3.250	580	46		2.725	820	60		2.200	1020	79
3.225	590	46		2.700	830	61		2.175	1030	80
3.200	600	47		2.675	840	61		2.150	1040	81
3.175	620	47		2.650	850	62		2.125	1050	82
3.150	630	48		2.625	860	63		2.100	1060	83
3.125	650	49		2.600	860	64		2.075	1070	84
3.100	660	49		2.575	870	65		2.050	1080	85
3.075	680	50		2.550	880	66		2.025	1090	86
3.050	690	50		2.525	890	67		2.000	1100	86

DIVISION II FULL QUALIFIER SLIDING SCALE				DIVISION II FULL QUALIFIER SLIDING SCALE				DIVISION II FULL QUALIFIER SLIDING SCALE		
Core GPA	SAT	ACT Sum		Core GPA	SAT	ACT Sum		Core GPA	SAT	ACT Sum
3.300	400	37		2.925	620	47		2.550	790	57
3.275	410	38		2.900	630	48		2.525	800	58
3.250	430	39		2.875	650	49		2.500	810	59
3.225	440	40		2.850	660	49		2.475	820	60
3.200	460	41		2.825	680	50		2.450	830	61
3.175	470	41		2.800	690	50		2.425	840	61
3.150	490	42		2.775	710	51		2.400	850	62
3.125	500	42		2.750	720	52		2.375	860	63
3.100	520	43		2.725	730	52		2.350	860	64
3.075	530	44		2.700	740	53		2.325	870	65
3.050	550	44		2.675	750	53		2.300	880	66
3.025	560	45		2.650	750	54		2.275	890	67
3.000	580	46		2.625	760	55		2.250	900	68
2.975	590	46		2.600	770	56		2.225	910	69
2.950	600	47		2.575	780	56		2.200	920	70

DIVISION II PARTIAL QUALIFIER SLIDING SCALE				DIVISION II PARTIAL QUALIFIER SLIDING SCALE				DIVISION II PARTIAL QUALIFIER SLIDING SCALE		
Core GPA	SAT	ACT Sum		Core GPA	SAT	ACT Sum		Core GPA	SAT	ACT Sum
3.050	400	37		2.700	600	47		2.350	770	56
3.025	410	38		2.675	620	47		2.325	780	56
3.000	430	39		2.650	630	48		2.300	790	57
2.975	440	40		2.625	650	49		2.275	800	58
2.950	460	41		2.600	660	49		2.250	810	59
2.925	470	41		2.575	680	50		2.225	820	60
2.900	490	42		2.550	690	50		2.200	830	61
2.875	500	42		2.525	710	51		2.175	840	61
2.850	520	43		2.500	720	52		2.150	850	62
2.825	530	44		2.475	730	52		2.125	860	63
2.800	550	44		2.450	740	53		2.100	860	64
2.775	560	45		2.425	750	53		2.075	870	65
2.750	580	46		2.400	750	54		2.050	880	66
2.725	590	46		2.375	760	55		2.025	890	67

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	VA/US History	VA/US 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 III 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 & 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	VA/US History	VA/US Government
3	Earth Science or Environmental Science or Biology	Biology or Chemistry	Chemistry or Physics	Upper Level Science
4	Algebra I or Geometry	Geometry or Algebra II	Algebra II or Pre-calculus	Upper Level Mathematics
5	Health and PE 9	Health and PE 10	Fine Arts or Career and Technical Education	Required Elective
6	World Language	World Language	World Language	Required Elective
7	Student Choice	Student Choice	Economics & 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				
9	Alternates			
10	Alternates			

High School Specialty Programs

Stafford County Public Schools provides opportunities for students to select challenging and interesting secondary specialty programs based on their learning needs, styles, and preferences. These programs vary in nature and scope as they relate to the academic and career interests of the student and include the following: Commonwealth Governor's School, Career and Technical Education, International Baccalaureate, Junior Reserve Officer Training Corps, and the Stafford Academy for Technology. Secondary specialty programs may be application-based and vary based on location. Students in need of financial assistance should contact their school counselor. First-time ninth-grade students in 2023-2024 and beyond that elect to attend a specialty program will transfer to the offering school location.

Nationally and Internationally Recognized Programs

Stafford County Public Schools offers Advanced Placement (AP) and International Baccalaureate (IB) courses and programs. These courses are recognized nationally and internationally, and may earn students college credit.

Advanced Placement Courses

Advanced Placement College Board approved courses provide students the opportunity to study at the college level. Each college or university, however, determines its own policies on acceptance of AP credits. AP courses require extensive reading, writing, and lab assignments. Some AP courses require prerequisite courses. Students who wish to take an AP course will need to discuss AP enrollment criteria with their high school counselors. Students enrolled in AP courses will receive weighted credit for successful completion of the course. Students are strongly encouraged to take all AP assessments as those students who earn equivalent scores on the AP exam may earn college credit. Students and/or parents/guardians are responsible for the AP exam fee by the appropriate date. Course offerings vary at each school depending on demand and teacher availability. More information on the AP courses is available through the [College Board website](#). Opportunities for financial assistance may be available. Please see your school counselor.

Students may take advantage of additional Advanced Placement courses offered through Virtual Virginia, as well as other courses not found in our Program of Studies. Virtual Virginia courses are offered in partnership with the Virginia Department of Education and are taught by licensed instructors. Students enrolled in Virtual Virginia courses will attend a live class session with their teacher four days per week for a minimum of 30 minutes per day. Students will spend an additional 1 hour per day completing work on their own through the Virtual Virginia Canvas platform. More information on Virtual Virginia course offerings and a sample class schedule can be found on their [website](#).

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. This program is offered at CFHS, NSHS, and SHS.

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

International Baccalaureate Diploma Programme

International Baccalaureate 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. 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 BPHS or MVHS “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.

Options for participation in IB courses include enrolling in one or more IB subject courses in an area of particular strength and interest OR enrolling in the full IB Diploma Programme. Students who choose to pursue individual IB subjects earn an IB Certificate for each IB course successfully completed. Students who choose to pursue the full IB Diploma Programme work toward earning the IB Diploma (while simultaneously earning the Advanced Studies Diploma). Both individual IB courses and the full IB Diploma 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 who do not take the end-of-year IB assessments will not earn an IB certificate. Students enrolled in the IB Diploma Programme must complete all assessments including the assessment in May.

Interested students should complete an application of interest before enrolling in the full IB Diploma Programme. Students who choose to participate in the International Baccalaureate (IB) Diploma Programme will be provided transportation and automatically transferred to the appropriate IB school.

Students pursuing the full IB Diploma complete one course from each of the six subject groups (see next page). 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 at the BPHS or MVHS website for more information and attend an IB Information Night at one of the two schools.

For Further Information:

BPHS – [Meghan Stone](#), IB Coordinator

MVHS – [Jeanne Mills](#), IB Coordinator

Sequence of Pre DP/Honors and IB Courses for Grades 9-12

The following sequence of courses is a typical program of study for students interested in pursuing the IB Diploma or individual IB subject certificates. Some scheduling modifications to the sequence below are available at both schools. Individual student schedules should be developed with the help of parents/guardians, counselors, and the IB coordinator. Course offerings at MVHS and BPHS may differ slightly. Call ahead or make an appointment to verify with a counselor or the IB Coordinator before making final course decisions.

Also note that it is assumed all students pursuing the IB Diploma have taken at least one level of world language and Algebra I in eighth grade. If the student has not, they may still pursue the IB diploma, but the course sequence may be somewhat different.

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. Students enrolled in the IB Diploma Programme must complete all assessments, including the final assessment.

Some IB courses are offered at both the higher level (HL) and standard level (SL), both of which are college-level.

HLs cover more material at a faster pace and greater depth. IB Diploma Programme students must complete 3 and not more than 4 HL courses, and at least 2 SL courses for a total of 6 courses.

IB SUBJECT GROUP	9 th grade 'pre-DP'	10 th grade "pre-DP"	11 th grade IB	12 th grade IB
Group 1 Language A	Honors English 9	Honors English 10	IB Language and Literature	
Group 2 Language B	French Level 2	French Level 2 and/or 3	IB French	
	German Level 2	German Level 2 and/or 3	IB German	
	Spanish Level 2	Spanish Level 2 and/or 3	IB Spanish	
	Latin Level 2	Latin Level 2 and/or 3	IB Latin	
Group 3 Individuals and Societies	World History II or Honors World History II	AP Comp. Gov.	IB History	
Group 4 Experimental Science	Biology or Honors Biology	Chemistry or Honors Chemistry	IB Biology, IB Chemistry, or IB Physics	
Group 5 Mathematics	Geometry or Honors Geometry	Algebra II or Honors Algebra II	IB Mathematics: Applications and Interpretations (SL) OR IB Mathematics: Analysis and Approaches (SL)	
	Algebra II or Honors Algebra II	Pre-Calculus: Math Analysis with Trigonometry	IB Mathematics: Applications and Interpretations (HL) OR IB Mathematics: Analysis and Approaches (HL)	
Group 6 IB Art or IB Elective	Art I	Art II	IB Art (1-year) or IB Art (2-year)	
	Theatre Arts I	Theatre Arts II	IB Theatre Arts	
	Band, Chorus or Orchestra	Band, Chorus or Orchestra	IB Music	
	Elective	Elective	Free Elective or IB Elective (1-year)	Free Elective or IB Elective (1-year)
Other	Health/PE 9	Health/PE 10	Elective or Personal Finance	Elective or Personal Finance
Other	Elective	Elective or Econ/Personal Finance	Theory of Knowledge	Theory of Knowledge

9th and 10th grade "pre-DP" Note: Full IB Diploma students do not need to take Earth Science or World History I in ninth grade. Taking an IB Higher Level Science Course and the IB Higher Level History Course fulfills the VA requirements for graduation, respectively. However, if a student should decide *not* to pursue the full IB Diploma in the junior year, he or she *may* then be required to go back and take those courses.

IB Diploma Program Notes: Most IB courses are two-year courses that begin in the 11th grade and finish at the end of the 12th grade. Some IB courses (mostly electives) are year-long courses. IB electives include: Social and Cultural Anthropology, Computer Science, Psychology, Environmental Systems and Societies, Economics, and Business Management.

IB GROUP 1: Language and Literature

The IB Language A courses in English are designed to support future academic study by developing high levels of language competence and communication skills as well as social, aesthetic and cultural literacy. Literature plays a central role in the courses, which aim to support lifelong learning through engaging students as actively as possible with the texts they study. The study of texts, both literary and non-literary, provides a focus for developing an understanding of how language works to create meanings in a culture, as well as in particular texts. All texts may be understood according to their form, content, purpose, and audience, and through the social, historical, cultural and workplace contexts that produce and value them. Responding to and producing texts promotes an understanding of how language sustains or challenges ways of thinking and being. All IB Language A courses in English at SCPS are two-year courses, with external examinations at the end of the second year. Students interested in earning an IB

certificate in Language A must complete both classes in the two-year sequence and successfully complete all IB assessments. Students interested in earning the full IB Diploma must successfully complete one of the two-year IB Language A courses as a required component of the program.

IB GROUP 2: Language Acquisition: World Languages

These courses are designed for world language learners and focus primarily on the interaction between speakers and writers of the target language. The aim of each course is to prepare students to use the language appropriately in a range of situations and contexts for a variety of purposes. An awareness and appreciation of the cultures of the countries in which the target language is spoken is also an important component of these courses.

IB GROUP 3: Individuals and Societies

Courses in Group 3 span the humanities and social sciences. Subject matter in Group 3 courses is contestable and requires students to tolerate some uncertainty. Studies of global perspectives and local situations foster an appreciation of change and continuity as well as of similarity and difference. Students evaluate major theories, research findings and concepts, and learn each subject's methodology.

IB GROUP 4: Experimental Sciences

Experimental science subjects promote an understanding of the concepts, principles, and applications of the respective disciplines, together with an appreciation of the methodology of the experimental sciences. Students develop practical laboratory skills as well as the ability to work collaboratively through participating in an interdisciplinary group project. A common curriculum model offers a parallel structure at both higher and standard levels whereby all students study a core of material which is supplemented by various options. A study of local and international examples helps students develop an awareness of moral and ethical issues and promotes social responsibility.

IB GROUP 5: Mathematics

Each course in Group 5 aims to deepen a student's understanding of mathematics as a discipline and to promote confidence and facility in the use of mathematical language. Each math course is designed to cater to different abilities and levels of student interest. IB math courses are inclusive, meaning they encompass all typical high school math topics: algebra, geometry, trigonometry, statistics, probability, and calculus.

IB GROUP 6: The Arts

Each course in Group 6 places emphasis on practical production by the student and exploration of a range of creative work in a global context. Many approaches to learning are emphasized and embrace a wide variety of expressive forms from a range of cultural contexts. Connections are made between areas of study and human experiences through collaborative, as well as individual production and interpretation. Engagement in the arts promotes a sense of identity and makes a unique contribution to the development of each student. Study of the arts provides students with the opportunity to develop a critical and intensely personal view of themselves in relation to the world. These courses also promote knowledge of art from various cultures.

State-Recognized Programs

Students may apply to one of several specialized programs endorsed by the Commonwealth of Virginia. These include the Commonwealth Governor's School, the Stafford Academy for Technology (a Governor's STEM Academy, and Dual Enrollment (DE) programs.

Commonwealth Governor's School

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. Depending on their attendance zones, students who are accepted, attend one of three sites: Colonial Forge High School, North Stafford High School, or Stafford High School. First-time ninth-grade students in 2023-2024 and beyond that elect to attend CGS will transfer to the offering school location.

Transportation will be provided.

Students wishing to apply to CGS should contact their school's counselors or gifted education resource teachers. The applications are due on November 30, 2022 and students will be notified of their status on January 20, 2023. Beginning with ninth grade students in fall 2023, students who choose to participate in the CGS will be automatically transferred to the High School in which the CGS program takes place. Transportation will be provided.

Course work 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 five to six 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.

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

Commonwealth Governor's School Schedule

	9 th Grade	10 th Grade	11 th Grade	12 th Grade
English	Honors English 9 1130G	Honors English 10 1140G	AP English Language & Composition 1196APG	AP English Literature & Composition 1195APG
Mathematics	Honors Algebra II 3135G Must have successfully completed Algebra I	Honors Geometry and Trigonometry 3143G or AP Pre-calculus 3162APG	AP Pre-calculus 3162APG or AP Calculus AB with Special Topics 3177APG	AP Statistics 3192APG or AP Calculus BC & Multivariable Calculus 3178APG
Science	AP Environmental Science 4270APG	AP Biology 4370APG	Dual Enrollment Chemistry ♦ 4420DEG	AP Physics 1 4573APG
Social Studies	AP European History 2399APG	AP U.S. Government 2445APG	AP U.S. History 2319APG	AP Human Geography 2212APG
Culminating	Advanced Research & Writing (Novice Level) 1519G	Advanced Research & Writing (Apprentice Level) 1519G	Advanced Research & Writing (Journeyman Level) 1519G	Advanced Research & Writing (Master Level) 1519G

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

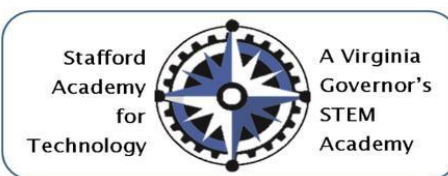
♦College credit is available through a dual-enrollment option. DE Chemistry earns a 1.0 weighted credit.

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 at their home high school.
- Students complete the Culminating Project (through registering for Advanced Research and RWRt 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.

Stafford Academy for Technology

The Stafford Academy for Technology (STAT), identified as a Governor's STEM Academy, is a four-year program of study utilizing an integrated, hands-on, project-based model of instruction. Students select one of the three possible STEM career pathways: Biomedical Science, Engineering, or Information Technology. The STAT instructional team includes teachers from the Career and Technical (specialty) area, as well as science, English, and mathematics. STAT is open to rising 9th graders on an application basis and to 10th graders if space is available.



STAT students learn in a “cohort” of like-minded students during 9th–12th grade in both academic and CTE courses. Course content is integrated to create a coherent learning experience and courses are taught at an Honors level to prepare students for college-level courses in grades 11 and 12. Students develop service-learning projects and partner with mentors in the business community to build a stronger sense of purpose and a firmer commitment to success in college education, while learning about the demands of the workplace. Students design a senior research project that serves as excellent preparation for careers in a Science, Technology, Engineering or Mathematics field and have the opportunity to earn industry certifications. The experience in the program also provides students the opportunity to develop skills essential in the 21st century workplace.

Students who complete the STAT program will earn the Governor's STEM Academy seal on their diploma.

First-time ninth-grade students in 2023-2024 and beyond that choose to attend a STAT program will transfer to the offering school location. Transportation will be provided.

STAT Information Technology (Housed at Brooke Point High School)

The IT sequence provides a “computing for solutions” approach that focuses on innovation, creativity and leadership. Junior and senior level IT courses offer opportunities for college credit. Students will investigate concepts related to data science, cybersecurity, Java language and programming.

STAT Engineering and Technology (Housed at North Stafford High School)

The curriculum design is focused on a general engineering and technology course of study utilizing the [Project Lead the Way](#) (PLTW) framework. In order to receive a weighted credit, students must complete the course and the appropriate PLTW end-of-course exam.

STAT Biomedical Science (Housed at North Stafford High School)

The curriculum design is focused on the exploration of a wide variety of healthcare and science career options utilizing the Project Lead the Way Biomedical Science framework.

STAT Information Technology Program at Brooke Point High School

Area	9th Grade Cohort	10th Grade Cohort	11th Grade Cohort (two technical courses)	12th Grade Cohort (two technical courses)
Information Technology Course(s)	Information Technology Fundamentals 6670S	Programming II 6641S	FOR CLASS OF 2024 & 2025 AP Computer Science 3185APS AND AP Computer Science Principles 3186APS OR FOR CLASS OF 2026 & BEYOND AP Computer Science 3185APS AND Cybersecurity I 6302S	Java Programming 6661S AND Cybersecurity II 6304S
Mathematics 4 credits *	Algebra 1 3130S or Honors Algebra 1 3130SH or Geometry 3143S or Honors Geometry 3143SH or Algebra II 3135S or Honors Algebra II 3135SH	Geometry 3143S or Honors Geometry 3143SH or Algebra II 3135S or Honors Algebra II 3135SH *	Students follow next course in sequence based on teacher recommendation: Algebra II, Honors Algebra II, Algebra III, Math Analysis, Calculus, AP Calculus**	
Science 4 credits	Honors Earth Science 4210SH	Honors Biology 4310SH	Honors Chemistry 4410SH***	Honors Physics 4510SH***
English 4 credits	Honors English 9 1130SH	Honors English 10 1140SH	Honors English 11 1150SH***	DE English Composition 1177SDE***

*Students taking Algebra II in 9th grade will be offered schedule adjustments which allow them to remain on their advanced mathematics track.

**Mathematics is highly recommended during 11th and 12th grade years. Students who intend to pursue STEM college majors and careers should choose four courses of algebra-based math (as shown) to fulfill four required credits of math. Statistics should be added as an elective. Social Studies, Physical Education, World Language and electives should be based on student preference and availability. Students are required to earn an Advanced Studies Diploma.

*** During the 11th and 12th grades, students will have the option to “opt up” from the STAT academic cohort to take any higher-level course, based on availability. College-level credit may be available in some academic and CTE courses; which may also receive a weighted grade.

NOTE: Students participate in rigorous interdisciplinary science, mathematics, and English courses as a cohort.

Engineering Program at North Stafford High School

Area	9 th Grade Cohort	10 th Grade Cohort	11 th Grade Cohort (two technical electives)	12 th Grade Cohort (one technical elective, two credits)
Engineering and Technology course(s)	Introduction to Engineering Design 8439S#	Aerospace Engineering 8428S or Digital Electronics 8440S#	Principles of Engineering 8441S# AND Civil Engineering & Architecture 8430S# or Computer Integrated Manufacturing 8442S#	Engineering Design & Development (EDD) Capstone Course 8443S
Mathematics 4 credits*	Algebra 1 3130S or Honors Algebra 1 3130SH Geometry 3143S or Honors Geometry 3143SH or Algebra II 3135S or Honors Algebra II 3135SH	Geometry 3143S or Honors Geometry 3143SH or Algebra II 3135S or Honors Algebra II 3135SH*	Students follow next course in sequence based on teacher recommendation: Algebra II, Honors Algebra II, Algebra III, Math Analysis, Calculus, AP Calculus**	
Science 4 credits	Honors Earth Science 4210SH	Honors Biology 4310SH	Honors Chemistry 4410SH***	Honors Physics 4510SH OR AP Physics 4573APS
English 4 credits	Honors English 9 1130SH	Honors English 10 1140SH	Honors English 11 1150SH***	Dual Enrollment English Composition 1177SDE***

NOTES: Students participate in rigorous interdisciplinary science, mathematics, and English courses as a cohort. College-level credit may be available in some academic and CTE courses.

*Students taking Algebra II in 9th grade will be offered schedule adjustments which allow them to remain on their advanced mathematics track.

**Math is highly recommended during 11th and 12th grade years. Students who intend to pursue STEM college majors and careers should choose four courses of algebra-based math (as shown) to fulfill four required credits of math. Statistics should be added as an elective. Social Studies, Physical Education, World Language and electives should be based on student preference and availability. Students are required to earn an Advanced Studies Diploma.

*** During the 11th and 12th grades, students will have the option to “opt up” from the STAT academic cohort to take any higher-level course, # - PLTW courses weighted 0.5

Biomedical Science Program at North Stafford High School

Area	9 th Grade Cohort	10 th Grade Cohort	11 th Grade Cohort	12 th Grade Cohort (one technical elective, two credits)
Biomedical Science course(s)	Principles of Biomedical Science 8379S	Human Body Systems 8380S	Medical Interventions 8381S	Biomedical Innovation (BI) Capstone Course 8382S
			AND Psychology 2900S or AP Psychology 2902APS	
Mathematics 4 credits	Algebra 1 3130S or Honors Algebra 1 3130SH or Geometry 3143S or Honors Geometry 3143SH or Algebra II 3135S or Honors Algebra II 3135SH	Geometry 3143S Honors Geometry 3143SH or Algebra II 3135S or Honors Algebra II 3135SH*	Students follow next course in sequence based on teacher recommendation: Algebra II, Honors Algebra II, Algebra III, Math Analysis, Calculus, AP Calculus**	
Science 4 credits	Honors Biology 4310SH	Anatomy & Physiology 4330S OR Honors Chemistry 4410SH	Honors Chemistry 4410SH*** OR Anatomy & Physiology 4330S OR AP Biology 4370APS	Honors Physics 4510SH*** OR AP Physics 4573APS
English 4 credits	Honors English 9 1130SH	Honors English 10 1140SH	Honors English 11 1150SH***	Dual Enrollment English Composition 1177SDE***

NOTE: Students participate in rigorous interdisciplinary science, mathematics, and English courses as a cohort.

*Students taking Algebra II in 9th grade will be offered schedule adjustments which allow them to remain on their advanced mathematics track.

**Math is highly recommended during 11th and 12th grade years. Students who intend to pursue STEM college majors and careers should choose four courses of algebra-based math (as shown) to fulfill four required credits of math. Statistics should be added as an elective.

Social Studies, Physical Education, World Language and electives should be based on student preference and availability. Students are required to earn an Advanced Studies Diploma.

*** During the 11th and 12th grades, students will have the option to "opt up" from the STAT academic cohort to take any higher-level course, based on availability. College-level credit may be available in some academic and CTE courses; which may also receive a weighted grade.

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 SAT scores, or take a placement test. They also will register through their high school in the spring. Tuition is the responsibility of the

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.

Career and Technical Education Dual Enrollment Courses

JAMES MADISON UNIVERSITY

High School Course Name	College Course Code	College Course Name	College Credits	Assessment Test Required	Schools
Geospatial Technology I	GEOG 161	Geospatial Tools and Techniques	3	No Compass	SHS
Geospatial Technology II	ISAT 181	Student Research Project	3	No Compass	SHS

Teachers for Tomorrow

Per the memorandum of understanding (MOU) agreements between University of Mary Washington (UMW), Germanna Community College (GCC), and Stafford County Public Schools (SCPS) supporting the Teachers for Tomorrow Program (TfT), students who complete the TfT Pathway will be eligible to enter GCC with the first semester of course work completed towards a two-year elementary education program that leads to a four-year teacher program at UMW. Or students may choose to enter UMW after graduation from SCPS. Students interested in earning an educational degree may transfer these dual enrollment (DE) credits to other Virginia colleges and universities. The TfT Pathway courses are listed below:

GERMANNA COMMUNITY COLLEGE/UNIVERSITY OF MARY WASHINGTON

Open to Juniors and Seniors

HS Course #	High School Course Name	College Course Code	College Course Name	College Credits	Assessment Test Required	Program Schools ***
9062DE	DE Virginia Teachers for Tomorrow I *	EDU 200	Teaching as a Profession	3 Credits	See Notes	BPHS & MVHS
9072DE	DE Virginia Teachers for Tomorrow II **	EDU 207	Human Development	3 Credits	TBD	BPHS & MVHS
3196DE	DE Quantitative and Statistical Reasoning	MTH 154 MTH 155	Quantitative Reasoning Statistical Reasoning	6 Credits	Algebra II	BPHS & MVHS
2360DE	DE United States History	HIS 121 HIS 122	United States History I United States History II	6 Credits	TBD	BPHS & MVHS

*Requires 40 hours of Practicum experience

**CTE Industry Credential required – possibly Workplace Readiness Skills exam or other

***Open to students in all high schools. Students will be required to travel to one of the Program Schools to participate.

Notes:

Qualifying scores for Reading:

- SAT Reading score of 500 or better, OR ACT Reading score of 21 or better, OR VPT ENG 111 Qualified
- Qualifying scores for Writing:
- SAT Writing score of 500 or better, OR ACT Writing score of 21 or better, OR VPT ENG 111 Qualified.
- Qualifying scores for Math: Algebra II

DE courses for CTE will only be offered if minimum enrollment is met, and DE course providers may vary.

Stafford County 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.

Cyber 4+

Stafford County Public Schools has developed Cyber 4+, a Cybersecurity Dual Enrollment Program, in partnership with Germanna Community College (GCC) and local businesses.



This pathway provides the opportunity for a student to earn an associate's degree through Germanna Community College while in high school at no cost for dual enrollment and industry recognized credentials to meet graduation requirements to prepare students for high-skill, high-wage, and in-demand careers. This application-based program is contingent on the availability of funding/staffing.

Sample Course Progression

9th Grade (SY 2022-23)	10th Grade (SY 2023-24)	11th Grade (SY 2024-25)	12th Grade (SY 2025-26)
English 9 1130 or 1130H	English 10 1140 or 1140H	DE English 111-112 (6 out of 9 English credits)	DE English 245-246 (6 credits) (satisfies remaining 3 English credits and 3 of 6 Humanities credits)
World History and Geography I 2215 or 2215H	World History and Geography II 2216 or 2216H	DE US History HIS 121-122 (satisfies 6 history credits)	DE US Government PLS 135-136 (6 transfer credits) OR Virginia and United States Government 2440
<i>MATH PATHWAY 1</i> Algebra I 3130 or 3130H	Geometry 3143 or 3143H	Algebra II 3135	AP Statistics 3192 or DE Quantitative Reasoning MTH 154 AND DE Statistical Reasoning MTH 155 (3 mathematics credits each)***
<i>MATH PATHWAY 2</i> Geometry 3143 or 3143H	Algebra II 3135 or 3135H	DE Pre-calculus MTH 161-162 (3 mathematics credits and 3 elective credits)	AP Calculus AB or BC OR DE Calculus I MTH 263 (4 mathematics credits and 1 elective credit)
<i>MATH PATHWAY 3</i> Algebra II 3135 or 3135H	Pre-calculus 3162 OR DE Pre-calculus MTH 161-162 (3 mathematics credits and 3 elective credits)	AP Calculus AB or BC OR DE Calculus I MTH 263 (3 mathematics credits and 1 elective credit) AND DE Calculus II MTH 264 (3 elective credits)	AP Statistics 3192
Earth Science 4210 OR Biology 4310H	Biology 4310H OR AP Computer Science A* 3185	DE Biology 101-102 4320DE (8 science credits)	DE Physics PHY 201-202 or DE Chemistry CHM 101-102 (8 elective credits)

9th Grade (SY 2022-23)	10th Grade (SY 2023-24)	11th Grade (SY 2024-25)	12th Grade (SY 2025-26)
IT Fundamentals 6670	Cybersecurity I 6302 Earning the CompTIA A+ Operating Systems satisfies GCC DE ITN 106 Microcomputer Operating System (3 credits)	Cybersecurity II 6304 Earning the CompTIA Network+ Certification satisfies GCC DE ITN 101 (3 credits)	Cybersecurity III 6306 Earning the CompTIA Security+ Certification satisfies GCC DE CISSP ITN 260 Network Security Basics (3 credits)
AP Computer Science Principles 3186 OR Elective	Economics & Personal Finance OR Elective	AP Computer Science A* 3185 OR AP Computer Science Principles 3186 OR Elective OR DE ITP 120 (3 credits)	DE Art I ART 101 or DE Modern Art ART 106 (3 credits each) (satisfies the 3 of 6 Humanities credits)
Health and Physical Education 9 7300	Health and Physical Education 10 7400	Business Management 6135 OR 6135IB IB Business Management SL** OR DE BUS 236 Communication in Management	DE CST 100: Principles of Public Speaking (3 credits - 1 semester) AND Senior Capstone (1 semester)
World Language	World Language	World Language	Elective

^Students will complete SDV 100 (Student Development) through GCC in either their sophomore or junior years.

*Students must take the AP exam and score a 3 or better to earn GCC credit for DE CSC 201 (4 credits).

**Students must take the IB exam and score a 4 or better to earn GCC credit for DE BUS 236 Communication in Management (3 credits).

***Students in this mathematics course sequence may also choose to enroll in Pre-calculus 3162 or DE Pre-calculus MTH 161-162 (6 credits) to best prepare for college Calculus or ensure that GCC elective requirements are met through other coursework.

Upon completing the Cyber4+ pathway (including the four industry certifications, students may choose from three subsequent pathways after graduating or some combination:

1. Go directly to the workforce.
2. Pursue a second, cybersecurity specific, associate's degree.
3. Transfer to a four-year college or university to complete their bachelor's degree.

High School Course 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 Course Sequence

1130 ENGLISH 9
1140 ENGLISH 10
1150 ENGLISH 11
1160 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
1140H HONORS ENGLISH 10
1150H HONORS ENGLISH 11
1 Credit

A series of sequential courses, designed by SCPS 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.

AP/DE Course Sequence

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 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.

Schools offering course: CFHS, NSHS, SHS

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.

Schools offering course: BPHS, CFHS, NSHS, SHS

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

Grade 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 Course Sequence

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.

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

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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.

IB Course Sequence

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 **Schools offering course: BPHS, MVHS**

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.

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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 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.

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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.

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

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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.

Schools offering course: SHS

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

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 take the SOL test.

2215H 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. Students will take the SOL test.

2216 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

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. Students may take the SOL test if they have not already passed an earlier SOL test.

Schools offering course: BPHS, MVHS, NSHS, SHS

2360 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

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.

AP/DE Course Sequence

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.

Schools offering course: BPHS, CFHS, NSHS, SHS

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.

Schools offering course: BPHS, CFHS, NSHS, SHS

2360DE DE UNITED STATES HISTORY (GCC HIS 121 & 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 VA/US History.

Schools offering: BPHS, CFHS, MVHS, SHS

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AP Electives

Note: AP social studies courses require students to use solid reading, writing, and time-management skills. Students enrolling in AP 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.

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.

Schools offering course: CFHS, NSHS, SHS

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.

Schools offering course: CFHS, NSHS, SHS

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. Schools offering course: CFHS

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. Schools offering course: CFHS

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.

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Schools offering course: CFHS, MVHS, NSHS, SHS

Commonwealth Governor's School Course Sequence

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.

IB Course Sequence

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

Schools offering these courses: BPHS 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 & Personal Finance requirement for graduation.

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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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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 Studies 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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#-Weighted, ●-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

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6120 ECONOMICS AND PERSONAL FINANCE
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. Students may have the opportunity to participate in the cooperative education program. 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.

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 & Statistics or Pre-calculus
Sample #3	Geometry	Algebra II	Probability & 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
- AP Calculus AB
- AP Calculus BC
- 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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#-Weighted, ●-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

Stafford County Public Schools

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 practical problems. Included in the progression of algebraic content is patterning, generalization or arithmetic concepts, proportional reasoning, and representing mathematical relationships using tables, symbols, and graphs. 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, allows students to make connections between algebraic and graphic representations of linear and quadratic functions. This course is taught at an accelerated pace. Students will take the SOL Algebra I test at the end of the course.

Schools offering course: NSHS

3143 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. The course is designed to develop effective methods of thinking through deductive reasoning. Students may take the SOL Geometry test at the end of the course.

3143H HONORS GEOMETRY

Grade 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. 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 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. Graphing utilities (calculators, computer, and other technology tools) will be used to assist in teaching and learning.

3135 ALGEBRA II

Grades 10-12

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,

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rational and radical equations, complex numbers, and sequences and series. Emphasis will be placed on practical applications and modeling throughout the course of study. Students may take the SOL Algebra II test at the end of the course.

3135H 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. 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.

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.

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#-Weighted, ●-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

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AP/DE Course Sequence

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.

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.

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#-Weighted, ●-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

Stafford County Public Schools

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.

3178DE DE CALCULUS I/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.

Commonwealth Governor's School Course Sequence**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.

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Stafford County Public Schools

3162G HONORS MATH ANALYSIS 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.

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 & 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.

IB Course Sequence

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

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Stafford County Public Schools

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.

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.***

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****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).

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 Course Sequence

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 take the SOL test. This course may be taken concurrently with Biology.

4210H HONORS EARTH SCIENCE

Grade 9-10

1 Credit

This advanced course, designed by SCPS as a pre-AP 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 take the SOL test. This course may be taken concurrently with Biology.

4265 ENVIRONMENTAL SCIENCE

Grades 9-10

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 take the SOL test. This course may be taken concurrently with Earth Science.

4310H HONORS BIOLOGY

Grades 9-10

1 Credit

This advanced course, designed by SCPS 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 take the SOL test. 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 by SCPS 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 by SCPS 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.

Schools offering course: BPHS, CFHS, MVHS, NSHS

AP/DE Course Sequence

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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Schools offering course: CFHS, NSHS, SHS

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.

Schools offering course: CFHS, SHS

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.**

Schools offering course: CFHS, NSHS, SHS

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.

Schools offering course: CFHS, SHS

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.

Schools offering course: CFHS, NSHS, SHS

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.

Schools offering course: CFHS, SHS

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#-Weighted, ●-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

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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.

Schools offering course: CFHS, NSHS, SHS

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. The Biology SOL test will be required unless the student has previously passed this test. Students who successfully complete the course will receive two semesters of college credit through Germanna Community College as well as one year of high school credit.

Note: This course may not be audited.

Schools offering course: TBD

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 two semesters of college credit 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.

Schools offering course: TBD

Commonwealth Governor's School Course Sequence

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

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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 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.

IB Course Sequence

Note: Each IB science course involves laboratory work as an integral part where students are required to submit written laboratory reports that are internally assessed by the classroom teacher as well as externally assessed by trained IB examiners. Participation in the interdisciplinary Group 4 research project varies by course and level. Students will be prepared and encouraged to take the year-end IB examination for possible college credit.

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.

Schools offering course: BPHS, MVHS

SCHOOL KEY: BPHS=Brooke Point CFHS=Colonial Forge MVHS=Mountain View NSHS=North Stafford SHS=Stafford

#-Weighted, ●-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

Stafford County Public Schools

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.

Schools offering course: BPHS

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 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.

Schools offering course: MVHS

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 gasses, chemical equilibrium, chemical kinetics, thermodynamics, acid-base theory, and organic chemistry. This course emphasizes problem-solving, proficiency in mathematical usage, and improvement & 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.

Schools offering course: BPHS

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#-Weighted, ●-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

Stafford County Public Schools

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 gasses, chemical equilibrium, chemical kinetics, thermodynamics, acid-base theory, and organic chemistry. This course emphasizes problem-solving, proficiency in mathematical usage, and improvement & expansion of laboratory techniques as related to contemporary chemistry, to include experiment design. **Schools offering course: BPHS**

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.

Schools offering course: BPHS**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 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.

Schools offering course: BPHS, MVHS**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.

Schools offering course: BPHS, MVHS

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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.

Schools offering course: BPHS, MVHS

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 provided to enhance the students understanding and application of the course material.

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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.

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 Course Sequence

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.

Schools offering course: CFHS, MVHS, NSHS, SHS

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.

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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 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.

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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.

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. ***Schools offering course: CFHS, NSHS, and SHS***

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.

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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 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

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language variation, customs, geography, history, and current events. Upon completion of this course, students may progress into AP Spanish Language or IB Spanish.

AP Course Sequence

Students are encouraged to take the AP examination for possible college credit.

Schools offering these courses: CFHS, NSHS, SHS

5170AP AP FRENCH

Grades 11-12

1 Credit#

**Successful completion of French Level IV*

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.

5270AP AP GERMAN

Grades 11-12

1 Credit#

**Successful completion of German Level IV*

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*

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 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.

IB Course Sequence

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

Schools offering these courses: BPHS 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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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 7-12 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. SCPS has identified the Standards-based Measurement of Proficiency (STAMP) test as the internationally recognized web-based assessment for language proficiency.

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 Placement	Next SFS
Novice-High	1	Level 2	SFS I
Intermediate-Low	2	Level 3	SFS II
Intermediate-Mid	3	Level 4/IB	SFS III
Intermediate-High	4	AP/IB	Level 4/AP/IB

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 & 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 13 secondary schools will be eligible for this opportunity, however, testing will happen twice per year on a Saturday date. There is no cost to SCPS 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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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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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, medias, 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 & 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 & 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, MVHS, SHS

9191 PHOTOGRAPHY & GRAPHIC DESIGN II

Grades 10-12

1 Credit

****Successful completion of Photography & Graphic Design I***

This course expands knowledge on the study of black & 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: SHS

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#-Weighted, ●-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

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9192 PHOTOGRAPHY & GRAPHIC DESIGN III

Grades 11-12

1 Credit

****Successful completion of Photography & 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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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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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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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.

AP 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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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, medias, 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 forums 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.

AP 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.

IB Courses for Visual and Performing Arts

Note: The students will be prepared and are encouraged to take the year-end IB examination for possible college credit.

Schools offering these courses: BPHS 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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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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Stafford County Public Schools

Health, Physical Education, and Driver Education

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 Course Sequence

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.

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.

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Note: This course requires that students devote time outside the scheduled class period to activities 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.

English Learner Courses

The courses below are designed for English Learner students to introduce the student to vocabulary, concepts, and background knowledge necessary for success in content courses.

Student Credit Options

- Sequential Elective Credit
- World Language Credit(s): Up to 3 ESOL course credits can count toward World Language credits.
- Science Credit: Environmental Science counts as a laboratory one science credit toward either a standard or advanced diploma

4265 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.

5720 ESOL CONCEPTS OF SCIENCE

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 course prepares students for enrollment in Environmental Science, Earth Science, or Biology while developing academic literacy. Students generally enroll in either Biology or Earth Science the following year.

5710 ESOL CONCEPTS OF SOCIAL STUDIES

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 course promotes academic literacy in world history content in preparation for enrollment in World History I or II. Students generally take World History the following year.

4610 ESOL FOUNDATIONS OF SCIENCE

Grades 9-12

1 Credit

This course is based on the standard Earth Science or Biology curriculum. Using English Language Development strategies, students will expand their academic vocabulary and content reading strategies that are essential for success in their concurrently enrolled Earth Science or Biology course.

2997 ESOL FOUNDATIONS OF SOCIAL STUDIES

Grades 9-12

1 Credit

This course is based on the standard World History curriculum. Using English Language Development strategies, students will expand their academic vocabulary and content reading strategies that are essential for success in their concurrently enrolled World History course.

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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 9. Students enrolled in this course generally take English 9 the following year.

5734 ESOL READING & WRITING STRATEGIES**Grades 9-12****1 Credit**

This course is designed for Level II or III English Learners in order to further assist in the acquisition of English Language and to help students be successful in their English Language Arts course. This course should be taken concurrently with English 9, 10, or 11.

5732 ESOL ALGEBRA READINESS**Grades 9-12****1 Credit****Note: Available to ELP Level I 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.

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.

AP 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.

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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.

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.

Junior Reserve Officer Training Corps (JROTC)

Stafford County Public 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

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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 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 II 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

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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 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.

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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; 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 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

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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, 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.

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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.

Career and Technical Education (CTE) and Industry Credentials

All students are encouraged to seek Career and Technical Education (CTE) courses that provide a foundation for their career plans and interests. Stafford County Public Schools offers a wide variety of rigorous and engaging CTE programs designed to improve academic and technical skills attainment, offer leadership opportunities through Career and Technical Student Organizations, and deliver instruction through realistic, hands-on applications through state approved forms of Work-Based Learning. CTE instruction demonstrates the relevance and purpose in learning as students prepare for post-secondary experiences, whether they plan to enter the workforce directly, seek additional training, enlist in the military, or enroll in a post-secondary institution.

CTE sequences are a coherent series of courses within a VDOE approved CTE program that address specific technical skill standards. All CTE courses and their completing sequence courses are listed in the Program of Studies by content area. A CTE course taken to satisfy the CTE graduation requirement may also serve as one of the two courses required to satisfy the sequential elective requirement.

Stafford County Public Schools offers Career and Technical Education courses 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

Industry certification exams are available in many CTE courses. To encourage more students to work towards a selected industry credential and/or state license while pursuing a high school diploma, the Pathway to High School Credentialing program was developed. Students should contact their CTE teacher or counselors for more details. Attendance, self-discipline, and safety awareness are vital to the successful enrollment and completion of CTE courses. All classes will not be offered at all schools due to enrollment and availability.

A credential is defined as:

- State-Issued Professional License required for entry into a specific occupation as determined by a Virginia state licensing agency (Licensed Practical Nurse (LPN), Cosmetology);
- Industry Certification from a recognized industry, trade, or professional association validating essential skills of a particular occupation (A+ Examinations (CompTIA), ServSafe Food Protection Manager Certification (National Restaurant Association)); and/or Stackable Industry Certifications which may consist of multiple entry-level exams as a component of a suite of exams in an industry certification program leading toward full certification (ASE- Automotive Service Excellence Entry-Level Certification Tests (National Institute for Automotive Service Excellence), Microsoft Office Specialist (MOS) Examinations (Microsoft));
- Occupational Competency Assessment, a national standardized assessment of skills/knowledge in a specific career and/or technical area, (Architectural Drafting Assessment (NOCTI), Electrical Level One Assessment (National Center for Construction Education & Research (NCCER));
- Workplace Readiness Skills (WRS) for the Commonwealth Certification (Career and Technical Education Consortium of States (CTECS)); most valuable when given in addition to appropriate course specific credentials that demonstrate mastery of valuable CTE Skills.

While students pursuing an Advanced Studies Diploma may enhance their career plans by enrolling in CTE courses, students pursuing a Standard Diploma MUST complete two sequential electives or a CTE concentration and pass an industry certification. 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, or both from

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Health and Medical Sciences, etc.

A number of cooperative education (co-op) programs offer an opportunity to work at a part-time job while receiving high school credit. Students in co-op programs must be enrolled in a business or marketing class and provide their own transportation to the workplace. One (1) credit is awarded to students for successful completion of the program. Grades are awarded on a pass/fail basis. See your counselor or CTE teacher for more information.

SCPS CTE Course Title	Course	CTE 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 (<i>PLTW</i>)	8428	PLTW end of course test
Architectural Drawing and Design	8437	CTECS Workplace Readiness
Auto Body Technology I	8676	CTECS Workplace Readiness
Auto Body Technology II	8677	ASE
Auto Body Technology III	8678	ASE
Automotive Technology I	8502	ASE or CTECS Workplace Readiness
Automotive Technology II	8507	ASE or CTECS Workplace Readiness
Automotive Technology III	8508	ASE or CTECS Workplace Readiness
Biomedical Innovations (<i>PLTW</i>)	8382	PLTW end of course test
Business Law	6131	WISE or CTECS Workplace Readiness
Business Management	6135	WISE or CTECS Workplace Readiness
Cabinetmaking I	8604	CTECS Workplace Readiness
Cabinetmaking II	8605	CTECS Workplace Readiness
Carpentry I	8601	CTECS Workplace Readiness or SkillsUSA Carpentry Examination
Carpentry II	8602	CTECS Workplace Readiness or SkillsUSA Carpentry Examination
Carpentry III	8603	CTECS Workplace Readiness or SkillsUSA Carpentry Examination
Child Development and Parenting	8232	CTECS Workplace Readiness
Civil Engineering and Architecture (<i>PLTW</i>)	8430	PLTW end of course test
Computer Integrated Manufacturing (<i>PLTW</i>)	8442	PLTW end of course test
Computer Information Systems I	6612	CTECS Workplace Readiness or MOS Student Choice

SCPS CTE Course Title	Course	CTE Industry Credential Offered
Computer Information Systems II	6613	CTECS Workplace Readiness or MOS Student Choice
Construction Trades I	9071	CTECS Workplace Readiness
Cosmetology I	8745	CTECS Workplace Readiness
Cosmetology II	8746	State License Exam
Criminal Justice I	8702	CTECS Workplace Readiness
Criminal Justice II	8703	CTECS Workplace Readiness
Culinary Arts I	8275	NRF-ServSafe
Culinary Arts II	8276	END of Course ACF, if applicable
Culinary Arts Specialization	8279	END of Course ACF, if applicable
Cybersecurity I	6302	CompTIA IT Fundamentals, CompTIA A+, or Certiport IT Specialist Certification Exam
Cybersecurity II	6304	CompTIA A+, CompTIA Network+, or Certiport IT Specialist Certification Exam
DE VA Teachers for Tomorrow I	9062 9062DE	CTECS Workplace Readiness
DE VA Teachers for Tomorrow II	9072 9072DE	CTECS Workplace Readiness
Design, Multimedia, and Web Technologies I	6630	Microsoft Office Specialist (Word, Excel, Access, or PowerPoint)
Design, Multimedia, and Web Technologies II	6631	Microsoft Office Specialist (Word, Excel, Access, or PowerPoint)
Digital Applications	6611	CTECS Workplace Readiness
Digital Electronics (<i>PLTW</i>)	8440	PLTW end of course test
Digital Visualization	8459	CTECS Workplace Readiness
Drafting I	8530	CTECS Workplace Readiness
Drafting II	8531	ADDA—Mechanical
Drafting III	8532	ADDA—Architectural
Early Childhood Education and Services I	8285	CTECS Workplace Readiness
Early Childhood Education and Services II	8286	NOCTI Early Child or CTECS Workplace Readiness
Economics and Personal Finance	6120	WISE Financial Literacy
Electricity I	8533	CTECS Workplace Readiness or SkillsUSA Residential Wiring Examination
Electricity II	8534	CTECS Workplace Readiness or SkillsUSA Residential Wiring Examination

SCPS CTE Course Title	Course	CTE Industry Credential Offered
Electricity III	8535	CTECS Workplace Readiness or SkillsUSA Residential Wiring Examination
Emergency Medical Technician I	8333	CTECS Workplace Readiness
Emergency Medical Technician II, III	8334/ 8335	EMT
Emergency Medical Telecommunication	8337	Certified Emergency Telecommunicator
Engineering Design and Development (PLTW)	8443	PLTW end of course test
Engineering Drawing and Design	8436	CTECS Workplace Readiness
Engineering Exploration	8450	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 & II	8705 & 8706	Firefighter I & II Certification Examination
Geospatial Technology I	8423 8423DE	CTECS Workplace Readiness
Geospatial Technology II	8424 8424DE	CTECS Workplace Readiness or other (TBD)
Graphic Imaging Technology I	8660	SkillsUSA PrintE-Graphics Communications
Graphic Imaging Technology II	8661	SkillsUSA PrintE-Graphics Communications
Greenhouse Plant Production and Management	8035	CTECS Workplace Readiness
Health Assisting Careers	8331	NOCTI Health Assistant
Horticulture Sciences	8034	CTECS Workplace Readiness
Human Body Systems (PLTW)	8380	PLTW end of course test
IB Business & Management and Supervision (SL)	6135IB	CTECS Workplace Readiness
Information Technology Fundamentals	6670	Certiport IT Specialist Certification Exam or CompTIA IT Fundamentals
Introduction to Engineering Design (PLTW)	8439	PLTW end of course test
Introduction to Fashion Careers	8248	CTECS Workplace Readiness
Introduction to Health and Medical Sciences	8302	CTECS Workplace Readiness
Introduction to Interior Design	8255	CTECS Workplace Readiness

SCPS CTE Course Title	Course	CTE Industry Credential Offered
Java Programming	6661	Certiport IT Specialist Certification Exam, or Oracle
Landscaping	8036	CTECS Workplace Readiness
Life Planning	8227	CTECS Workplace Readiness
Manufacturing Systems	8425	CTECS Workplace Readiness
Marketing I	8120	CTECS Workplace Readiness
Marketing II	8130	CTECS Workplace Readiness
Masonry I	8512	CTECS Workplace Readiness or SkillsUSA Masonry Examination
Masonry II	8513	CTECS Workplace Readiness or SkillsUSA Masonry Examination
Masonry III	8514	CTECS Workplace Readiness or SkillsUSA Masonry Examination
Master Barbering I	8743	CTECS Workplace Readiness
Master Barbering II	8744	State License Exam
Medical Assistant I	8345	NOCTI Medical Assistant
Medical Interventions (PLTW)	8381	PLTW End of Course Test
Military Science I (JROTC)	7913	ASVAB or CTECS Workplace Readiness
Military Science II (JROTC)	7916	ASVAB or CTECS Workplace Readiness
Military Science III (JROTC)	7918	ASVAB or CTECS Workplace Readiness
Military Science IV (JROTC)	7919	ASVAB or CTECS Workplace Readiness
Nurse Aide I	8360	CTECS Workplace Readiness
Nurse Aide II	8362	C.N.A.
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
Principles of Biomedical Science (PLTW)	8379	PLTW end of course test
Principles of Business and Marketing	6115	WISE or CTECS Workplace Readiness
Principles of Engineering (PLTW)	8441	PLTW end of course test
Production Systems	8447	CTECS Workplace Readiness
Programming I	6640	CTECS Workplace Readiness

SCPS CTE Course Title	Course	CTE Industry Credential Offered
Programming II	6641	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	NOCTI-Video Production or CTECS Workplace Readiness
Television and Media Production III	8690	CTECS Workplace Readiness

Career and Technical Education Courses

CTE Course Offerings Key and Note:

‡ Students are required to use provided bus service for all classes requiring transportation from a base school to another high school.

- Application required

NOTES:

- All cooperative education programs require an application.
- Number of credits indicates the number of instructional blocks in which instruction is delivered

9062DE DE VIRGINIA TEACHERS FOR TOMORROW I ▲‡

Grades 11-12

1 Credit#

Please refer to Teachers for Tomorrow Pathway

The DE Teachers for Tomorrow course introduces students to a career in teaching and education. This course provides the opportunity for students to prepare for careers in education as they research postsecondary options, learn about the process of teacher certification in Virginia, and participate in a practicum experience. **Schools offering course: BPHS, MVHS**

9072DE DE VIRGINIA TEACHERS FOR TOMORROW II ‡

Grades: 11-12

1 Credit#

Required Background: Completion of Virginia Teachers for Tomorrow I

Students continue to explore careers in the Education and Training Cluster, as well as human development. This course provides an overview of the physical, intellectual, cognitive, language, social, and emotional development of human beings from birth to adolescence. Emphasizes how hereditary and environmental influences impact the development of the whole child.

NOTE: Stafford County 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.

Schools offering course: BPHS, MVHS

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#-Weighted, ●-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

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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

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. Students may have the opportunity to earn college credit upon receiving a passing score on The College Board CLEP test. Students may have the opportunity to participate in the cooperative education program. Digital Applications is recommended prior to taking this course.

6321 ACCOUNTING II

Grades 11-12

1 Credit

Required Background: Accounting

Students gain in-depth knowledge of accounting procedures and techniques used to solve problems and make

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Stafford County Public Schools

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. Students may have the opportunity to earn college credit upon receiving a passing score on The College Board CLEP test. Students may have the opportunity to participate in the cooperative education program.

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. Students may have the opportunity to earn college credit upon receiving a passing score on The College Board CLEP test. Students may have the opportunity to participate in the cooperative education program.

6135 BUSINESS MANAGEMENT

Grades 11-12

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. Students may have the opportunity to participate in the cooperative education program.

6612 COMPUTER INFORMATION SYSTEMS I

Grades 9-12

1 Credit

Required 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. Students may have the opportunity to participate in the cooperative education program.

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. Students may have the opportunity to participate in the cooperative education program.

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 (Formally Cybersecurity Fundamentals)

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.

6630 DESIGN, MULTIMEDIA, AND WEB TECHNOLOGIES I

Grades 10-12

1 Credit

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. Students may have the opportunity to participate in the cooperative education program. Digital Applications is recommended prior to taking this course.

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. Students may have the opportunity to participate in the cooperative education program.

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, 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

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. Students may have the opportunity to participate in the cooperative education program. 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.

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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 Program only; BPHS

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.

Schools offering course: BPHS IB Program and NSHS

6640 PROGRAMMING I

Grades 10-12

1 Credit

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. Students may have the opportunity to participate in the cooperative education program. Digital Applications is recommended prior to taking this course.

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. Students may have the opportunity to participate in the cooperative education program.

Marketing

Distributive Education Clubs of America (DECA) is the co-curricular organization for marketing students.

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.

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Personal selling, sales promotion, purchasing, physical distribution, market planning, and product/ service technology are part of this course. Students may have the opportunity to participate in the cooperative education program.

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. Students may have the opportunity to participate in the cooperative education program.

8120 MARKETING I

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. Students may have the opportunity to participate in the cooperative education program.

8130 MARKETING II

Grades 11-12

1 Credit

Required Background: Marketing I

Students continue to gain knowledge of marketing functions and foundations as they relate to supervisory and management responsibilities and develop skills needed for advancement. They develop skills for supervisory positions and/or for continuing education in a marketing-related field. Students may have the opportunity to participate in the cooperative education program.

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. Students may have the opportunity to participate in the cooperative education program.

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. Students may have the opportunity to participate in the cooperative education program.

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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

Introduction to Health and Medical Sciences- student 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.

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. Students must provide documentation of immunizations and a negative drug screen. Class assignments include technical reading level of at least grade 10.

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

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 & 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: SHS

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#-Weighted, •-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

Stafford County Public Schools

8331 HEALTH ASSISTING CAREERS ‡ • ▲**Grades 11-12****2 Credits*****Required 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 practice in health care facilities based on their particular areas of interest. Note: Clinical/Work Experience: Students must provide his/her own transportation to and from the clinical work site. 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 10-12****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 11-12****2 Credits*****Required Background: Introduction to Health and Medical Sciences***

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

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. Each student is required to purchase a hunter green scrub uniform, apron, white shoes without logos, watch with a second hand, have a negative PPD (Tuberculosis screening test) and a urine drug screen test, flu shot, TB test, and receive a COVID-19 vaccine prior to clinical placement. 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

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#-Weighted, •-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

Stafford County Public Schools

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 & Nurse Aide II.**Schools offering course:** NSHS

Family and Consumer Sciences

Family, Career & 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.

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

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#-Weighted, •-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

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8285 EARLY CHILDHOOD, EDUCATION, & SERVICES I ‡ • ▲**Grades 10-12****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, & SERVICES II ‡ ▲**Grades 11-12****2 Credits**

Required Background: Early Childhood, Education, & 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 11-12****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 emphasized through relevant life applications.

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#-Weighted, •-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

Stafford County Public Schools

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.*

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

8459 DIGITAL VISUALIZATION

Grades 10-12

1 Credit

Required Background: Technical Drawing and Design

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.

Schools offering course: CFHS

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#-Weighted, ●-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

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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

8491 ENGINEERING STUDIES**Grades 10-12****1 Credit**

Required Background: Engineering Exploration or Engineering Practicum IV

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 IV

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

8423 or 8423DE GEOSPATIAL TECHNOLOGY I**Grades 11-12****1 Credit**

The Geospatial Technology program provides experiences pertaining to the study and use of geographic information systems (GIS), global positioning systems (GPS), remote sensing (RS), and mobile technologies. Fundamentally, these technologies allow students to 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. 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. Students will have the opportunity to earn dual enrollment credit through James Madison University.

Schools offering course: SHS

8424 or 8424DE 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

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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. Students will have the opportunity to earn Dual Enrollment credit through James Madison University.

Schools offering course: SHS

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 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, NSHS

TELEVISION AND MEDIA PRODUCTION I, II, III

Located Under Trade and Industrial Education

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 course work 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).

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Level	Engineering	Biomedical Science
College 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
Career-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 & 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 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

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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 & 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, 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: *NSHS*

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*

Trade and Industrial Education

SkillsUSA is the co-curricular organization for Trade and Industrial students.

AUTO BODY TECHNOLOGY

Courses are taught by Automotive Service Excellence (ASE) Certified Instructors

The Auto Body Technology program is a 3-year program with mastery of each task for job entry-level skills as a priority. The program is open to 10th, 11th, and 12th graders. Students will complete a pre-test prior to being admitted to Auto Body Technology I (8676), as required by NATEF.

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8676 AUTO BODY TECHNOLOGY I – COLLISION AND REPAIR ‡ •**Grades 10-11 (Other grades, if space is available)****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: Automotive 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: Automotive 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 3-year program with mastery of each task for job entry-level skills as a priority. The program is open to 10th, 11th, and 12th graders. Students will complete an application and a pre-test prior to being admitted to Automotive Technology I (8502). Students will have the opportunity to apply for job shadowing and internships programs with local automotive businesses.

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, SHS**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

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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 ‡****Grade 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 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 10-12****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

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8601 CARPENTRY I ‡ •**Grades 10****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 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 Carpentry II. This course will be open to highly qualified 9th graders who are interested in pursuing a future in the BOOTS program. ***Schools offering course: BPHS, SHS***

8602 CARPENTRY II ‡ ▲-only at SHS**Grades 10-12****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 are provided the opportunity to work on the construction of a new home through the Bringing Occupational Opportunities to Students (BOOTS) program. Students completing Carpentry I as a 9th grader will be eligible for Carpentry II as a 10th grader with no restrictions on power tool usage.

Schools offering course: BPHS, SHS**8603 CARPENTRY III ▲-only at SHS****Grade 11-12****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 I****Grades 9-10****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, 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 ‡ •****Grade 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

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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 & 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 11-12

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 11-12

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 I (Fundamentals) ▲

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.

Schools offering course: SHS

8531 DRAFTING II (Advanced Mechanical) ▲

Grades 10-12

2 Credits

Required Background: *Drafting I*

This course focuses on creating mechanical drawings for manufacturing purposes. New skills learned include developing auxiliary views, reading tolerances, applying & 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.

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Schools offering course: SHS

8532 DRAFTING III (Architectural Drawing) ▲

Grades 11-12

2 Credits

Required Background: Drafting II

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

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 10-12

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.

Schools offering course: SHS

8535 ELECTRICITY III ‡ ▲

Grade 11-12

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: 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.

Stafford County Public 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

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#-Weighted, •-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

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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. Students will become familiar with the procedures, equipment, and technologies used by current fire departments. 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. 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 10-12

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

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 10-12

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

SCHOOL KEY: BPHS=Brooke Point CFHS=Colonial Forge MVHS=Mountain View NSHS=North Stafford SHS=Stafford

#-Weighted, •-Application Required, ‡-Must use school transportation, ▲-Work-Based, *-Successful Completion

Stafford County Public Schools

8514 MASONRY III ‡ ▲**Grade 11-12****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**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 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.

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Stafford County Public Schools

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 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 COURSE SEQUENCE FOR ENGLISH					
ALL	1130	English 9	1.0	9	
ALL	1130H	Honors English 9	1.0	9	
ALL	1140	English 10	1.0	10	
ALL	1140H	Honors English 10	1.0	10	
ALL	1150	English 11	1.0	11	
ALL	1150H	Honors English 11	1.0	11	
ALL	1160	English 12	1.0	12	
AP/DE COURSE SEQUENCE FOR ENGLISH					
C-N-S	1140AP	AP English 10: Seminar	1.0	10	
C-N-S	1196AP	AP English: Language and Composition	1.0	11	
B-C-N-S	1195AP	AP English: Literature and Composition	1.0	12	
ALL	1177DE	DE Honors English Composition	1.0	12	
THE COMMONWEALTH GOVERNOR'S SCHOOL COURSES FOR ENGLISH					
C-N-S	1130G	English 9: Honors English 9	1.0	9	
C-N-S	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	
IB COURSE SEQUENCE FOR ENGLISH					
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	
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	10-12	

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ALL	1165	Creative Writing II	1.0	11-12	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	
S	1178	Advanced Writing	1.0	10-12	
HISTORY AND SOCIAL SCIENCES					
GENERAL COURSE SEQUENCE FOR HISTORY AND SOCIAL SCIENCES					
ALL	2215	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	
ALL	2216H	Honors World History and Geography II	1.0	10	
ALL	2360	Virginia and U.S. History	1.0	11	
ALL	2440	Virginia and U.S. Government	1.0	12	
AP/DE COURSE SEQUENCE FOR HISTORY AND SOCIAL SCIENCES					
B-C-N-S	2380AP	AP Modern World History	1.0	10	
ALL	2319AP	AP United States History	1.0	11-12	
ALL	2450AP	AP Comparative Government and Politics	1.0	12	
B-C-N-S	2445AP	AP United States Government/Politics	1.0	12	
B-C-M	2360DE	DE United States History	1.0	11	
C-N-S	2212AP	AP Human Geography	1.0	9-12	
C-N-S	2902AP	AP Psychology	1.0	11-12	
C	2802AP	AP Microeconomics	1.0	11-12	
C	2803AP	AP Macroeconomics	1.0	11-12	Successful completion of AP Microeconomics or Economics and Personal Finance
C-M-N-S	2399AP	AP European History	1.0	10-12	
THE COMMONWEALTH GOVERNOR'S SCHOOL COURSES FOR HISTORY AND SOCIAL SCIENCES					
C-N-S	2399APG	AP European History	1.0	9	
C-N-S	2445APG	AP U.S. Government	1.0	10	
C-N-S	2319APG	AP U.S. History	1.0	11-12	
C-N-S	2212APG	AP Human Geography	1.0	12	
IB COURSE SEQUENCE FOR HISTORY AND SOCIAL SCIENCES					
B-M	2806IB	IB Economics (SL) with	1.0	11-12	

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
		Personal Finance			
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
ELECTIVE COURSES FOR HISTORY AND SOCIAL SCIENCES					
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	
MATHEMATICS					
GENERAL COURSE SEQUENCE FOR MATHEMATICS					
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
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	10-12	Successful completion of Geometry or Algebra, Functions, and Data Analysis
C-N	3135H	Honors Algebra II	1.0	9-10	Successful Completion of Geometry
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
AP/DE COURSE SEQUENCE FOR MATHEMATICS					
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

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ALL	3185AP	AP Computer Science A	1.0	10-12	Successful completion of Algebra II
ALL	3196DE	DE Quantitative and Statistical Reasoning	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
THE COMMONWEALTH GOVERNOR'S SCHOOL COURSES FOR MATHEMATICS					
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 Math Analysis w/Discrete Topics	1.0	10-11	
C-N-S	3177APG	AP Calculus AB w/Special Topics	1.0	11	
C-N-S	3178APG	AP Calculus BC & Multivariable Calculus	1.0	12	
C-N-S	3192APG	AP Statistics	1.0	12	
IB COURSE SEQUENCE FOR MATHEMATICS					
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 COURSE SEQUENCE FOR SCIENCE					
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

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
B-C-M-N	4510H	Honors Physics	1.0	11-12	Algebra II or higher must be completed or taken concurrently
AP/DE COURSE SEQUENCE FOR SCIENCE					
C-N-S/C-S	4370AP/4370A PL	AP Biology/Lab	1.0/1.0.0	10-12	Successful completion of Biology and Chemistry
C-N-S/C-S	4470AP/4470A PL	AP Chemistry/Lab	1.0/1.0	11-12	Successful completion of Algebra II and Chemistry
C-N-S	4573AP	AP Physics 1	1.0	12	
C-S	4574AP	AP Physics 2	1.0	12	
C-N-S	4270AP	AP Environmental Science	1.0	10-12	Successful completion two laboratory sciences and Algebra 1
TBD	4320DE	DE Biology	1.0	10-12	
TBD	4420DE	DE Chemistry	1.0	11-12	
THE COMMONWEALTH GOVERNOR'S SCHOOL COURSES FOR SCIENCE					
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	
IB COURSE SEQUENCE FOR SCIENCE					
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

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ELECTIVE COURSES FOR SCIENCE					
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
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 FOR WORLD LANGUAGE					
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
C-M-N-S	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

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
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
AP COURSES FOR WORLD LANGUAGE					
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
C-N-S	5570AP	AP Spanish	1.0	11-12	Successful completion of Spanish Level IV or Spanish for Fluent Speakers III
IB COURSES FOR WORLD LANGUAGE					
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

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ALL	9170	Art History (Non-Studio Elective)	1.0	10-12	
B-S	9190	Photography & Graphic Design I	1.0	9-12	
S	9191	Photography & Graphic Design II	1.0	10-12	Successful completion of Photography & Graphic Design I
S	9192	Photography & Graphic Design III	1.0	10-12	Successful completion of Photography & 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.
B-C-M-N	9245	Guitar I	1.0	9-12	
B-C-M-N	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					

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ALL	1410	Theatre Arts I	1.0	9-12	
ALL	1420	Theatre Arts II	1.0	10-12	Successful completion of Theatre Arts I
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
AP 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
AP COURSES FOR MUSIC					
ALL	9226AP	AP Music Theory	1.0	11-12	Successful completion of Music Theory or teacher recommendation
IB COURSES FOR FINE 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 PROGRAMS					
ALL	7300	Health and Physical Education 9	1.0	9	

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ALL	7400/ 7405	Health and Physical Education 10	1.0	10	
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	5720	ESOL Concepts of Science	1.0	9-12	
ALL	5710	ESOL Concepts of Social Studies	1.0	9-12	
ALL	4610	ESOL Foundations of Science	1.0	9-12	
ALL	2997	ESOL Foundations of Social Studies	1.0	9-12	
ALL	5730	ESOL English for Academic Purposes	1.0	9-12	
ALL	5734	ESOL Reading & Writing Strategies	1.0	9-12	
ALL	5732	ESOL Algebra Readiness	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	
JROTC					

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
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
CAREER AND TECHNICAL EDUCATION					
CAREER CONNECTIONS					
B-M-C	9062DE	DE Virginia Teachers for Tomorrow I	1.0	11-12	
B-M-C	9072DE	DE Virginia Teachers for Tomorrow II	1.0	11-12	Completion of Virginia Teachers for Tomorrow I
AGRICULTURE AND NATURAL RESOURCES					
N	8034	Horticulture Sciences	1.0	10-12	
N	8035	Greenhouse Plant Production and Management	2.0	10-12	Horticulture Sciences
N	8036	Landscaping	2.0	11-12	Horticulture Sciences
BUSINESS AND INFORMATION TECHNOLOGY					
ALL	6320	Accounting I	1.0	10-12	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	11-12	
ALL	6612	Computer Information Systems I	1.0	9-12	Digital Applications
ALL	6613	Computer Information Systems II	1.0	10-12	Computer Information Systems I
ALL	6302	Cybersecurity I	1.0	10-12	IT Fundamentals

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ALL	6304	Cybersecurity II	1.0	10-12	Cybersecurity I
ALL	6630	Design, Multimedia, and Web Technologies I	1.0	9-12	Recommended: Digital Applications
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 (STAT)	6661	Java Programming	1.0	12	
B (IB)-N	6115	Principles of Business and Marketing	1.0	9-10	
ALL	6640	Programming I	1.0	10-12	Recommended: Digital Applications
ALL	6641	Programming II	1.0	11-12	Programming I
MARKETING					
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 I	1.0	10-12	
ALL	8130	Marketing II	1.0	11-12	Marketing I
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	Introduction to Health and Medical Sciences- student 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 & EMT II
C	8335	Emergency Medical Technician III	1.0	12	Successful completion of EMT I and EMT II/Instructor Endorsement
S	8337	Emergency Medical Telecommunications	1.0	10-12	
B	8331	Health Assisting Careers	2.0	11-12	Introduction to Health and Medical Sciences and teacher recommendation
ALL	8302	Introduction to Health and Medical Sciences	1.0	10-12	
M	8345	Medical Assistant I	2.0	11-12	Introduction to Health and Medical Sciences
N	8360	Nurse Aide I	2.0	11-12	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 & Nurse Aide II
FAMILY AND CONSUMER SCIENCES					
ALL	8232	Child Development & Parenting	1.0	10-12	

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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	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, & Services I	2.0	10-12	
B-N	8286	Early Childhood, Education, & 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	11-12	
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
ALL	TBD	Cybersecurity and IT Fundamentals	1.0	11-12	Located under Business and Information Technology
C	8459	Digital Visualization	1.0	10-12	Technical Drawing and Design
C-M-S	8450	Engineering Exploration	1.0	9-11	
C-M-S	8491	Engineering Studies	1.0	10-12	Engineering Exploration or Engineering Practicum IV
B-C-M-N	8436	Engineering Drawing & Design	1.0	10-12	Technical Drawing & Design
S	8423 8423DE	Geospatial Technology I or DE Geospatial Technology I	1.0 per course	11-12	
S	8424 8424DE	Geospatial Technology II or DE Geospatial Technology II	1.0 per course	11-12	Geospatial Technology I
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-N	8447	Production Systems	1.0	9-12	
B-C-M-N	8435	Technical Drawing & 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 & 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

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
N	8440	Digital Electronics - PLTW	1.0	10-12	Introduction to Engineering Design
N	8443	Engineering Design & 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
N	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	Automotive Body Technology I
N	8678	Auto Body Technology III – Collision and Repair and Painting and Refinishing	4.0	12	Automotive Body Technology II
B-N-S	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 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	10-12	Cabinetmaking I
B-S	8601	Carpentry I	BPHS - 1.0 SHS - 2.0	10	Construction Trades
B-S	8602	Carpentry II	2.0	10-12	Carpentry I
S	8603	Carpentry III	2.0	11-12	Carpentry II
S	9071	Construction Trades I	1.0	9-10	
M-S	8745	Cosmetology I	3.0	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 & regular attendance is required to meet clinical hours.
B-N	8702	Criminal Justice I	1.0	11-12	

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*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
B-N	8703	Criminal Justice II	1.0	11-12	Criminal Justice I
S	8530	Drafting I (Fundamentals)	1.0	9-11	
S	8531	Drafting II (Advanced Mechanical)	2.0	10-12	Drafting I
S	8532	Drafting III (Architectural Drawing)	2.0	11-12	Drafting II
S	8533	Electricity I	2.0	10-11	Construction Trades recommended; Algebra I, Part I recommended
S	8534	Electricity II	2.0	10-12	Electricity I
S	8535	Electricity III	2.0	11-12	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	10-12	Graphic Imaging Technology I
S	8512	Masonry I	2.0	10-11	Construction Trades recommended
S	8513	Masonry II	2.0	10-12	Masonry I
S	8514	Masonry III	2.0	11-12	Masonry II
S	8725	Small Engine Technology I	1.0	9-12	
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 County Public 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/Executive Director of Human Resources, Stafford County Public Schools, 31 Stafford Avenue, Stafford, VA 22554. Phone: (540) 658-6560 Fax: (540) 658- 5970. Reasonable accommodation upon request.