

# Stafford County Public Schools 2025-2026 Program of Studies



**Stafford County  
Public Schools**

*Inspire | Empower | Excel*



Dear Stafford County Families,

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

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

We continue to enhance our Program of Studies to expand secondary offerings, including a new Specialty Center at Colonial Forge High School. The aim of these changes are to engage our students in exciting new opportunities and to better prepare them for life after high school.

Our 2025-2026 Program of Studies provides a listing of available course offerings (required and elective) and suggested sequencing. Students should discuss course selections with their school counselor and parent/guardian(s).

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

Sincerely,  
Daniel W. Smith, Ed.D.  
Superintendent

## School Board Members

Ms. Susan Randall  
George Washington District

Falmouth District

Ms. Patricia Healy  
Rock Hill District

Ms. Maureen Siegmund  
Garrisonville District

Ms. Maya Guy  
Aquia District

Dr. Elizabeth Warner  
Griffis-Widewater District

Dr. Sarah Chase

Ms. Alyssa Halstead  
Hartwood District

### Vision

Prepared to Excel

### Mission

Inspire and empower every student.

### Values

Students, Integrity, Respect, Community, Opportunity, Excellence

### Goals

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



***What skills should a graduate from Stafford School have?***

**Communication**

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

**Collaboration**

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

**Critical Thinking**

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

**Creativity**

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

**Citizenship**

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

**Wellness**

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

**Acknowledgements**

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

**Editorial Notation**

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



# Table of Contents



<a href="#">School Contact Information</a>	8
<a href="#">Elementary Schools</a>	8
<a href="#">Middle Schools</a>	9
<a href="#">High Schools</a>	9
<a href="#">School Schedules</a>	9
<a href="#">General Information</a>	11
<a href="#">Graduation Requirements</a>	11
<a href="#">Standard Diploma Requirements</a>	11
<a href="#">Advanced Studies Diploma Requirements</a>	12
<a href="#">Work-Based Learning Opportunities</a>	13
<a href="#">Applied Studies Diploma</a>	14
<a href="#">Other Diplomas and Certificates</a>	14
<a href="#">Graduation Seals for Exemplary Performance</a>	14
<a href="#">State-Required Assessments</a>	16
<a href="#">State-required Screening Assessments</a>	16
<a href="#">State-Required Elementary School Assessments for All Students</a>	17
<a href="#">State-Required Middle School Assessments for All Students</a>	18
<a href="#">State-Required High School Assessments</a>	19
<a href="#">Other Assessments</a>	19
<a href="#">English for Speakers of Other Languages Services</a>	19
<a href="#">Elementary Services</a>	20
<a href="#">Secondary Services</a>	20
<a href="#">Gifted Education Services</a>	20
<a href="#">Special Education Services</a>	21
<a href="#">Transfer Students</a>	21
<a href="#">Grading and Reporting</a>	22
<a href="#">Elementary Grading and Reporting</a>	22
<a href="#">Secondary Grading Scale and Grade Point Average Calculation</a>	23
<a href="#">Course Retakes and Grade Replacement</a>	23
<a href="#">Weighted Grades</a>	23
<a href="#">Student Absenteeism and Make-up Work</a>	24
<a href="#">Full-time Virtual Instruction</a>	24
<a href="#">Elementary School Program</a>	26

Pre-Kindergarten	26
Kindergarten	28
First Grade	30
Second Grade	32
Third Grade	34
Fourth Grade	36
Fifth Grade	38
Middle School Program	41
Course Information, Planning, and Registration	41
English Courses	43
History and Social Science Courses	43
Mathematics Courses	45
Science Courses	48
Health and Physical Education Courses	49
English Learner Courses	50
Elective Courses	50
Visual and Performing Arts Courses	51
Visual Arts	51
Music	52
Theatre Arts	54
World Language Courses	56
Career and Technical Education Courses	57
State-Required Career Investigation	57
Business and Information Technology	57
Technology and Engineering Education	57
Family and Consumer Sciences	58
Academic Electives	59
State-Required Career Investigations	61
Index of Middle School Courses	61
High School Program	66
General Course Information	66
Increasing Secondary Options for Students	66
Promotion	66
Course Registration	66
Course Changes	66
Auditing Courses	67
Credit Recovery and Virtual Courses	67
Dual Enrollment Courses	67
International Baccalaureate Diploma Programme	68
Credit by Demonstrated Proficiency	69
Stafford Schools Secondary Offerings	71

<a href="#">Application Process and Selection</a>	71
<a href="#">Stafford Specialty Centers</a>	72
<a href="#">Leadership, Education, and Public Service (LEAPS) Center</a>	74
<a href="#">Engineering Professions and Industries of Construction (EPIC) Center</a>	79
<a href="#">Community Health and Medical Professions (CHAMP) Center</a>	82
<a href="#">Business and Information Technology Center</a>	87
<a href="#">Stafford Secondary Programs</a>	93
<a href="#">Four-Year Secondary Program Pathways</a>	93
<a href="#">Other Secondary Programs</a>	99
<a href="#">Regional High School Programs</a>	112
<a href="#">The Academy of Technology and Innovation at the University of Mary Washington</a>	112
<a href="#">The Commonwealth Governor’s School</a>	114
<a href="#">English Courses</a>	116
<a href="#">History and Social Sciences Courses</a>	122
<a href="#">Mathematics Courses</a>	128
<a href="#">Science Courses</a>	136
<a href="#">World Language Courses</a>	144
<a href="#">Visual and Performing Arts Courses</a>	151
<a href="#">Visual Arts</a>	151
<a href="#">Music</a>	153
<a href="#">Theatre Arts</a>	157
<a href="#">Health, Physical Education, and Driver Education Courses</a>	161
<a href="#">English Learner Courses</a>	164
<a href="#">Additional Credit Opportunities</a>	166
<a href="#">Advanced Placement Capstone Courses</a>	166
<a href="#">Independent Study and Internship Programs</a>	166
<a href="#">Career and Technical Education and Industry Credentials</a>	168
<a href="#">Workplace Readiness Skills</a>	168
<a href="#">CTE Completer</a>	168
<a href="#">CTE Industry Credentials</a>	168
<a href="#">Career and Technical Education Courses</a>	174
<a href="#">Junior Reserve Officer Training Corps (JROTC)</a>	175
<a href="#">Agriculture and Natural Resources</a>	179
<a href="#">Business and Information Technology</a>	180
<a href="#">Marketing</a>	184
<a href="#">Health and Medical Sciences</a>	186
<a href="#">Family and Consumer Sciences</a>	188
<a href="#">Technology and Engineering Education</a>	190
<a href="#">Trade and Industrial Education</a>	195
<a href="#">Index of High School Courses</a>	204

# School Contacts



## Elementary Schools

SCHOOL	PRINCIPAL	TELEPHONE
<a href="#">Anne E. Moncure Elementary</a>	Greg Machi	(540) 658-6300
<a href="#">Anthony Burns Elementary</a>	Caroline Goddard	(540) 658-6800
<a href="#">Conway Elementary</a>	JR Raybold	(540) 361-1455
<a href="#">Falmouth Elementary</a>	Ashley Hall	(540) 373-7458
<a href="#">Ferry Farm Elementary</a>	TBD	(540) 373-7366
<a href="#">Garrisonville Elementary</a>	Nicole Clemente	(540) 658-6260
<a href="#">Grafton Village Elementary</a>	Michael Sidebotham	(540) 373-5454
<a href="#">Hampton Oaks Elementary</a>	Susan Weiderhold	(540) 658-6280
<a href="#">Hartwood Elementary</a>	Brian Raska	(540) 752-4441
<a href="#">Kate Waller Barrett Elementary</a>	Rachel Novak	(540) 658-6464
<a href="#">Margaret Brent Elementary</a>	Scott Elchenko	(540) 658-6790
<a href="#">Park Ridge Elementary</a>	Niki Simms	(540) 658-6320
<a href="#">Rockhill Elementary</a>	Jessica Corwin	(540) 658-6360
<a href="#">Rocky Run Elementary</a>	Nick Roman	(540) 286-1956
<a href="#">Stafford Elementary</a>	Stefanie Sanders	(540) 658-6340
<a href="#">Widewater Elementary</a>	Karen Bingham	(540) 658-6380
<a href="#">Winding Creek Elementary</a>	Rebecca Wardlow	(540) 658-6400

## Middle Schools

SCHOOL	PRINCIPAL	TELEPHONE
<a href="#">A.G. Wright Middle</a>	Carly Hegna	(540) 658-6240
<a href="#">Dixon-Smith Middle</a>	Andrew Bathke	(540) 899-0860
<a href="#">Edward E. Drew Middle</a>	Amy Ivory	(540) 371-1415
<a href="#">H.H. Poole Middle</a>	Moneka Coats	(540) 658-6190
<a href="#">Rodney Thompson Middle</a>	Mike Archambault	(540) 658-6420
<a href="#">Shirley C. Heim Middle</a>	Matthew Hills	(540) 658-5910
<a href="#">Stafford Middle</a>	Andrew Grider	(540) 658-6210
<a href="#">T. Benton Gayle Middle</a>	Deanna Fierro-Kin	(540) 373-0383

## High Schools

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

# General Information



**Stafford County  
Public Schools**

*Inspire | Empower | Excel*



## General Information

### Graduation Requirements

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

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

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

#### Standard and Verified Units of Credit

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

#### Standard Diploma Requirements

Course Area	9th Graders for the First Time in Fall of 2018 and Beyond	
	Standard Credits	Verified Credits
English	4	2
Mathematics <sup>1</sup>	3	1
Lab Science <sup>2, 6</sup> – Earth Science, Biology, one additional Science course	3	1
History <sup>3, 6</sup> – 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 <sup>7</sup>	2	
Economics and Personal Finance	1	
Electives <sup>4</sup>	4	
<b>TOTAL</b>	<b>22</b>	<b>5</b>

<sup>1</sup>Courses 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.

<sup>2</sup>Courses 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.

<sup>3</sup>Courses 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.

<sup>4</sup>Courses 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 \(8VAC-20-131\)](#) (MS Word).

<sup>5</sup>Students 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.

<sup>6</sup>Students 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.

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

Students seeking a Standard Diploma must also:

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

### Advanced Studies Diploma Requirements

Course Area	9th Graders for the First Time in Fall of 2018 and Beyond	
	Standard Credits	Verified Credits
English	4	2
Mathematics <sup>1</sup>	4	1
Lab Science <sup>2, 6</sup> – Four (4) courses from among three of these Lab Science areas: Earth Science, Biology, Chemistry, and Physics	4	1
History <sup>3, 6</sup> – 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 <sup>4</sup>	3 (or 2)	
Fine Arts or Career and Technical Education <sup>7</sup>	1	
<b>TOTAL</b>	<b>26</b>	<b>5</b>

<sup>1</sup>Courses 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.

<sup>2</sup>Courses 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.

<sup>3</sup>Courses 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.

<sup>4</sup>Courses 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 \(8VAC-20-131\)](#) (MS Word). A student's first three world language credits may not be used to meet the sequential requirements.

<sup>5</sup>Students 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.

<sup>6</sup>Students 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.

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

Students seeking an Advanced Studies Diploma must also:

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

## Work-Based Learning Opportunities

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. To learn more, visit the [WBL website](#).

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:

- May be embedded within a course under the direction of the instructor. Students may earn work-based learning experience outside of school when the work aligns with the curriculum of certain classes. Experiences may include internships, externships, and apprenticeships. 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.

- Ready S.E.T. Go is a 40-hour externship program where students participate in an immersive workplace experience during one school week.
  - [Ready S.E.T. Go Overview](#)
  - [Ready S.E.T. Go Application](#)
  - [Ready S.E.T. Go Application Schedule](#)
- Career and Technical Student Organizations (CTSOs): Co-curricular student organizations are supported in conjunction with CTE courses and include Distributive Education Clubs of America (DECA), Future Business Leaders of America (FBLA), Family Career and Community Leaders of America (FCCLA), Future Farmers Association (FFA), Health Occupation Student Association (HOSA), SkillsUSA, and Technology Student Association (TSA).

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

## Applied Studies Diploma

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

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

## Other Diplomas and Certificates

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

## Graduation Seals for Exemplary Performance

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

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

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

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

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

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

The **Seal for Science, Technology, Engineering, and Mathematics (STEM)** is awarded to students who earn either a Standard Diploma or an Advanced Studies Diploma and satisfy all Math and Science requirements for the Advanced Studies diploma with a “B” average or better in all course work, and

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

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

- Complete Virginia and United States History and Virginia and United States Government courses with a grade of "B" or higher.
- Have good attendance and no disciplinary infractions as determined by local school board policies.
- Complete 50 hours of voluntary participation in community service or extracurricular activities, such as volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate; participating in Boy Scouts, Girl Scouts or similar youth organizations; participating in Junior Reserve Officer Training Corps (JROTC); participating in political campaigns, government internships, Boys State, Girls State or Model General Assembly; or participating in school-sponsored extracurricular activities that have a civics focus. Any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement.

The **Seal of Biliteracy** is awarded to students who earn a Board of Education-approved diploma and:

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

The **Seal for Excellence in Science and the Environment** is awarded to students meet each of the following criteria:

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

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

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

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

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

## State-Required 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.

As a result of legislation passed in the 2021 Virginia General Assembly, all Virginia Public Schools in the Commonwealth of Virginia are required to administer a mathematics and reading growth assessment in grades 3-8. School divisions can administer either the state SOL growth assessment or an alternate growth assessment that is approved by the Virginia Department of Education (VDOE). Stafford Schools administers an alternate growth assessment, the NWEA® Measures of Academic Progress (MAP) Growth Assessment.

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. 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.

### State-required Screening Assessments

State law and administrative code require certain screening assessments for all students. Assessments are subject to change based on state requirements and local implementation.

#### Virginia Language and Literacy Screening System (VALLSS)

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

VALLSS is administered to all students in grade PK-2 and certain students in grade 3. These assessments are designed to measure students' knowledge of important literacy fundamentals. It 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 (VKRP)

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

#### Dynamic Indicators of Basic Early Literacy Skills (DIBELS)

As required by the Virginia Literacy Act of 2022, [DIBELS](#) is used as a progress monitoring tool assessing student acquisition of literacy skills. DIBELS is administered to certain students in grades K-2 and all students in grades 3-5.



### 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.

### NWEA Measures of Academic Progress (MAP) Growth

Stafford Schools has selected the [NWEA MAP Growth](#) assessment to meet state growth testing requirements. The 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 3-8.

## State-Required Elementary School Assessments for All Students

Elementary Grade Level	Virginia Standards of Learning or Other Assessment	Administration - Time of Year
Pre-Kindergarten	VALLSS VKRP	Beginning, Middle, and End Beginning, Middle, and End
Kindergarten	VALLSS VKRP	Beginning, Middle, and End Beginning, Middle (optional), and End
Grade 1	VALLSS	Beginning, Middle, and End
Grade 2	VALLSS	Beginning, Middle, and End
Grade 3	MAP Growth - Reading and Mathematics  Grade 3 Reading SOL Assessment Grade 3 Mathematics SOL Assessment Grade 3 Science Performance Assessments Grade 3 Social Studies Performance Assessments	Beginning, Middle, and End (except Grade 3 Reading) End End Throughout Throughout
Grade 4	MAP Growth - Reading and Mathematics Grade 4 Reading SOL Assessment Grade 4 Mathematics SOL Assessment Virginia Studies SOL Assessment	Beginning, Middle, and End End End End
Grade 5	MAP Growth - Reading and Mathematics Grade 5 Reading (includes the Integrated Reading and Writing component) SOL Assessment Grade 5 Mathematics SOL Assessment Grade 5 Science (cumulative assessment - grade 4 and 5 science standards) SOL Assessment Grade 5 History and Writing Performance Assessments	Beginning, Middle, and End End  End End  Throughout

NOTE: The assessments listed in this chart are subject to change, based on state requirements and local implementation.

## State-Required Middle School Assessments for All Students

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

NOTE: The assessments listed in this chart are subject to change, based on state requirements and local implementation.

## State-Required High School Assessments

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

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

NOTE: The assessments listed in this chart are subject to change, based on state requirements and local implementation.

## Other Assessments

---

Stafford Schools has identified additional screening assessments that may be used to monitor and assess students and inform instruction. Assessments listed in this section are subject to change.

### **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 2<sup>nd</sup> grade will be assessed in 6<sup>th</sup> grade or by referral.

### **Devereux Student Strengths Assessment (DESSA)**

[DESSA assessments](#) provide educators with measurable and actionable data on students’ social, emotional, and behavioral health. It provides a common lens and language for crafting a tiered academic and behavioral program that involves educators, parents, and students. All schools will administer this assessment in the fall.

### **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 9-11. In addition, for 11<sup>th</sup> 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 four years, and dual language instruction (currently being piloted at Widewater Elementary School).

## **Secondary Services**

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

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

## **Gifted Education Services**

---

Gifted education services provide a cohesive continuum of appropriately challenging and differentiated educational experiences at the school, district, and community levels for identified students at all grade levels. Eligibility for the gifted program is determined by prescribed criteria established by the school division through [Stafford's Local Plan for the Education of the Gifted](#) and approved by the Commonwealth of Virginia.

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

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

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

## **Special Education Services**

---

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

Disabilities Act, also known as IDEA.

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

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

## **Transfer Students**

---

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

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

## **Military Student Transfer Students**

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

# Grading and Reporting

## Elementary Grading and Reporting

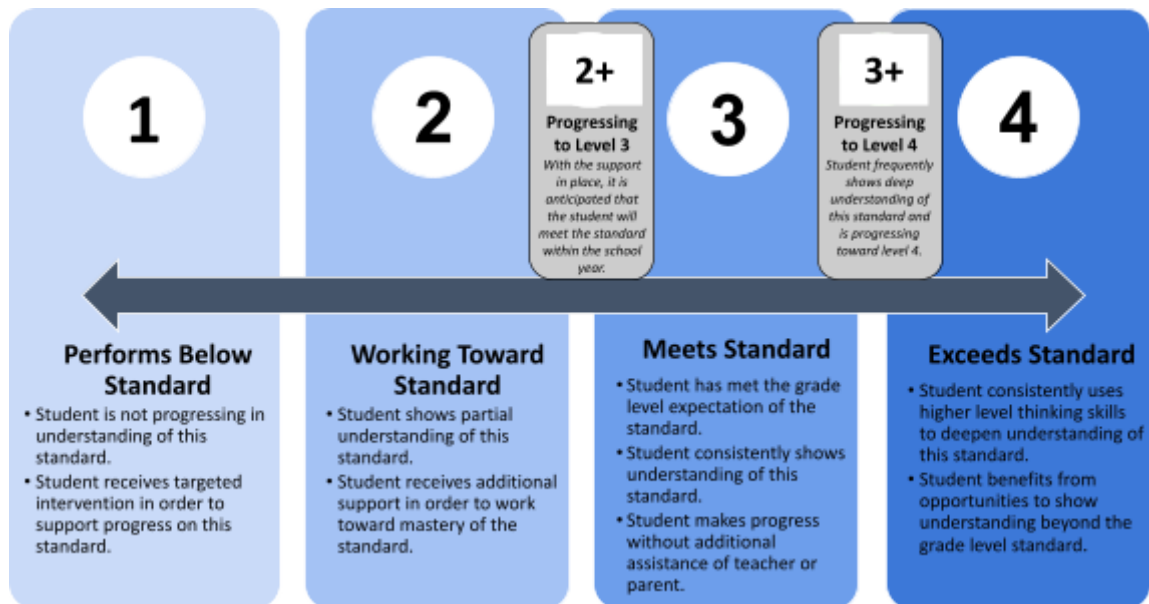
Stafford Schools provides feedback on academic growth and achievement to elementary students and parents/guardians through a standards-based grading system. A standards-based system measures and reports a student's progress according to how the student is performing on expected standards. It provides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

Grades K-5 (Academic Subjects)

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

Grades K-5 (Life Readiness Skills)

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





## Secondary Grading Scale and Grade Point Average Calculation

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

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

### Course Retakes and Grade Replacement

Any student choosing to replace a high-school credit-bearing course grade may do so by retaking the course. Students retaking a course with a passing grade may only do so with principal approval. Original and replacement courses and associated grades will be listed on the student's transcript. The highest of the two grades (original or replacement course) will be factored into the calculation of the student's GPA. An "R" tag on the student transcript indicates grade replacement through repeating the full (new) course. A "CR" tag on the student transcript indicates grade replacement through a credit recovery course after failing a course. Credit recovery courses do not meet the NCAA eligibility requirements.

Notes:

- Courses may be repeated only once, unless required to meet graduation requirements.
- Repeated courses must be at the same level as the original course.
- Virtual Virginia (VVA) courses may be used to repeat in-person or VVA courses of the same level during Stafford's summer school program.
- Asynchronous virtual courses through providers other than VVA may not be used to electively repeat a course.

### Weighted Grades

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

Please note the following:

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

NOTE: Students transferring into Stafford Schools will receive weighted grades for only those AP, DE, IB, and Project

Lead the Way 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.

## **Student Absenteeism and Make-up Work**

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

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

## **Full-time Virtual Instruction**

---

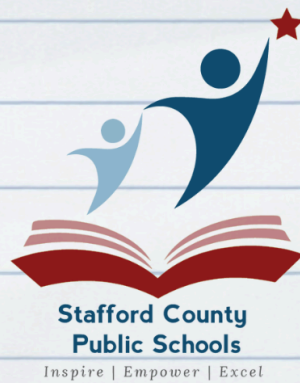
Students in grades 6-12 may request full-time virtual instruction at no cost through [Virtual Virginia](#), a program of the Virginia Department of Education (VDOE). Students must receive school approval based on division criteria developed from the VDOE Guidelines for Successful Full-time Virtual Students.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

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

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

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

# Elementary School Program



## Elementary School Program

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

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

## Pre-Kindergarten

---

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

### Literacy

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

### Mathematics

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

### Science

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

### History and Social Sciences

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

### Approaches to Learning

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

## **Social Emotional Learning**

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

## **Physical Development, Health and Self Care**

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

## **Music**

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

## **Visual Arts**

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

# Kindergarten

---

## **Literacy**

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

## **Mathematics**

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

## **Science - *Using My Senses to Understand My World***

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

## **Social Studies - *Focus on the Community***

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

## **Music**

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

## **Visual Arts**

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



## **Physical Education**

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

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

## **Health Education**

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

This is accomplished by demonstrating

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

## **Library**

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

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

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

# First Grade

---

## **Literacy**

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

## **Mathematics**

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

## **Science - *How I Interact with My World***

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

## **Social Studies - *Focus on the Commonwealth of Virginia***

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

## **Music**

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

## **Visual Arts**

Fine motor skills and eye-hand coordination development continue in first grade art. Students will begin to perceive spatial relationships, identify primary colors, and distinguish line variation. The standards continue to emphasize ways that art communicates ideas, opinions, and emotions. Art production focuses on increased communication, creative thinking, and the depiction of stories, poems, ideas, and themes. Students explore why people have different responses to works of art.

## **Physical Education**

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

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

## **Health Education**

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

This is accomplished by demonstrating

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

## **Library**

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

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

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

## Second Grade

---

### **Literacy**

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

### **Mathematics**

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

### **Science - *Change Occurs All Around Us***

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

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

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

### **Music**

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

### **Visual Arts**

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

## **Physical Education**

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

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

## **Health Education**

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

This is accomplished by demonstrating

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

## **Library**

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

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

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

## Third Grade

---

### **Literacy**

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

### **Mathematics**

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

### **Science - *Interactions in Our World***

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

### **Social Studies - *Focus on Ancient World Cultures***

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

### **Music**

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

### **Visual Arts**

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

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

## **Physical Education**

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

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

## **Health Education**

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

This is accomplished by demonstrating

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

## **Library**

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

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

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



## Fourth Grade

---

### **Literacy**

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

### **Mathematics**

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

### **Science - *Our Place in the Solar System***

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

### **Social Studies - *Virginia Studies***

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

### **Music**

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

### **Visual Arts**

The elements of art (e.g. color, form, line, shape, space, texture, value) and principles of design (e.g. balance, contrast, emphasis, movement, pattern, proportion, rhythm, unity, variety) as tools for visual communication, creative expression, and production continue to be emphasized in fourth grade art. Further application of student skills include

an awareness of proper portion and illusion of depth on a two-dimensional surface. Students examine influences of art of the past on contemporary culture. Students will explore a continued range of art tools and subject matter as they engage in the creative process.

### **Physical Education**

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

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

### **Health Education**

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

This is accomplished by demonstrating

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

### **Library**

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

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

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

## **Fifth Grade**

---

### **Literacy**

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

### **Mathematics**

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

### **Science - *Transforming Matter and Energy***

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

### **Social Studies - *United States History to 1865***

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

### **Music**

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

### **Visual Arts**

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

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

## **Physical Education**

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

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

## **Health Education**

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

This is accomplished by demonstrating

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

## **Library**

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

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

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

# Middle School Program



**Stafford County  
Public Schools**

*Inspire | Empower | Excel*

## **Middle School Program**

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

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

## **Course Information, Planning, and Registration**

---

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

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

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

## **High School Credit Earned Prior to the 9th Grade**

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

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

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

## **Intervention and Enrichment**

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

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





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

## English Courses

---

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

### ENGLISH

**1109 Grade 6**

**1110 Grade 7**

**1120 Grade 8**

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

## History and Social Science Courses

---

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

### **2354 GRADE 6 UNITED STATES HISTORY: 1865 TO THE PRESENT**

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

### **2357 GRADE 7 CIVICS AND ECONOMICS**

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

### **2359 GRADE 8 WORLD GEOGRAPHY**

The focus of this course is the study of the world's peoples, places, and environments with an emphasis on world regions. The knowledge, skills, and objectives of the course are centered on the world's population and cultural characteristics, landforms and climates, migration and settlement patterns, as well as economic development. Particular emphasis is placed on students' applying geographic concepts and skills to their daily lives.

## Mathematics Courses

---

### Sample Middle School Mathematics Course Sequences

#### 6th Graders

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

#### 7th Graders

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

#### 8th Graders

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

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

#### 3110 PRE-ALGEBRA 6

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

experimental and theoretical probability, compare and contrast the properties of quadrilaterals, and evaluate algebraic expressions. Students enrolled in this course take the Grade 6 Mathematics Virginia Standards of Learning test.

### **3116 PRE-ALGEBRA 6 INTENSIFIED**

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

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

### **3111 PRE-ALGEBRA 7**

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

### **3118 FOUNDATIONS OF ALGEBRA I**

#### **Grade 8**

**Placement:** *Selection based on a set of criteria including assessment data and teacher recommendation*

This course reviews, extends, and builds upon skills learned in previous grades in order to provide students with a comprehensive foundation in mathematics to prepare for Algebra I. The curriculum emphasizes the development of key concepts such as rational numbers, proportions, linear relationships, and equations and inequalities. Students will also engage with concepts to prepare for Geometry, including the properties of angles, transformations, and measurement concepts such as volume and surface area. Students use the data cycle by applying it to histograms, scatterplots, and boxplots. The course fosters problem-solving skills, critical thinking, and the application of math to real-world situations, ensuring students meet and exceed the requirements of the Virginia SOL. By the end of the course, students will be prepared for Algebra I. Students enrolled in this course will take the Grade 8 Mathematics SOL assessment.

### **3130 ALGEBRA I**

#### **1 Credit**

**Prerequisite:** *Pre-Algebra 7 and a passing score on the Grade 8 SOL assessment*

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

### **3143H HONORS GEOMETRY**

**1 Credit**

***Prerequisite: Grade 7 Algebra I***

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

## Science Courses

---

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

### **4105 GRADE 6 EARTH SCIENCE**

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

### **4115 GRADE 7 LIFE SCIENCE**

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

### **4125 GRADE 8 PHYSICAL SCIENCE**

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

## Health and Physical Education Courses

---

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

### **7110 GRADE 6 HEALTH AND PHYSICAL EDUCATION**

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

### **7120 GRADE 7 HEALTH AND PHYSICAL EDUCATION**

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

### **7200 GRADE 8 HEALTH AND PHYSICAL EDUCATION**

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



## English Learner Courses

---

In addition to their core content classes, students identified as English Learners (ELs) may take the following courses designed to enhance their language acquisition in reading and writing, as well as develop academic vocabulary for content areas.

### **5712 CONTENT LANGUAGE DEVELOPMENT FOR ENGLISH LEARNERS**

**Grades 6, 7, or 8**

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

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

### **5713 READING AND WRITING STRATEGIES FOR ENGLISH LEARNERS**

**Grades 6, 7, or 8**

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

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

### **5733 MATH CONCEPTS FOR ENGLISH LEARNERS**

**Grades 6, 7, or 8**

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

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

## Elective Courses

---

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

## Visual and Performing Arts Courses

---

### Visual Arts

#### **9103 BEGINNING STUDIO ART (18 weeks)**

**Grades 6, 7, or 8**

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

#### **9105 INTERMEDIATE STUDIO ART (18 weeks)**

**Grades 7 or 8**

*Prerequisite: Beginning Studio Art*

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

#### **9115 ADVANCED STUDIO ART (18 weeks)**

**Grade 8**

*Prerequisite: Intermediate Studio Art*

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

#### **9180 BEGINNING DIGITAL ART (18 weeks)**

**Grades 6, 7, or 8**

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

**9181 INTERMEDIATE DIGITAL ART (18 weeks)****Grades 7 or 8*****Prerequisite: Beginning Digital Art***

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

**9182 ADVANCED DIGITAL ART (18 weeks)****Grades 8*****Prerequisite: Intermediate Digital Art***

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

**Music**

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

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

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

**9230 INTERMEDIATE BAND (36 weeks)****Grades 7 or 8*****Prerequisite: Beginning Band***

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

**9231 ADVANCED BAND (36 weeks)****Grade 8*****Prerequisite: Intermediate Band***

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

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

**9269 BEGINNING CHORUS (36 weeks)**

**Grades 6, 7, or 8**

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

**9270 INTERMEDIATE CHORUS (36 weeks)**

**Grades 7 or 8**

*Prerequisite: Beginning Chorus*

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

**9271 ADVANCED CHORUS (36 weeks)**

**Grade 8**

*Prerequisite: Intermediate Chorus*

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

**9235 BEGINNING ORCHESTRA (36 weeks)**

**Grades 6, 7, or 8**

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

**9236 INTERMEDIATE ORCHESTRA (36 weeks)****Grades 7 or 8*****Prerequisite: Beginning Orchestra***

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

**9241 ADVANCED ORCHESTRA (36 weeks)****Grade 8*****Prerequisite: Intermediate Orchestra***

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

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

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

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

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

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

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

**1395 INTERMEDIATE THEATRE ARTS (18 weeks)****Grades 7 or 8*****Prerequisite: Beginning Theatre Arts***

This course begins to refine students' dramatic and theatrical skills typically learned in Beginning Theatre Arts. Using voice, language, movement, imagination, and emotional perception, students develop characters for the theater, and their own self-discipline and self-concept. They learn drama through artistic collaboration through improvisation, play

writing, directing, technical production, and theater management. In addition, students learn about theater in the past and theater today with an emphasis on available roles and careers.

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

**Grade 8**

***Prerequisite: Intermediate Theatre Arts***

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

## World Language Courses

---

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

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

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

### **5510 SPANISH I (36 weeks)**

**Grade 8**

**1 Credit**

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

### **5110 FRENCH I (36 weeks)**

**Grade 8**

**1 Credit**

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

### **5210 GERMAN I (36 weeks)**

**Grade 8**

**1 Credit**

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

### **5310 LATIN I (36 weeks)**

**Grade 8**

**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.

### **5511 SPANISH FOR FLUENT SPEAKERS I (36 weeks)**

**Grade 8**

**1 Credit**

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



## Career and Technical Education Courses

---

### State-Required Career Investigation

#### **9069 PATHWAYS TO SUCCESS (18 weeks)**

**Grade 7**

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

### Business and Information Technology

#### **6609 BEGINNING DIGITAL EXPLORATIONS (18 weeks)**

**Grade 6**

Students are introduced to computing devices and software as problem-solving tools. Students will complete a variety of projects with word processing, database, presentation, and spreadsheet software. Students explore Internet safety and digital citizenship.

#### **4002 INTERMEDIATE COMPUTER SCIENCE DISCOVERIES (18 weeks)**

**Grades 7 or 8**

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

#### **6617 ADVANCED DIGITAL EXPLORATIONS (18 weeks)**

**Grades 7 or 8**

This course prepares students to utilize various digital concepts, programs, and tools, granting them greater understanding of the technology that influences their lives. They'll learn to use this newfound knowledge to solve problems and grow into responsible digital citizens to prepare them for high school. Students demonstrate an understanding of computer concepts through the application of knowledge and real-world activities and develop employability skills.

### Technology and Engineering Education

#### **8482 BEGINNING TECHNOLOGY AND ENGINEERING (18 weeks)**

**Grade 6**

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

### **8464 INTERMEDIATE TECHNOLOGY AND ENGINEERING (18 weeks)**

**Grades 7 or 8**

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

### **8463 ADVANCED TECHNOLOGY AND ENGINEERING (18 weeks)**

**Grades 7 or 8**

This advanced technology and engineering course utilizes the Engineering Design Process to introduce: construction, transportation, manufacturing, communication, power and energy, and biotechnology pathways. Students interpret designer's schematics in order to choose the best materials for designing and assembling a product in the production lab using industry appropriate machinery. Students will be exposed to processes for working with plastics, metals, woods, ceramics, and composites to produce a product or meet a need. Challenging laboratory activities ignite students' creativity to build systems and analyze technologies to learn how and why they work. Students will practice workplace readiness skills, gain exposure to work-based learning and collaborate with high school Technology Student Association (TSA) members.

## **Family and Consumer Sciences**

### **8208 BEGINNING FAMILY AND CONSUMER SCIENCES (18 weeks)**

**Grade 6**

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

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

**Grades 7 or 8**

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

### **8244 ADVANCED JOURNEY TOWARDS INDEPENDENCE (18 weeks)**

**Grades 7 or 8**

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

## Academic Electives

---

### **1202 COMMUNITY LEADERS I (18 weeks)**

**Grades 6, 7, or 8**

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

### **1204 COMMUNITY LEADERS II (18 weeks)**

**Grades 7 or 8**

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

### **2352 HISTORY AND SOCIAL STUDIES INDEPENDENT STUDY (18 weeks)**

**Grades 7 or 8**

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

### **LITERACY LAB (36 weeks)**

**1106 Grade 6**

**1107 Grade 7**

**1108 Grade 8**

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

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

### **1399 PUBLIC SPEAKING AND DEBATE (18 weeks)**

**Grades 6, 7, or 8**

This course will introduce students to the basics of public speaking, including debate and online formats such as podcasts and Ted Talks. Students will learn the purpose of a speech and practice various forms of public speaking

and debate. This course supports critical thinking, research, writing, and public speaking. Students will participate in class presentations and debates. This course may only be taken one time.

### **1172 CREATIVE WRITING (18 weeks)**

**Grades 6, 7 or 8**

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

### **INVESTIGATE MATHEMATICS (36 weeks)**

**3113 Grade 6**

**3114 Grade 7**

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

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

### **INVESTIGATE ALGEBRA I (36 Weeks)**

**3119 Grade 8**

**Note:** Students should be concurrently enrolled in Algebra I

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

Investigate Algebra I is a course designed to support students while enrolled in Algebra I. This course provides an in-depth review and reinforcement of fundamental mathematical concepts that are the foundation for success in Algebra I. Key topics include, but not limited to, properties of numbers, fractions, decimals, ratios, proportions, and introductory algebraic concepts such as solving simple equations and understanding variables. Through a combination of direct instruction, collaborative problem-solving, and targeted practice, students will build a strong mathematical foundation, gain confidence in their skills, and develop the critical thinking necessary for more advanced mathematical studies.

### **3117 MATHEMATICS PERFORMANCE LAB (18 weeks)**

**Grades 7 or 8**

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

### **4000 INNOVATION STUDIO (18 weeks)**

**Grades 7 or 8**

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

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

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

## **State-Required Career Investigations**

---

The Career Investigation curriculum will assist students in bridging their academic and career development in the elementary grades with information on rigorous courses, career pathways, postsecondary options, and workplace trends in the middle grades to help them meet their goals for successful transition to high school graduation and beyond.

The Career Investigation curriculum supports the preparation of the “life ready” student and engages students in:

- demonstrating workplace readiness skills;
- exploring career clusters and pathways;
- completing a career interest assessment;
- introducing work-based learning;
- applying the decision-making process to course
- selection and postsecondary options;
- creating the Academic and Career Plan; and
- connecting the world of work to responsibilities as a citizen, including personal, physical, and mental wellness.

Virginia provides flexibility on how school divisions provide career investigations. Career investigations will be delivered through a combination of virtual modules and direct instruction, and will include information regarding high school program offerings connecting to students interests and post-secondary goals.

**9069 PATHWAYS TO SUCCESS (18 weeks)**  
**Grade 7 or 8**

Students explore career pathways within the 17 identified career clusters by investigating through self-discovery and project-based learning activities. Self-assessments will allow students to discover their interests, strengths, and explore various pathways in high school and beyond by creating an "Academic and Career Plan."

## Index of Middle School Courses

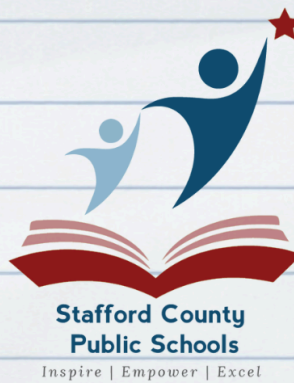
COURSE #	COURSE	HIGH SCHOOL CREDIT	Duration	GRADE	PLACEMENT/ PREREQUISITE
<b>ENGLISH</b>					
1109	Grade 6 English	0	36 weeks	6	
1110	Grade 7 English	0	36 weeks	7	
1120	Grade 8 English	0	36 weeks	8	
<b>HISTORY AND SOCIAL SCIENCE</b>					
2354	Grade 6 United States History: 1865 to the present	0	36 weeks	6	
2357	Grade 7 Civics and Economics	0	36 weeks	7	
2359	Grade 8 World Geography	0	36 weeks	8	
<b>MATHEMATICS</b>					
3110	Pre-Algebra 6	0	36 weeks	6	
3116	Pre-Algebra 6 Intensified	0	36 weeks	6	Selection for this course is based on a set criteria.
3111	Pre-Algebra 7	0	36 weeks	7	
3118	Foundations of Algebra I	0	36 weeks	8	Selection based on a set of criteria including assessment data and teacher recommendation.
3130	Algebra I	1	36 weeks	7-8	Pre-Algebra 7 and a passing score on the Grade 8 SOL assessment
3143H	Honors Geometry	1	36 weeks	8	Grade 7 Algebra I
<b>SCIENCE</b>					
4105	Grade 6 Science	0	36 weeks	6	
4115	Grade 7 Life Science	0	36 weeks	7	
4125	Grade 8 Physical Science	0	36 weeks	8	
<b>HEALTH AND PHYSICAL EDUCATION</b>					
7110	Grade 6 Health and Physical Education	0	36 weeks	6	
7120	Grade 7 Health and Physical Education	0	36 weeks	7	
7200	Grade 8 Health and Physical Education	0	36 weeks	8	
<b>ENGLISH LEARNERS (EL)</b>					
5712	Content Language Development for English Learners	0	36 weeks	6-8	Selection for this course is based on a set criteria including WIDA assessments and teacher recommendation.
5713	Reading and Writing Strategies for English Learners	0	36 weeks	6-8	Selection for this course is based on a set criteria including WIDA assessments and teacher recommendation.
5733	Math Concepts for English Learners	0	36 weeks	6-8	Selection for this course is based on a set criteria including WIDA assessments and teacher recommendation.
<b>ELECTIVES-VISUAL AND PERFORMING ARTS</b>					
<b>VISUAL ARTS</b>					
9103	Beginning Studio Art	0	18 weeks	6-8	

<b>COURSE #</b>	<b>COURSE</b>	<b>HIGH SCHOOL CREDIT</b>	<b>Duration</b>	<b>GRADE</b>	<b>PLACEMENT/ PREREQUISITE</b>
9105	Intermediate Studio Art	0	18 weeks	7-8	Beginning Studio Art
9115	Advanced Studio Art	0	18 weeks	8	Intermediate Studio Art
9180	Beginning Digital Art	0	18 weeks	6-8	
9181	Intermediate Digital Art	0	18 weeks	7-8	Beginning Digital Art
9182	Advanced Digital Art	0	18 weeks	8	Intermediate Digital Art
<b>PERFORMING ARTS</b>					
9229	Beginning Band	0	36 weeks	6-8	
9230	Intermediate Band	0	36 weeks	7-8	Beginning Band
9231	Advanced Band	0	36 weeks	8	Intermediate Band
9269	Beginning Chorus	0	36 weeks	6-8	
9270	Intermediate Chorus	0	36 weeks	7-8	Beginning Chorus
9271	Advanced Chorus	0	36 weeks	8	Intermediate Chorus
9235	Beginning Orchestra	0	36 weeks	6-8	
9236	Intermediate Orchestra	0	36 weeks	7-8	Beginning Orchestra
9241	Advanced Orchestra	0	36 weeks	8	Intermediate Orchestra
9249	Guitar	0	18 weeks	7-8	
9272	Music Production	0	18 weeks	7-8	
1390	Beginning Theatre Arts	0	18 weeks	6-8	
1395	Intermediate Theatre Arts	0	18 weeks	7-8	Beginning Theatre Arts
1400	Advanced Theatre Arts	0	18 weeks	8	Intermediate Theatre
<b>ELECTIVES-WORLD LANGUAGES</b>					
5510	Spanish I	1	36 weeks	8	
5110	French I	1	36 weeks	8	
5210	German I	1	36 weeks	8	
5310	Latin I	1	36 weeks	8	
5511	Spanish For Fluent Speakers I	1	36 weeks	8	Course is intended for heritage and native speakers of Spanish and is taught in Spanish.
<b>CAREER AND TECHNICAL EDUCATION</b>					
<b>BUSINESS AND INFORMATION TECHNOLOGY</b>					
6609	Beginning Digital Explorations	0	18 weeks	6	
4002	Intermediate Computer Science Discoveries	0	18 weeks	7-8	
6617	Advanced Digital Explorations	0	18 weeks	7 - 8	
<b>TECHNOLOGY EDUCATION</b>					
8482	Beginning Technology and Engineering	0	18 weeks	6	
8464	Intermediate Technology and Engineering	0	18 weeks	7-8	
8463	Advanced Technology and Engineering	0	18 weeks	7-8	
<b>FAMILY AND CONSUMER SCIENCES</b>					
8208	Beginning Family and Consumer Sciences	0	18 weeks	6	
8263	Intermediate Designing with Foods, Fashion, and Family	0	18 weeks	7-8	
8244	Advanced Journey Towards Independence	0	18 weeks	7-8	
<b>ACADEMIC ELECTIVES</b>					
1106 1107 1108	Literacy Lab	0	36 weeks	6-8	Selection for this course is based on a set of criteria including previous SOL tests, reading

<b>COURSE #</b>	<b>COURSE</b>	<b>HIGH SCHOOL CREDIT</b>	<b>Duration</b>	<b>GRADE</b>	<b>PLACEMENT/ PREREQUISITE</b>
					assessments, and teacher recommendation.
1172	Creative Writing	0	18 weeks	6-8	
1399	Public Speaking and Debate	0	18 weeks	6-8	
1202	Community Leaders I	0	18 weeks	6-8	
1204	Community Leaders II	0	18 weeks	7-8	
2352	History and Social Studies Independent Study	0	18 weeks	7-8	
3113 3114	Investigate Mathematics	0	36 weeks	6-7	Selection for this course is based on a set criteria including previous SOL tests and teacher recommendation.
3119	Investigate Algebra I	0	36 weeks	8	
3117	Mathematics Performance Lab	0	18 weeks	7-8	
4000	Innovation Studio	0	18 weeks	7-8	
4140	Exploring Living Systems, Marvels, and Phenomena	0	18 weeks	7-8	
<b>STATE-REQUIRED CAREER INVESTIGATIONS</b>					
9069	Pathways to Success	0	18 weeks	7-8	



# High School Program



## High School Program

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

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

## General Course Information

---

### Increasing Secondary Options for Students

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

### Promotion

The following criteria shall be used in determining promotion to the next grade of high school students:

- Students shall be promoted to grade 10 when they have earned six standard units of credit and completed two semesters.
- Students shall be promoted to grade 11 when they have earned 12 standard units of credit and completed six semesters.

### 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 based on state graduation requirements, 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. Electives and alternates should be requested with the understanding that they may become a part of a student's final schedule for that school year. Retained high school students may be offered appropriate coursework outside of the listed course grade levels to support post-secondary goals.

### Course Changes

While every effort is made to provide educational opportunities that meet the needs of all students, on occasion, courses must be canceled. Generally, courses will be offered with a minimum enrollment of 15. Courses may not be able to be offered based on staffing and/or facility limitations. Juniors and seniors receive priority enrollment in order to complete graduation requirements. Course sections are filled and balanced using student course requests.

Requests for schedule changes after the course request process ends may be considered in the following situations:

- Student's schedule is missing required courses for diploma requirements or any specialized services;

- Student did not meet a course prerequisite;
- Student has previously earned credit for a course;
- Student is requesting a course level change; or
- Student is missing a course or if a course is listed twice.

Important notes regarding timeline for changes:

- Principals may approve a course request change not listed above after the 5th scheduled class meeting, based on academic needs and scheduling constraints. However, approval is not guaranteed and will be contingent on factors such as class size, course availability, and potential impact on the student's academic progress.
- Courses dropped after the 15th class meeting (based on date of student placement) with principal approval will be recorded on the student transcript as a "Withdraw Pass" ("WP") or "Withdraw Fail" ("WF") and will not be included in the calculation of the student's GPA.
- Course level changes, such as honors to regular, will be considered until five days past the end of the first grading period. The principal may review and approve level changes beyond this deadline.
- The drop/add date for Dual Enrollment and Virtual Virginia courses will be determined by the sponsoring college or organization.

## **Auditing Courses**

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

## **Credit Recovery and Virtual Courses**

Recognizing that students may run into difficulty earning credits or accessing certain courses desired to fulfill their academic/career goals, Stafford Schools utilizes technology and VDOE approved digital curriculum to offer high school courses online as needed. This includes online initial credit and credit recovery courses. Students may be able to take an online course with a Stafford teacher or enroll in a virtual course through an approved online provider. Students interested in pursuing credit recovery or 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 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 final examination to earn credit and a final grade.

Credit recovery courses do not meet the NCAA eligibility requirements. For additional information about NCAA guidelines, please visit [Stafford Schools NCAA Eligibility](#). For NCAA guidelines and requirements for non-traditional and online courses, please visit the NCAA's [Guide for the College-Bound Student Athlete](#). For more information regarding the rules please visit the [NCAA site](#) or the [NCAA Eligibility Center](#). For local assistance, please contact your NCAA school counseling representative.

## **Dual Enrollment Courses**

Dual enrollment (DE) courses provide high school juniors and seniors and qualified underclassmen 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 must apply to the college, provide qualifying GPA, PSAT, SAT, ACT scores, and complete the college registration process in the spring. Stafford's reduced tuition rates for dual enrollment are the responsibility of

families. In determining whether to drop or withdraw from a DE course, the student must follow drop/add procedures and timelines established by the college, not those of the school division.

Dual Enrollment Qualifications:

- 3.0 GPA, OR PSAT ERW score of 390 or higher, OR SAT ERW score of 480 or higher, OR ACT score of 18 or higher on English and Reading, OR Virginia Placement Test ( VPT) ENG 111 placement score:
- Additional qualifying scores for Mathematics courses include: 3.0 GPA and a C or better in high school math courses, OR PSAT ERW score of 390 or higher and a PSAT math score of 500 or higher, OR SAT ERW score of 480 or higher and SAT math score of 530 or higher, OR ACT score of 18 or higher on English and reading and ACT math score of 22 or higher, OR VPT ENG 111 placement and VPT MTH 154 placement scores.
- Sophomores may be considered on a case by case basis and are subject to additional placement criteria set by Germanna Community College.

DE courses will only be offered if minimum enrollment requirements are met and a qualified teacher is available. Stafford Schools will offer a letter of intent to hire students who successfully complete the Teachers for Tomorrow program, complete a College/University Education program, and are eligible to earn a teacher license. Students with an IEP or 504 plan can receive accommodations for high school credit. Students with an IEP or 504 plan must apply and be approved for accommodations for the college credit through the community college. Please visit [Accessibility Resources](#) at Germanna.edu for more information and application instructions.

## **International Baccalaureate Diploma Programme**

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

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

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

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

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

## **Advanced Placement Capstone Program**

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

### AP Capstone Diploma

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

### AP Seminar and Research Certificate

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

## Credit by Demonstrated Proficiency

Students in grades 9-12 who speak a language other than English may elect to take a language proficiency test to receive world language credit which may assist in meeting graduation requirements. Internationally recognized, web-based assessments have been identified for demonstration of language proficiency in Arabic, French, German, Hebrew, Hindi, Italian, Japanese, Korean, Mandarin (Simplified and Traditional), Polish, Portuguese (Brazilian), Russian and Spanish. Speakers of other languages will be tested through Alta Language Services.

Eligible 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 through this exam. Credits earned will appear on a student's transcript as "pass" and will not impact a student's GPA in any way. If a student does not earn credit through this exam, their transcript will not be negatively affected.

Proficiency	Credit	Next World Language Level Placement	Next Spanish for Fluent Speakers (SFS) Placement
Novice-Mid	1	Level 2	SFS II
Novice-High	2	Level 3	SFS III
Intermediate-Low	3	Level 4/IB/DE	
Intermediate-Mid	4	AP/IB/DE	

- 5600 - Other World Language: Heritage Language – I
- 5602 - Other World Language: Heritage Language – II
- 5603 - Other World Language: Heritage Language – III
- 5606 - Other World Language: Heritage Language – IV

### Testing is available in the following languages:

Arabic, Amharic, Armenian, Chin, Czech, Filipino (Tagalog), French, German, Haitian-Creole, Hebrew, Hindi, Hmong, Ilocano, Italian, Japanese, Korean, Mandarin (Simplified and Traditional), Maxaa, Polish, Portuguese (Brazilian), Russian, Samoan, Somali Maay Maay, Somali, Spanish, Tamil, Telugu, Turkish, Urdu, Vietnamese, Yup'ik

Students should contact their school counselor for the testing dates. Students from all 5 high schools will be eligible for this opportunity, however, testing will happen twice per year. There is no cost to Stafford students for the first time that they take the test as part of this process. Re-tests are at the expense of the student and the cost varies per test.

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

### Sample Advanced Studies Diploma Four-Year Plan

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

## Stafford Schools Secondary Offerings

Stafford Schools provides opportunities for students to select challenging and interesting secondary specialty programs based on their learning needs, styles, and preferences. Secondary offerings are aligned with local, regional, and state workforce data.

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

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

## Application Process and Selection

The Stafford Secondary Offerings [application system](#) is designed to include parents/guardians in the decision-making process with their students. Parents/Guardians create an account in the online application and work with their child to apply to Specialty Centers, Secondary Program Pathways, and Regional Schools. Students applying for Specialty Centers and Secondary Program Pathways will be selected by a lottery and notified through email and/or text message, based on account settings. Applicants to the Commonwealth Governor's School are selected based on established criteria. Guardians will log back into the application system to review, accept or decline offers. Students who are waitlisted for programs will remain on the waitlist until a space becomes available. Visit Stafford Schools' secondary applications [website](#) to view key application dates and see answers to frequently asked questions.



## Stafford Specialty Centers

---



### **SPECIALTY CENTERS OF STAFFORD COUNTY PUBLIC SCHOOLS**

*Empowering Minds. Inspiring Futures.*

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

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

### **Goals**

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

Within each Specialty Center students will have the opportunity to customize their learning experience based on their post-secondary plans. Students will be able to explore two main outcomes; industry certification in specialized areas to move directly into the workforce or pre-collegiate specialized coursework to continue their educational pursuits after high school. Beyond these outcomes, all Specialty Center students may engage in work-based learning experiences, develop leadership characteristics, and cultivate an entrepreneurship prowess to monetize the skills learned in coursework.

### **Specialty Center Implementation Timeline**

Stafford Schools is in the process of expanding secondary opportunities for all students by opening a Specialty Center in each high school by the 2026-2027 school year.

#### **2024-2025**

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

#### **2025-2026**

- Business and Information Technology Center - Colonial Forge High School

#### **2026-2027**

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

*NOTE: \*Center names have not been finalized.*



### **Multiple Student Pathways**

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

### **Eligibility Criteria and Selection**

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

### **School Transfer**

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



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

---

*Empowering Minds. Inspiring Futures.*

## **Leadership, Education, and Public Service (LEAPS) Center**

### **Location**

Mountain View High School

### **Student Experience**

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

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

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

### **Student Pathways and Eligibility Criteria**

The LEAPS Center will have four pathways of study:

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

### Civic Leadership Pathway - Sample Course Sequence

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

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

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

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

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

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

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

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

### Students Seeking to Enroll in Individual IB Courses

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

### Teachers for Tomorrow Pathway - Sample Courses

	LAUNCH	LEARN		LEAD
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>English</b>	Center English 9	Center English 10	Center English 11	DE English 12
<b>History and Social Sciences</b>	Center World History I	Center World History II	DE Virginia and United States History	DE Virginia and United States Government
<b>Mathematics</b>	Algebra I	Geometry	Algebra II	DE Quantitative and DE Statistical Reasoning
	Geometry	Algebra II	Pre-calculus OR DE Pre-calculus OR DE Quantitative and DE Statistical Reasoning	AP or DE Calculus OR AP Statistics
<b>Science</b>	Earth Science	Biology	Chemistry	Physics OR Science Elective OR Computer Science
	Biology	Chemistry	Physics	IB Science OR Science Elective OR Computer Science
<b>World Language</b>	World Language I	World Language II	World Language III	World Language IV
<b>Health and Physical Education</b>	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
<b>Program Requirement</b>	Communication for Leadership and Public Service	Policy, Advocacy, and Ethics	DE Virginia Teachers for Tomorrow I*	DE Virginia Teachers for Tomorrow II
<b>Suggested Electives</b>	Elective	Child Development and Parenting	Sociology	Design, Multimedia, and Web Technologies
<b>Elective</b>	N/A	N/A	Economics and Personal Finance	Elective

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

\*Requires 40 hours of Practicum experience

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

### Law and Criminal Justice Pathway - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>English</b>	Center English 9	Center English 10	Center English 11	Center English 12
<b>History and Social Sciences</b>	Center World History I	Center World History II	Center Virginia and United States History	Center Virginia and United States Government
<b>Mathematics</b>	Algebra I	Geometry	Algebra II	Algebra III
	Geometry	Algebra II	Pre-calculus	AP or DE Calculus OR Statistics
<b>Science</b>	Earth Science	Biology	Chemistry	Physics OR Science Elective OR Computer Science
	Biology	Chemistry	Physics	IB Science OR Science Elective OR Computer Science
<b>World Language</b>	World Language I	World Language II	World Language III	World Language IV
<b>Health and Physical Education</b>	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
<b>Pathway Requirement</b>	Communication for Leadership and Public Service	Policy, Advocacy, and Ethics	Criminal Justice I	Criminal Justice II (2 credits)
<b>Suggested Elective</b>	Elective	Elective	Sociology	Emergency Medical Telecommunication
<b>Elective</b>	N/A	N/A	Economics and Personal Finance	N/A

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



## ENGINEERING PROFESSIONS AND INDUSTRIES OF CONSTRUCTION CENTER AT STAFFORD HIGH SCHOOL

*Empowering Minds. Inspiring Futures.*

### Engineering Professions and Industries of Construction (EPIC) Center

#### Location

Stafford High School

#### Student Experience

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

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

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

#### Stafford Schools BOOTS Program

Building Trades introduces students to skills in the core areas of residential construction: masonry, carpentry, electricity, drafting, HVAC (heating, ventilation, and air conditioning) and plumbing. Students emphasize safety by utilizing the Occupational Safety and Health Administration (OSHA) expectations. Students will also learn current residential building codes associated with the trades. The Bringing Occupational Opportunities to Students (BOOTS) program is led by teachers at Stafford High School. The BOOTS program is the only program of its kind in the local area where students design and build houses. BOOTS program prepares students for careers in construction trades.

#### Potential Credentials

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

#### Student Pathways and Eligibility Criteria

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

- Pathway I: Construction Trades (Carpentry, Electricity, HVAC, Masonry, and Plumbing)

*Minimum Criteria: Eligible for grade 9*

- Pathway II: Engineering  
*Minimum Criteria: Eligible for grade 9 and successful completion of Algebra I*

### Construction Trades Pathway - Sample Course Sequence

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

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



### Engineering Pathway - Sample Course Sequence

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

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



## **COMMUNITY HEALTH AND MEDICAL PROFESSIONS CENTER AT BROOKE POINT HIGH SCHOOL**

---

*Empowering Minds. Inspiring Futures.*

### **Community Health and Medical Professions (CHAMP) Center**

#### **Location**

Brooke Point High School

#### **Student Experience**

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

- Medical Doctor
- Nurse - Certified Nurse Aide, Licensed Practical Nurse, Registered Nurse, Nurse Practitioner
- Medical Assistant
- Physician Assistant
- Mental Health Professional

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

#### **Potential Credentials**

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

#### **Student Pathways and Eligibility Criteria**

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

- Pathway I: Biomedical Sciences (Governor's STEM Academy)  
*Minimum Criteria: Eligible for grade 9 and successful completion of Algebra I*
- Pathway II: Nursing  
*Minimum Criteria: Eligible for grade 9*
- Pathway III: Medical Assistant  
*Minimum Criteria: Eligible for grade 9*
- Pathway IV: Mental Health Services  
*Minimum Criteria: Eligible for grade 9*

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

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

NOTE: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available. Project Lead the Way courses included in this sequence receive additional weighting.

### Nursing Pathway - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>English</b>	Center English 9	Center English 10	English 11	English 12
<b>History and Social Sciences</b>	World History I	World History II	Virginia and United States History	Virginia and United States Government
<b>Mathematics</b>	Algebra I ----- Center Geometry	Center Geometry ----- Center Algebra II	Center Algebra II ----- Pre-calculus	Pre-calculus OR AP Calculus OR AP Statistics OR DE Quantitative and Statistical Reasoning
<b>Science</b>	Center Earth Science	Center Biology	Center Chemistry	Biology II: Anatomy and Physiology OR Physics
<b>World Language</b>	World Language I	World Language II	World Language III	N/A
<b>Health and Physical Education</b>	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
<b>Pathway requirements</b>	Introduction to Health and Medical Sciences	Health Informatics	Communication and Leadership for Medical Professionals	Nurse Aide I (2 credits) AND Nurse Aide II (2 credits) - concurrent enrollment
<b>Elective</b>	Elective	Elective	Economics and Personal Finance	N/A

NOTE: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available. This pathway enables students to become a Certified Nurse Assistant upon high school graduation. Students may choose to continue their studies to become a Licensed Practical Nurse (LPN) with one additional year through a community college. Students may choose to continue their studies at a 4 year institute to earn their Registered Nurse (RN) or Bachelor's of Science in Nursing (BSN).

### Medical Assistant Pathway - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>English</b>	Center English 9	Center English 10	English 11	English 12
<b>History and Social Sciences</b>	World History I	World History II	Virginia and United States History	Virginia and United States Government
<b>Mathematics</b>	Algebra I ----- Geometry	Geometry ----- Algebra II	Algebra II ----- Pre-calculus	Pre-calculus OR AP Calculus OR AP Statistics OR DE Quantitative and Statistical Reasoning
<b>Science</b>	Earth Science	Biology	Chemistry	Biology II: Anatomy and Physiology OR Physics
<b>World Language</b>	World Language I	World Language II	World Language III	N/A
<b>Health and Physical Education</b>	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
<b>Pathway requirements</b>	Introduction to Health and Medical Sciences	Health Informatics	Communication and Leadership for Medical Professionals	Medical Assistant I (2 credits) AND Medical Assistant II (2 credits) - concurrent enrollment
<b>Elective</b>	Elective	Elective	Economics and Personal Finance	N/A

NOTE: Sample courses listed do not limit the student's ability to enroll in honors, Advanced Placement, dual enrollment, or International Baccalaureate courses, if available. This pathway enables students to become a Medical Assistant upon high school graduation. Students may choose to continue their studies to become a Licensed Practical Nurse (LPN) with one additional year through a community college. Students may choose to continue their studies at a 4 year institute to earn their Registered Nurse (RN) or Bachelor's of Science in Nursing (BSN).

### Mental Health Services Pathway - Sample Course Sequence

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

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



## **BUSINESS AND INFORMATION TECHNOLOGY CENTER AT COLONIAL FORGE HIGH SCHOOL**

---

*Empowering Minds. Inspiring Futures.*

### **Business and Information Technology Center**

#### **Location**

Colonial Forge High School

#### **Student Experience**

The Center offers coursework and learning experiences that prepare students for careers including those in the following areas:

- Business Administration
- Information Technology
- Data Analytics
- Cybersecurity
- Database Management
- Business Ownership

Students enrolled in this Specialty Center will have the opportunity to extend their applications of business and information technology (IT) beyond the classroom in innovative and practical spaces within five pathways. This center provides rigorous coursework that strengthens students' critical thinking skills, supports innovation and creativity, and builds entrepreneurial skills. Students may choose to specialize in a business or IT pathway of their choice and complete an internship, earn other relevant certifications, or complete rigorous coursework in preparation to pursue a degree in the business or IT fields. Students will pick a pathway during their 9th grade year.

#### **Potential Credentials**

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

#### **Student Pathways and Eligibility Criteria**

The Center at Colonial Forge High School will have five unique pathways that drive the student's course of study.

- Pathway I: Business Administration  
*Minimum Criteria: Eligible for grade 9*
- Pathway II: Entrepreneurship  
*Minimum Criteria: Eligible for grade 9*
- Pathway III: Cyber4+  
*Minimum Criteria: Eligible for grade 9*
- Pathway IV: Business Information Technology  
*Minimum Criteria: Eligible for grade 9*
- Pathway V: Data Analytics  
*Minimum Criteria: Eligible for grade 9*

### Entrepreneurship Pathway - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>English</b>	Center English 9	Center English 10	English 11	English 12
<b>History and Social Sciences</b>	World History I	World History II	Virginia and United States History	Virginia and United States Government
<b>Mathematics</b>	Algebra I	Geometry	Algebra, Functions, and Data Analysis OR Algebra II	Algebra II OR Algebra III OR Pre-calculus OR DE Statistical Reasoning and Quantitative Analysis
	Geometry	Algebra, Functions, and Data Analysis OR Algebra II	Algebra II OR Pre-calculus	Pre-calculus OR DE Statistical Reasoning and Quantitative Analysis
<b>Science</b>	Environmental Science	Biology	Chemistry OR Science Elective	Chemistry OR Physics OR Science Elective OR Computer Science
<b>World Language</b>	World Language I	World Language II	World Language III	World Language IV
<b>Health and Physical Education</b>	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
<b>Pathway Requirement</b>	Principles of Business and Marketing	Digital and Social Media Marketing	Entrepreneurship	Entrepreneurship Advanced
<b>Suggested Elective</b>	Elective	Elective	Accounting I	Data Science
<b>Elective</b>	N/A	N/A	Economics and Personal Finance	Elective



### Business Administration Pathway - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>English</b>	Center English 9	Center English 10	DE English 11	DE English 12
<b>History and Social Sciences</b>	World History I	World History II	DE Virginia and United States History	DE Virginia and United States Government
<b>Mathematics</b>	Algebra I	Geometry	Algebra II	Pre-calculus OR DE Pre-calculus OR DE Statistical Reasoning and Quantitative Analysis
	Geometry	Algebra II	Pre-calculus or DE Pre-calculus	Calculus OR DE Calculus OR AP Statistics
<b>Science</b>	Environmental Science	Biology	Chemistry OR Physics	DE Biology OR Science Elective OR Computer Science
<b>World Language</b>	World Language I	World Language II	World Language III	World Language IV or DE World Language
<b>Health and Physical Education</b>	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
<b>Pathway Requirement</b>	Principles of Business and Marketing	Communication for Leadership	DE Business Management	DE International Business
<b>Elective</b>	N/A	N/A	Accounting I	AP Economics
<b>Suggested Elective</b>	Elective	Elective	Elective	Accounting II

**Cyber4+ Pathway - Sample Course Sequence**

	LAUNCH	LEARN		LEAD
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>English</b>	Center English 9	Center English 10	English 11	English 12
<b>History and Social Sciences</b>	World History I	World History II	Virginia and United States History	Virginia and United States Government
<b>Mathematics</b>	Algebra I	Geometry	Algebra II	Algebra III OR Pre-calculus OR DE Statistical Reasoning and Quantitative Analysis
	Geometry	Algebra II	Pre-calculus OR DE Statistical Reasoning and DE Quantitative Analysis	Calculus OR DE Calculus OR AP Statistics
<b>Science</b>	Environmental Science	Biology	Chemistry OR Science Elective	Chemistry OR Physics OR Science Elective OR Computer Science
<b>World Language</b>	World Language I	World Language II	World Language III	World Language IV or DE World Language
<b>Health and Physical Education</b>	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
<b>Pathway Requirement</b>	Information Technology Fundamentals	Cybersecurity I	Cybersecurity II	Cybersecurity III
<b>Suggested Elective</b>			Programming I	Programming II
<b>Elective</b>	N/A	N/A	Economics and Personal Finance	Data Science

**Business Information Technology (BIT) Pathway (Governor’s STEM Academy) -  
Sample Course Sequence**

	LAUNCH	LEARN		LEAD
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>English</b>	Center English 9	Center English 10	English 11 OR Dual Enrollment English 11	English 12 OR Dual Enrollment English 12
<b>History and Social Sciences</b>	World History I	World History II	Virginia and United States History OR DE Virginia and United States History	Virginia and United States Government OR DE Virginia and United States Government
<b>Mathematics</b>	Algebra I	Geometry	Algebra II	Pre-calculus OR DE Pre-calculus OR DE Statistical Reasoning and Quantitative Analysis OR Data Science
	Geometry	Algebra II	Pre-calculus OR DE Pre-Calculus OR DE Statistical Reasoning and Quantitative Analysis	Pre-calculus OR DE Pre-calculus OR DE Calculus OR AP Statistics
<b>Science</b>	Environmental Science	Biology	Chemistry OR Physics	DE Biology OR Science Elective OR Computer Science
<b>World Language</b>	World Language I	World Language II	World Language III	World Language IV or DE World Language
<b>Health and Physical Education</b>	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
<b>Pathway Requirement</b>	Information Technology Fundamentals	Database Design and Management	DE Business Management	DE Programming
<b>Elective</b>	N/A	N/A	Programming I	BIT Project Management Capstone
<b>Elective</b>	Elective	Elective	Economics and Personal Finance	Accounting I

### Data Analytics Pathway - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>English</b>	Center English 9	Center English 10	English 11 OR DE English 11	English 12 OR DE English 12
<b>History and Social Sciences</b>	World History I	World History II	Virginia and United States History OR DE Virginia and United States History	Virginia and United States Government OR DE Virginia and United States Government
<b>Mathematics</b>	Algebra I	Geometry	Algebra II	Data Science OR Pre-calculus OR DE Statistical Reasoning and Quantitative Analysis
	Geometry	Algebra II	Pre-calculus or DE Pre-calculus	Calculus OR DE Calculus
<b>Science</b>	Environmental Science	Biology	Chemistry OR Physics	DE Biology OR Science Elective OR Computer Science
<b>World Language</b>	World Language I	World Language II	World Language III	World Language IV or DE World Language
<b>Health and Physical Education</b>	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
<b>Pathway Requirement</b>	Information Technology Fundamentals	Database Design and Management	Database Design and Management with PL/SQL (Oracle)	Data Analytics Capstone
<b>Suggested Elective</b>	N/A	N/A	Programming I	Programming II
<b>Elective</b>	Elective	Elective	Economics and Personal Finance	Accounting I

## Stafford Secondary Programs

---

### Four-Year Secondary Program Pathways

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

Current secondary program pathway offerings include:

- **Drafting** is a program through which students delve into drafting as a potential STEM careers, learning the essential theories and skills needed for success. They develop the technical abilities required to create precise manufacturing and construction drawings from the concepts and sketches provided by engineers, architects, and designers. The course emphasizes mechanical drafting and design, where students will engage in both manual drafting techniques and computer-aided design and drafting (CADD) operations.
- **International Baccalaureate (IB) Diploma Programme** is a rigorous pre-university course of study in the last two years of high school that focuses on developing the student as a whole by emphasizing ten Learner Profile traits: IB learners strive to be inquirers, knowledgeable, thinkers, communicators, principled, open-minded, caring, risk-takers, balanced, and reflective.
- **Stafford Academy for Technology (STAT) Engineering** is a state-approved Governor's Science, Technology, Engineering and Mathematics (STEM) Academy. STAT is a four-year program of study utilizing integrated hands-on, project-based instruction focused on STEM career areas.

### Eligibility Criteria and Selection

All rising 9th graders may apply to Stafford Specialty Programs. Each specialty program may have a unique set of minimum criteria. Eligible students that meet the minimum criteria and apply for a specialty program will be entered into a pool of candidates for selection via lottery. The number of seats available within each program may vary based on local factors and state and federal requirements, but will be established prior to the lottery selection.

### School Transfer

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

### Drafting

#### Location

Stafford High School

#### Student Experience

Drafting is a program through which students delve into drafting as a potential STEM careers, learning the essential theories and skills needed for success. They develop the technical abilities required to create precise manufacturing and construction drawings from the concepts and sketches provided by engineers, architects, and designers. The course emphasizes mechanical drafting and design, where students will engage in both manual drafting techniques and computer-aided design and drafting (CADD) operations

#### Eligibility Criteria

Drafting is open to students that are eligible for grade 9. Rising 10th grade students may be considered if space is available.

### Drafting Pathway - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>English</b>	Center English 9	Center English 10	Center English 11	Center English 12
<b>History and Social Sciences</b>	World History I	World History II	Virginia and United States History	Virginia and United States Government
<b>Mathematics</b>	Center Algebra I	Center Geometry	Algebra, Functions, and Data Analysis OR Algebra II	Algebra II OR Algebra III OR Pre-calculus OR DE Statistical Reasoning and Quantitative Analysis
	Center Geometry	Algebra, Functions, and Data Analysis OR Algebra II	Algebra II OR Pre-calculus	Pre-calculus OR DE Statistical Reasoning and Quantitative Analysis
<b>Science</b>	Environmental Science	Biology	Chemistry OR Science Elective	Chemistry OR Physics OR Science Elective OR Computer Science
<b>Health and Physical Education</b>	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
<b>Pathway Requirement</b>	Drafting: Fundamentals	Drafting: Architectural	Drafting: Mechanical	Drafting: Advanced
<b>Suggested Elective</b>	World Language I	World Language II	World Language III	World Language IV OR DE World Language
<b>Suggested Elective</b>	Elective	Economics and Personal Finance	Principles of Business and Marketing	Business Management OR DE Entrepreneurship AND DE Small Business Management (1 semester each)

## International Baccalaureate Diploma Programme

### Location

Mountain View High School

### Student Experience

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

### Eligibility Criteria

This program is open to students that successfully complete Algebra I in grade 8 and are eligible for grade 9 at a Stafford high school.

### IB Diploma Programme Pathway - Sample Course Sequence

	LAUNCH	LEARN		LEAD
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>English</b> (Group 1 Language A)	English 9 Honors	English 10 Honors	IB Language and Literature	IB Language and Literature
<b>World Language*</b> (Group 2 Language B)	World Language Level I World Language Level II (semester courses) ----- World Language Level II	World Language Level III	IB World Language Acquisition I	IB World Language Acquisition II
<b>History and Social Sciences</b> (Group 3 Individuals and Societies)	World History II	AP Comparative Government	IB History of the Americas I	IB History of the Americas II
<b>Science</b> (Group 4 Experimental Science)	Biology	Chemistry	IB Biology I OR IB Chemistry I OR IB Physics I OR IB Environmental Systems and Societies I	IB Biology II OR IB Chemistry II OR IB Physics II OR IB Environmental Systems and Societies II
<b>Mathematics</b> (Group 5 Mathematics)	Geometry	Algebra II	IB Mathematics: Applications and Interpretation I	IB Mathematics: Applications and Interpretation II
	Algebra II	Pre-calculus	IB Mathematics: Analysis and Approaches I	IB Mathematics: Analysis and Approaches II
<b>Required Electives</b> (Group 6)	N/A	N/A	IB Elective**	IB Elective**

	LAUNCH	LEARN		LEAD
	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Electives)				
<b>Health and Physical Education</b>	Health and Physical Education 9	Health and Physical Education 10	N/A	N/A
<b>Elective</b>	Elective	Elective <sup>†</sup> OR Economics and Personal Finance	IB Theory of Knowledge I	IB Theory of Knowledge II
<b>Elective</b>	N/A	N/A	Elective	Elective

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

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

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

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



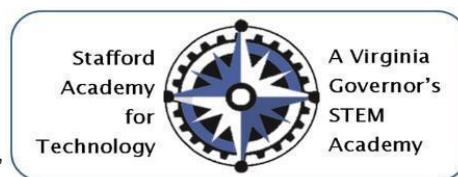
## Stafford Academy for Technology (STAT) Engineering

### Location

North Stafford High School

### Student Experience

STAT is a four-year program of study utilizing an integrated, hands-on, project-based model of instruction. Students are immersed in a Science, Technology, Engineering, and Mathematics (STEM) academy which includes teachers from the Career and Technical Education (specialty) area, as well as science, English, and mathematics.



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

STAT students are expected to earn an industry certification or state occupational license as well as successfully complete at least nine transferable college credits. Upon completion of this four year cohort, students will earn the Governor’s STEM Academy diploma seal. Project Lead the Way courses are weighted as 0.50 additional credit.

### Potential Credentials

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

### Eligibility Criteria

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

### STAT Engineering (Governor’s STEM Academy) - Sample Course Sequence

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

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

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

## Other Secondary Programs

---

Stafford Schools secondary programs provide a series of advanced and specialized coursework aimed to deepen student knowledge, skills, and understanding of a particular field of study or career. Depending upon the program pathway of choice, students may also obtain relevant certifications that serve local and regional economic needs. Program pathways offer a one- or two-year program of study.

Current offerings include:

- **Auto Body Technology** is a program with mastery of each task including: collision and repair, painting and refinishing. This program is accredited by the The Board of the National Institute for Automotive Service Excellence (ASE).
- **Automotive Technology** is a program with mastery of each task including the four primary ASE certified areas: Brakes, Steering and Suspension, Electrical/Electronics and light duty vehicle repair. This program is accredited by the The Board of the National Institute for Automotive Service Excellence (ASE).
- **Barbering and Cosmetology** prepares students for certification through the Virginia Board of Barbers/Cosmetology. Coursework includes mannequin- and live-model work, safety, sterilization, sanitation, bacteriology, effective communication, and management.
- **Carpentry** prepares students with skills leading to careers in the construction industry and/or post-secondary education. Students learn the principles and technologies in commercial and residential construction. In addition, students develop leadership skills and compete in the SkillsUSA program as well as the Bringing Occupational Opportunities To Schools (BOOTS) program.
- **Criminal Justice** highlights occupations within the criminal justice system. Through understanding the rule of law and exploring policy, students will examine evidence, techniques of investigation, report writing, and courtroom procedures.
- **Culinary Arts** is a program designed to prepare students for college and careers in the food service industry.
- **Early Childhood Education** prepares students for employment or continued education in the field of childcare and early childhood education. The Early Childhood program builds skills through integrated learning experiences centered around opportunities for student engagement with concrete materials and exploration.
- **Electricity** prepares students to develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems that prepare them for real-world work environments. In addition, students develop leadership skills and compete in the SkillsUSA program as well as the Bringing Occupational Opportunities To Schools (BOOTS) program.
- **Emergency Medical Technician (EMT)** program prepares students for a variety of careers and advanced coursework in the healthcare field including service as a paramedic. Students will have the opportunity to earn their EMT certification as well as continuing education hours required for recertification.
- **Firefighting** is a high school firefighter program (HSFP) through a partnership with Stafford County Fire and Rescue. Firefighting prepares students in the professional standards necessary to successfully fight live fires, address hazardous-materials incidents, and conduct search-and-rescue operations.
- **Heating, Ventilation, Air Conditioning, and Refrigeration** prepares students to professionally install, repair, and maintain the operating conditions of heating, ventilation, air-conditioning, and refrigeration (HVACR) systems. Students work with piping and tubing, study the principles of heat and electricity, install duct systems, and comply with U.S. Environmental Protection Agency (EPA) regulations. Successful completion of the two-course sequence may prepare students for a career as an HVACR technician.
- **Masonry** prepares students through hands-on training in a program lab outfitted with laser levels, mortar mixers, masonry saws and other industry-standard equipment. Masonry, also known as brick or stone work, develops technical knowledge for laying block and brick, concrete construction, and reading blueprints. In addition, students develop leadership skills and compete in the SkillsUSA program as well as the Bringing Occupational Opportunities To Schools (BOOTS) program.
- **Medical Assistant** prepares students to develop basic skills and techniques to assist the physician and/or other medical professionals in patient examinations, basic emergency care, simple laboratory tests, preparation for minor surgical procedures, and administrative duties.

- **Nurse Aide** is an introduction to the nursing career field. This course is approved by the State Board of Nursing and may qualify the student for participation in Virginia Nurse Aide Competency Evaluation Program (required for certification).
- **Paramedic Prep** prepares students for a career as a paramedic by completing the Fire Fighting and EMT programs along with the required certifications. Successful completion of this sequence equips students to enter the emergency public service industry and positions them well for pursuing paramedic certification.
- **Teachers for Tomorrow** is a dual enrollment program to train students in a career in teaching and education. This course sequence provides an overview of the development of human beings from birth to adolescence to explore K-12 education.

### Eligibility Criteria and Selection

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

## Auto Body Technology

### Location

North Stafford High School

### Student Experience

### Potential Credentials

- Automotive Service Excellence (ASE) Certification

### Eligibility Criteria and Selection

The program is open to rising 11th grade students. Students are required to complete a pre-test prior to being admitted as required by Automotive Service Excellence (ASE). This program can accept up to 20 students per section.

### Auto Body Technology Courses

	LEARN	LEAD
	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Program Requirement	Auto Body Technology I - Collision and Repair (2 credits)	Auto Body Technology II - Painting and Refinishing (4 credits)

## Automotive Technology

### Locations

Brooke Point High School  
North Stafford High School

### Student Experience

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

### Potential Credentials

- Automotive Service Excellence (ASE) Certification

### Eligibility Criteria and Selection

The program is open to rising 11th grade students. Students are required to complete a pre-test prior to being admitted as required by Automotive Service Excellence (ASE).

### Automotive Technology Courses

	LEARN	LEAD
	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Program Requirement	Automotive Technology I	Automotive Technology II (2 credits)

## Barbering and Cosmetology

### Locations

Mountain View High School (Barbering only)  
Stafford High School

### Student Experience

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

### Potential Credentials

- Virginia Barbering or Cosmetology State License

### Eligibility Criteria and Selection

This program is open to rising 11th grade students. Regular attendance is required in order to meet the clinical lab hours, based on requirements from the Virginia Board for Barbers and Cosmetology.

### Barbering and Cosmetology Courses

	LEARN	LEAD
	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Program Requirement	Master Barbering I (3 credits) OR Cosmetology I (3 credits)	Master Barbering II (4 credits) OR Cosmetology II (4 credits)

## Carpentry

## Location

Brooke Point High School  
Stafford High School

## Student Experience

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

## Potential Credentials

- Carpentry Level One Assessment

## Eligibility Criteria and Selection

The program is open to rising 11th grade students.

## Carpentry Courses

	LEARN	LEAD
	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Program Requirement	Carpentry I (2 credits)	Carpentry II (2 credits)

## Criminal Justice

### Locations

Brooke Point High School  
Mountain View High School  
North Stafford High School

### Student Experience

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

## Eligibility Criteria and Selection

This program is open to rising 11th grade students.

## Criminal Justice Courses

	LEARN	LEAD
	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Program Requirement	Criminal Justice I	Criminal Justice II (2 credits)

## Culinary Arts

## Locations

Brooke Point High School  
Mountain View High School  
Stafford High School

## Student Experience

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

## Potential Credentials

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

## Eligibility Criteria and Selection

The program is available to rising 11th grade students. The work in this course requires that the student comply with the regulations of the Virginia Health Department in preparing and serving food sold to the public.

## Culinary Arts Courses

	LEARN	LEAD
	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Program Requirement	Culinary Arts I (2 credits)	Culinary Arts II (2 credits)

## Early Childhood Education

### Locations

Brooke Point High School  
North Stafford High School

### Student Experience

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

### Eligibility Criteria and Selection

The programs are available to rising 11th grade students.

## Early Childhood Education Courses

	LEARN	LEAD
	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Program Requirement	Early Childhood, Education, and Services I (2 credits)	Early Childhood, Education, and Services II (2 credits)

## Electricity

## Location

Stafford High School

## Student Experience

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

## Potential Credentials

- Electrical Level One Assessment

## Eligibility Criteria and Selection

The program is open to rising 11th grade students.

## Electricity Courses

	LEARN	LEAD
	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Program Requirement	Electricity I (2 credits)	Electricity II (2 credits)

## Emergency Medical Technician

### Locations

Colonial Forge High School  
Stafford High School

### Student Experience

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

### Potential Credentials

- Emergency Medical Technician State License
- National Registry Emergency Medical Technicians Certification

### Eligibility Criteria and Selection

The program is available to rising 11th and 12th grade students who are 16 years of age by the first day of school and meet the eligibility requirements listed below.

This program is accredited by the Virginia Office of Emergency Medical Services (OEMS) and requires students meet certain criteria. According to the Virginia High School EMS Education Program Manual, **Eligibility Requirements for Enrollment and Certification in a High School Emergency Medical Services (EMS) Course in Virginia:**

1. **English Proficiency:**
  - Applicants must be proficient in reading, writing, and speaking English.



- Note: Spanish language programs are not supported by the National Highway Traffic Safety Administration or the National Registry of EMTs, and therefore not permitted by the OEMS.
- 2. **English Language Proficiency Level:**
  - English Learners (ELs) must have an English Language Proficiency Level (ELP) of 4+ on the WIDA assessment to be admitted and meet the Virginia Functional Position Description requirements.
- 3. **Academic Requirements:**
  - Must have a cumulative GPA of 2.0 prior to entering the Emergency Medical Responder (EMR) or EMT program.
  - Must meet all course requirements set by the Program Director and OEMS:
    - **EMR:** Maintain a 2.0 GPA within all program metrics
    - **EMT:** Maintain a 3.0 GPA within all program metrics to participate in the clinical/field component.
- 4. **Recommended Courses:**
  - Students are encouraged to take to the following courses:
    - Introduction to Health and Medical Sciences (preferred);
    - Anatomy & Physiology; and/or
    - Sports Medicine.
- 5. **Age Requirements:**
  - Must be 16 years old by the course start date as announced to OEMS (12VAC5-31-471).
- 6. **Parental Permission:**
  - Students under 18 must provide a signed TR-07 Basic Life Support (BLS) Student Permission Form from a parent or guardian.
- 7. **Physical and Mental Fitness:**
  - Students must have no physical or mental impairments that would prevent them from performing all required practical skills, including independent functioning and communication, as well as providing appropriate patient care.
- 8. **Identification:**
  - Must possess an unexpired state-issued ID, valid passport, or federal visa by the course start date.
- 9. **Criminal Record:**
  - Students must not have any unresolved arrest/conviction records, juvenile or adult, that have not been cleared by the OEMS Division of Regulation & Compliance.
- 10. **Professional Appearance and Conduct:**
  - Students must maintain a professional appearance according to local EMS expectations and school district policy.
  - Students must not be under the influence of drugs or intoxicating substances that impair their ability to provide patient care or operate a motor vehicle during class, clinical settings, on duty, or when responding to or assisting in patient care.

EMT courses require students to devote time outside the school day to participate in related activities occurring in the evening and on weekends. BLS for Healthcare Providers CPR certification is required prior to the start of class.

### Emergency Medical Technician Courses

	LEARN	LEAD
	9 <sup>th</sup> , 10 <sup>th</sup> , or 11 <sup>th</sup> Grade	11 <sup>th</sup> or 12 <sup>th</sup> Grade
<b>Program Requirement</b>	N/A	Emergency Medical Technician I (1 credit) AND Emergency Medical Technician II (1 credit)
<b>Suggested Elective</b>	Introduction to Health and Medical Sciences	

## Firefighting

### Location

Stafford County Fire and Rescue

### Student Experience

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

### Potential Credentials

- Firefighter I Certification Examination
- Firefighter II Certification Examination

### Eligibility Criteria and Selection

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

Stafford Fire and Rescue and National Fire Protection Association (NFPA) requires students to be at least 16 years old by July 1 and pass the NFPA 1582 medical physical. Additional requirements include parent/guardian consent and CPR, HAZMAT operations, and Mayday Awareness certifications.

Stafford County Fire and Rescue maintain their own application and selection process. Interested students should apply for the firefighting program by completing the Stafford secondary programs application. Applicants will be provided access to the separate Stafford Fire and Rescue application and process timeline.

### Firefighting Courses

	LEARN	LEAD
	9 <sup>th</sup> , 10 <sup>th</sup> , or 11 <sup>th</sup> Grade	11 <sup>th</sup> or 12 <sup>th</sup> Grade
Program Requirement	N/A	Firefighter I (2 credits) AND Firefighter II (2 credits)
Suggested Elective	Introduction to Health and Medical Sciences	

## Heating, Ventilation, Air Conditioning and Refrigeration

### Location

Stafford High School

### Student Experience

Heating, Ventilation, Air Conditioning and Refrigeration prepares students to professionally install, repair, and maintain the operating conditions of heating, ventilation, air-conditioning, and refrigeration (HVACR) systems. Students work with piping and tubing, study the principles of heat and electricity, install duct systems, and comply with U.S. Environmental Protection Agency (EPA) regulations. Successful completion of the two-course sequence may prepare students for a career as an HVACR technician. In addition, students develop leadership skills and compete in the SkillsUSA program as well as the Bringing Occupational Opportunities To Schools (BOOTS) program.

Students will also learn current residential building codes associated with the trades. The BOOTS program is led by teachers at Stafford High School. BOOTS program prepares students for careers in construction trades.

### Potential Credentials

- HVACR Level One Assessment

### Eligibility Criteria and Selection

The program is open to rising 11th grade students.

### Heating, Ventilation, Air Conditioning and Refrigeration Courses

	LEARN	LEAD
	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Program Requirement	Heating, Ventilation, Air Conditioning and Refrigeration I (1 credit)	Heating, Ventilation, Air Conditioning and Refrigeration II (2 credits)

## Masonry

### Location

Stafford High School

### Student Experience

Masonry prepares students through hands-on training in a program lab outfitted with laser levels, mortar mixers, masonry saws and other industry-standard equipment. Masonry, also known as brick or stone work, develops technical knowledge for laying block and brick, concrete construction, and reading blueprints. In addition, students develop leadership skills and compete in the SkillsUSA program as well as the Bringing Occupational Opportunities To Schools (BOOTS) program. Students will also learn current residential building codes associated with the trades. The BOOTS program is led by teachers at Stafford High School. BOOTS program prepares students for careers in construction trades.

### Potential Credentials

- Masonry Level One Assessment

### Eligibility Criteria and Selection

The program is open to rising 11th grade students.

### Masonry Courses

	LEARN	LEAD
	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Program Requirement	Masonry I (2 credits)	Masonry II (2 credits)

## Medical Assistant

## Location

Mountain View High School

## Student Experience

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

## Potential Credentials

- Clinical Medical Assistant Certification (CMAC)

## Eligibility Criteria

This program is open to rising 11th grade students.

## Medical Assistant Courses

	LEARN		LEAD
	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Program Requirement	N/A	Medical Assistant I (2 credits)	Medical Assistant II (2 credits)
Suggested Elective	Introduction to Health and Medical Sciences		

## Nurse Aide

### Locations

Brooke Point High School  
North Stafford High School

## Student Experience

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

## Potential Credentials

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

## Eligibility Criteria

This program is open to rising 12th grade students. Students will be required to purchase a scrub uniform and white shoes without a logo. A description and cost of the uniform will be provided by the instructor during the first week of class. Additional requirements include a watch with a second hand, have a negative PPD (Tuberculosis screening test), a urine drug screen test, flu shot, TB test, and receive a COVID-19 vaccine prior to clinical placement. All screenings, tests and vaccines must be dated after August of the school year they are entering. This course is approved by the State Board of Nursing and will qualify the student for participation in Virginia Nurse Aide Competency Evaluation Program (required for certification).

## Nurse Aide Courses

	LEARN	LEAD
	9 <sup>th</sup> , 10 <sup>th</sup> , or 11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>Program Requirement</b>	N/A	Nurse Aide II (2 credits) (NSHS) Nurse Aide I (2 credits) AND Nurse Aide II (2 credits) (BPHS)
<b>Suggested Elective</b>	Introduction to Health and Medical Sciences	

## Paramedic Prep

### Locations

Colonial Forge High School  
Stafford High School

### Student Experience

This course sequence prepares students for a career as a paramedic by completing the Fire Fighting and EMT programs along with the required certifications. Successful completion of this sequence equips students to enter the emergency public service industry and positions them well for pursuing paramedic certification.

### Potential Credentials

- Emergency Medical Technician (EMT) State License
- National Registry Emergency Medical Technicians Certification
- Firefighter I Certification Examination
- Firefighter II Certification Examination

### Eligibility Criteria and Selection

This two-year program is open to rising 11th grade students. The application for the Firefighting program is separate from the Stafford secondary programs application. Firefighting will be offered on an every other day schedule. Counselors must verify students have a plan to meet required credits necessary for graduation before they are eligible to participate in the program. Please see your school counselor for more information. Students who successfully complete the firefighting courses will be assigned to either Colonial Forge High School or Stafford High School and to complete the 12th grade EMT courses.

Stafford Fire and Rescue and National Fire Protection Association (NFPA) requires students to be at least 16 years old by July 1 and pass the NFPA 1582 medical physical. Additional requirements include parent/guardian consent and CPR, HAZMAT operations, and Mayday Awareness certifications.

## Paramedic Prep Courses

	LEARN	LEAD	
	9 <sup>th</sup> or 10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>Program Requirement</b>	N/A	Firefighter I (2 credits) AND Firefighter II (2 credits)	Emergency Medical Technician I (1 credit) AND Emergency Medical Technician II (1 credit)
<b>Suggested Elective</b>	Introduction to Health and Medical Sciences	Anatomy and Physiology	

## Teachers for Tomorrow

### Location

Mountain View High School

### Student Experience

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

### Potential Credentials

- Teacher PRAXIS Core Test

### Eligibility Criteria and Selection

This two-year program is open to rising 11th grade students.

### Teachers for Tomorrow Courses

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

\*Requires 40 hours of practicum experience

## Regional High School Programs

---

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

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

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

### Student Experience

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



### Location

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

### Eligibility Criteria and Selection

All students eligible for entry into the 9th grade at a Stafford County high school and pursuing at minimum a standard diploma are eligible to apply. Eligible students that apply will be entered into a pool of candidates for selection via lottery. Students and their families should be aware that coursework in the program will be rigorous, include a number of advanced, Advanced Placement, and optional dual enrollment courses, providing opportunities for college credit and/or industry certifications.

## ATI-UMW - Sample Course Sequence

Content Area	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>English</b>	Global Studies I (English 9 and World History II)	Global Studies II (English 10 and AP World History)	American Studies I (English 11 Virginia and US History AP or regular)	American Studies II (English 12 and Virginia and US Government AP or regular)
<b>History and Social Sciences</b>				
<b>Mathematics</b>	Algebra I	Geometry	Algebra II	Pre-Calculus
	Integrated Mathematics I (Algebra I + Geometry Part A)	Integrated Mathematics II (Algebra II + Geometry Part B)	Pre-Calculus OR Data Science	Calculus AB OR AP Statistics
	Geometry	Algebra II		
	Algebra II	Pre-calculus	Calculus AB	Calculus BC OR AP Statistics
<b>Science OR Integrated Science</b>	Biology	Chemistry	Physics	AP or DE Science
<b>Health and Physical Education</b>	Health and Physical Education 9 (virtual)	Health and Physical Education 10 (virtual)	N/A	N/A
<b>World Language Offerings*</b>	Spanish I, II, III	Spanish II, III, IV	Spanish III, IV, V	Spanish IV, V
<b>Required Electives</b>	Introduction to Computer Science OR Programming/ Introduction to Data Science	AP Computer Science Principles	AP Computer Science A OR AP Statistics	Economics and Entrepreneurship (Fulfills Economics and Personal Finance content, integrated with entrepreneurship and taught across all four years; awarded senior year)
<b>Additional Elective Possibilities**</b>	Cloud Computing; Coding Website Design (HTML and CSS); Data Methods and Analysis (Mixed Methods); Data Science Applications; Data Visualizations; Digital Art I; Digital Art II; Digital Marketing and Data Science; Ethics and Government for Data and Computer Science; Introduction to Data Science Coding Languages (R, Python, SQL, etc.) Music Studio; Population Science; Teachers for Tomorrow I and II; UX and UI			
**The exact elective possibilities will be curated through existing staff, higher education partnerships, Virtual Virginia, concurrent enrollment opportunities, independent study, and small group instruction based on student interests and instructor availability.				

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

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



## The Commonwealth Governor’s School

### Student Experience

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

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

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

### Locations

Accepted students attend one of three sites, based on the location of their residence (not necessarily the zoned high school): Colonial Forge High School, North Stafford High School, or Stafford High School. Students electing to attend CGS will transfer full time to the assigned school location for all four years of high school.

### Eligibility Criteria and Selection

Students entering the CGS program must have completed Algebra I during an academic school year prior to the 9th grade. Students apply to CGS through the Stafford secondary programs application. Selection is based on multiple criteria: student portfolio, interview, ability test scores, achievement test scores, academic performance, and rating scales from teachers and mentors. Students interested in applying for CGS should contact their school counselor or gifted education resource teacher.

### Commonwealth Governor’s School - Sample Course Sequence

Content Area	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>English</b>	Honors English 9	Honors English 10	AP English Language and Composition	AP English Literature and Composition
<b>Mathematics</b>	Honors Algebra II*	Honors Geometry and Trigonometry OR AP Pre-calculus	AP Pre-calculus OR AP Calculus AB with Special Topics	AP Statistics OR AP Calculus BC and Multivariable Calculus
<b>Science</b>	AP Environmental Science	AP Biology	Dual Enrollment Chemistry	AP Physics 1
<b>History and Social Sciences</b>	AP European History	AP U.S. Government	AP U.S. History	AP Human Geography
<b>Culminating</b>	Advanced Research and Writing (Novice Level)	Advanced Research and Writing (Apprentice Level)	Advanced Research and Writing (Journeyman Level)	Advanced Research and Writing (Master Level)

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

Notes:

- Students wishing to enroll in additional AP mathematics courses (i.e., AP Statistics, AP Calculus AB, etc.) may need to enroll in that class as an elective.
- Students complete components of the Culminating Project annually, earning a course credit in grade 12 through the CGS Advanced Research and Writing course.
- Additional fees may be required for courses included in the CGS program. All efforts will be made to keep fees to a maximum of \$75 or less. Opportunities for financial assistance may be available. Please see your school counselor.

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



## 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.

### General Courses

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

### Advanced Placement Courses

AP courses are college-level courses that prepare and encourage students to take the course's AP examination for possible college credit.

- 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 required.

### **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 required.

## **Dual Enrollment Courses**

### **1177DE DE ENGLISH COMPOSITION (ENG 111 and 112)**

**Grades 11-12**

**1 Credit#**

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

### **1198DE DE ENGLISH WORLD LITERATURE (ENG 255)**

**Grade 12**

**1 Credit#**

*Prerequisite: ENG 112 or a 3 on AP Language or AP Literature exam.*

DE World Literature examines literary texts across a variety of cultures, genres, and time periods. Develops critical thinking and interpretive skills through close reading, discussion, and analysis of literary texts from around the world in their historical, cultural, social, and/or literary contexts. This course explores the diversity and depth of the human experience through literature across a variety of cultures and traditions.

## **Commonwealth Governor's School Courses**

AP courses are college-level courses that prepare and encourage students to take the course's AP examination for possible college credit.

### **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 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.

### **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.

## **International Baccalaureate Courses**

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

### **IB LANGUAGE AND LITERATURE (HL)**

**1151IB Grade 11**

**1161IB Grade 12**

**1 Credit per Year#**

***Prerequisite: English 10 or Honors English 10 courses for IB year one***

***Prerequisite: IB year one for 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.

## **English Elective Courses**

### **1300 ORAL COMMUNICATION**

**Grades 10-12**

**1 Credit**

Since communication is a lifelong process, oral communication focuses on necessary skills to help students

communicate more effectively in their personal, social, and professional lives. To accomplish this goal, students will receive instruction in prepared speeches, impromptu speeches, personal communication, and oral interpretation.

### **1200 JOURNALISM I**

**Grades 9-12**

**1 Credit**

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

### **1210 JOURNALISM II**

**Grades 10-12**

**1 Credit**

***Prerequisite: 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**

***Prerequisite: 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**

***Prerequisite: 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**

***Prerequisite: 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**

***Prerequisite: Photojournalism II and service on the school's publication staff***

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

## **1218 PHOTOJOURNALISM IV**

**Grade 12**

**1 Credit**

***Prerequisite: 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**

***Prerequisite: 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**

***Placement: Selection for this course is based on a set of criteria to include passing the 8th grade SOL, and NWEA MAP results.***

Reading Across the Content Areas is designed for specific instruction in reading secondary content material; texts that often are compactly written and contain specialized vocabulary. Instruction for students placed in this course will focus on 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.

## **DEVELOPMENTAL READING I-IV**

**9491 Grade 9**

**9492 Grade 10**

**9493 Grade 11**

**9494 Grade 12**

**1 Credit**

***Placement: Selection based on the recommendation of the IEP team.***

Students placed in these courses require differentiated instruction in reading, and may qualify as 1 elective credit per course, up to 4 credits. This program provides an academic based opportunity for students to achieve a degree of mastery in phonemic awareness, phonics, fluency, vocabulary, and comprehension. Teachers support students' reading through continued assessment, the provision of instructional-level materials, planned interventions that reflect the student's Individualized Education Program, and the developmental nature of reading.

**ENGLISH REVIEW****1515 Grade 11****1516 Grade 12****1 Elective Credit*****Placement: Selection based on teacher recommendation and state assessment results.***

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.

**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.

**1301 COMMUNICATION FOR LEADERSHIP AND PUBLIC SERVICE****Grade 9****1 Elective Credit**

This course will develop and enhance students' ability to speak effectively and listen critically. Students will learn more about communication and how it affects human interaction by participating in individual and group learning activities. Students will learn to write and deliver a variety of speeches and learn to critique themselves and others. Group activities emphasize leadership styles and critical thinking skills. Students develop into ethical and effective communicators, whose integrity and leadership will affect positive change. This course requires students to participate in learning experiences outside the school day including evenings and weekends.



## 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.

### 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.

#### **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 and write essays.

#### **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 and write essays. Students may take the SOL test if they have not already passed an earlier SOL test.

#### **2360 VIRGINIA AND UNITED STATES HISTORY**

**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.

#### **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.

## **Advanced Placement Courses**

AP courses are college-level courses that prepare and encourage students to take the course's AP examination for possible college credit.

### **2380AP AP MODERN WORLD HISTORY**

**Grade 10**

**1 Credit#**

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

### **2319AP AP UNITED STATES HISTORY**

**Grades 11-12**

**1 Credit#**

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

### **2450AP AP COMPARATIVE GOVERNMENT AND POLITICS**

**Grade 12 (Grade 10 for IB Students)**

**1 Credit#**

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

### **2445AP AP UNITED STATES GOVERNMENT/POLITICS**

**Grade 12**

**1 Credit#**

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

### **2212AP AP HUMAN GEOGRAPHY**

**Grades 9-12**

**1 Credit#**

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

### **2902AP AP PSYCHOLOGY**

**Grades 11-12**

**1 Credit#**

AP Psychology provides an overview of current psychological theory and practice. Students will explore the systematic and scientific study of the behavior and mental processes of humans and other animals. In accordance with the driving principals of current psychological practice, this course will emphasize scientific method and critical thinking skills.

## **2804AP AP ECONOMICS**

**Grades 11-12**

**1 Credit#**

AP Economics combines both AP Micro and Macroeconomics into a one-year course. The first semester will focus on microeconomics, the study of the behavior of individuals and businesses as they exchange goods and services in the marketplace. The second semester will focus on macroeconomics, the study of the principles of economics that apply to the economic system as a whole. Personal finance standards will be incorporated throughout the course in order to meet the Economics and Personal Finance graduation requirement. Students will have the opportunity to take both AP exams at the end of the year.

## **2399AP AP EUROPEAN HISTORY**

**Grades 10-12**

**1 Credit#**

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

## **Dual Enrollment Courses**

### **2360DE DE UNITED STATES HISTORY (HIS 121 and 122)**

**Grade 11**

**1 Credit#**

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

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

**Grade 12**

**1 Credit#**

This course examines the political structure, processes, institutions, and policy making at the federal, state, and local levels. It examines federalism and the relationship between the different levels of government. Topics include civil liberties and civil rights; political parties and elections; public opinion, the media, and interest groups; policy making; as well as state and local issues such as education, healthcare, criminal justice, and metropolitan issues.

## **Commonwealth Governor's School Courses**

AP courses are college-level courses that prepare and encourage students to take the course's AP examination for possible college credit.

### **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. AP European History meets state graduation requirements for history, often taking the place of a World History course.

### **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.

### **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.

### **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.

## **International Baccalaureate Courses**

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

### **2806IB IB ECONOMICS (SL) with PERSONAL FINANCE**

**Grades 11 or 12**

**1 Credit#**

**Note: This course fulfills the Economics and Personal Finance requirement for graduation through completion of the Personal Finance curriculum.**

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.

### **6135IB IB BUSINESS MANAGEMENT (SL)**

**Grades 11 or 12**

**1 Credit#**

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

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.

## **IB THEORY OF KNOWLEDGE**

**1197IB Grade 11**

**1198IB Grade 12**

**1 Credit per Year#**

***Prerequisite: IB year one for 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#**

*Prerequisite: World History or Honors World History for IB year one*

*Prerequisite: IB year one for 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, a 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#**

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

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.

### **2903IB IB PSYCHOLOGY (SL)**

**Grades 11 or 12**

**1 Credit#**

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

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.

## **History and Social Sciences Elective Courses**

### **2372 AFRICAN AMERICAN HISTORY**

**Grades 10-12**

**1 Credit**

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

### **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.

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

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

**2455 POLICY, ADVOCACY, AND ETHICS****Grade 10****1 Elective Credit**

Policy, Advocacy, and Ethics will explore foundational ethical theories, analyze moral dilemmas, and understand their applications in shaping policies and advocating for change. Through case studies, projects, and class discussions, the course emphasizes critical thinking and decision making, equipping students with the skills to navigate complex issues and be effective leaders.

## Mathematics Courses

**Sample High School Mathematics Course Sequences**

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

**\*Higher-Level Mathematics Elective Courses**

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

Preparing students to pursue higher education, to compete in a global workforce, and to be informed citizens requires rigorous mathematical knowledge and skills. Students must gain an understanding of fundamental ideas in number sense, computation, measurement, geometry, probability, data analysis and statistics, algebra and functions, and they must develop proficiency in mathematical skills. The content of the mathematics standards is intended to support the following five process goals for students: becoming mathematical problem solvers, communicating mathematically, reasoning mathematically, making mathematical connections, and using mathematical representations to model and interpret practical situations. Students requiring co-enrollment in Algebra II and Geometry may do so with principal approval.

## General Course Sequence

### **3130 ALGEBRA I**

**Grades 9-10**

**1 Credit**

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

### **3130H HONORS ALGEBRA I**

**Grade 9**

**1 Credit**

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

### **3143 GEOMETRY**

**Grades 9-12**

**1 Credit**

*Prerequisite: Algebra I*

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

### **3143H HONORS GEOMETRY**

### **3143HE ENGINEERING HONORS GEOMETRY**

**Grades 9-10**

**1 Credit**

*Prerequisite: Algebra I*

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

### **3134 ALGEBRA, FUNCTIONS, AND DATA ANALYSIS**

**Grades 10-12**

**1 Credit**

*Prerequisite: 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. Students will solve problems that require the formulation of linear, quadratic, exponential, or piecewise-defined equations or a system of equations. Mathematical communication and reasoning are emphasized throughout the course. Graphing utilities (calculators, computer, and other technology tools) will be used to assist in teaching and learning.



**3135 ALGEBRA II****Grades 9-12****1 Credit*****Prerequisite: Geometry or Algebra Functions, and Data Analysis***

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

**3135H HONORS ALGEBRA II****3135HE ENGINEERING HONORS ALGEBRA II****Grades 9-12****1 Credit*****Prerequisite: Geometry***

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

**3160 ALGEBRA III WITH TRIGONOMETRY****Grades 11-12****1 Credit*****Prerequisite: Algebra II***

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

**3138 DATA SCIENCE****Grades 10-12****1 Credit*****Prerequisite: Algebra II***

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

**3162 PRE-CALCULUS: MATH ANALYSIS WITH TRIGONOMETRY****Grades 10-12****1 Credit*****Prerequisite: 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**

***Prerequisite: 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**

***Prerequisite: Algebra III with Trigonometry or Pre-calculus: Math Analysis with Trigonometry***

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

## **Advanced Placement Courses**

AP courses are college-level courses that prepare and encourage students to take the course's AP examination for possible college credit.

### **3192AP AP STATISTICS**

**Grades 11-12**

**1 Credit#**

***Prerequisite: 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. Summer assignments may be required.

### **3162AP AP PRE-CALCULUS**

**Grades 10-12**

**1 Credit#**

***Prerequisite: 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#**

***Prerequisite: 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 most one-semester college calculus courses.

### **3178AP AP CALCULUS BC**

**Grades 11-12**

**1 Credit#**

***Prerequisite: 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 most two-semester college calculus courses. Students taking the AP Calculus BC exam will receive an AP Calculus AB subscore.

### **3185AP AP COMPUTER SCIENCE A**

**Grades 10-12**

**1 Credit#**

***Prerequisite: Algebra II***

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

## **Dual Enrollment Courses**

### **3196DE DE QUANTITATIVE REASONING AND STATISTICAL REASONING (MTH 154 and MTH 155)**

**Grades 11-12**

**1 Credit#**

***Prerequisite: 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 (MTH 161 and MTH 162)**

**Grades 10-12**

**1 Credit#**

***Prerequisite: Algebra II with a C or better and a current cumulative high school GPA of 3.0 or better***

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. Students who successfully complete this course will receive credit from Germanna Community College.

### **3178DE DE CALCULUS I and II (MTH 263 and MTH 264)**

**Grades 11-12**

**1 Credit#**

***Prerequisite: DE Pre-calculus with a C or better or Pre-calculus: Math Analysis with Trigonometry with a grade of B or better in combination with a current cumulative high school GPA of 3.0 or better***

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

### **3250DE DE LINEAR ALGEBRA (MTH 266)**

**Grades 11-12**

**1 Credit#**

***Prerequisite: DE Calculus II MTH 264 with a grade of C or better and a current cumulative high school GPA of 3.0 or better***

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

Equations as a second semester course.

### **3252DE DE DIFFERENTIAL EQUATIONS (MTH 267)**

**Grades 11-12**

**1 Credit#**

*Prerequisite: DE Calculus II MTH 264 with a grade of C or better and a current cumulative high school GPA of 3.0 or better*

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

## **Commonwealth Governor's School Courses**

AP courses are college-level courses that prepare and encourage students to take the course's AP examination for possible college credit.

### **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.

### **3162APG AP PRE-CALCULUS**

**Grades 10-11**

**1 Credit#**

*Prerequisite: 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.

### **3178APG AP CALCULUS BC AND MULTIVARIABLE CALCULUS**

**Grade 12**

**1 Credit#**

This course includes concepts and applications of differential and integral calculus, sequences and series, elementary differential equations, and using all of these skills with functions of more than one variable. Experiences with appropriate microcomputer software and graphing calculators are included. Summer assignments may be

required.

### **3192APG AP STATISTICS**

**Grade 12**

**1 Credit#**

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

## **International Baccalaureate Courses**

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

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

### **IB MATHEMATICS: APPLICATIONS AND INTERPRETATION (SL)**

**3164IB Grade 11**

**3196IB Grade 12**

**1 Credit per course#**

*Prerequisite: Algebra II for IB year one*

*Prerequisite: IB year one for 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. Students who are likely to need mathematics in pursuit of a science or mathematics major in college are advised to consider IB Mathematics Analysis or Application and Interpretation HL.

### **IB MATHEMATICS: ANALYSIS AND APPROACHES (SL)**

**3167IB Grade 11**

**3198IB Grade 12**

**1 Credit per course#**

*Prerequisite: Pre-calculus: Math Analysis with Trigonometry for IB year one*

*Prerequisite: IB year one for 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#**

*Prerequisite: Pre-calculus: Math Analysis with Trigonometry*

*Prerequisite: IB year one for 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#**

***Prerequisite: Pre-calculus: Math Analysis with Trigonometry.***

***Prerequisite: IB year one for 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 Courses

#### **4210 EARTH SCIENCE**

**Grades 9-11**

**1 Credit**

**NOTE: Students may be concurrently enrolled in Biology.**

The Earth Science standards focus on the complex nature of the Earth system, including Earth's composition, structure, processes, and history; its atmosphere, fresh water, and oceans; and its environment in space as a set of complex, interacting and overlapping systems. The standards emphasize the nature of science as students learn about the development of scientific thought about Earth and space. Lab work includes the interpretation of maps, charts, tables, and profiles; the use of technology to collect, analyze, and report data; and the utilization of science skills in systematic investigation.

#### **4210H HONORS EARTH SCIENCE**

**Grades 9-11**

**1 Credit**

**NOTE: Students may be concurrently enrolled in Biology.**

This advanced course, designed as a pre-AP and pre-IB course, explores the complex nature of the Earth system, including Earth's composition, structure, processes, and history; its atmosphere, fresh water, and oceans; and its environment in space as a set of complex, interacting and overlapping systems for entrance into college, AP, and/or IB courses. The standards emphasize the nature of science as students learn about the development of scientific thought about Earth and space. Lab work and independent research will include the interpretation of maps, charts, tables, and profiles; the use of technology to collect, analyze, and report data; and the utilization of science skills in systematic investigation.

#### **4265 ENVIRONMENTAL SCIENCE**

**Grades 9-12**

**1 Credit**

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

#### **4310 BIOLOGY**

**Grades 9-10**

**1 Credit**

**NOTE: Students may be concurrently enrolled in Earth Science.**

This in-depth course is designed to provide students with a detailed understanding of living systems. Students investigate biochemical life processes, cellular organization, mechanisms of inheritance, dynamic relationships among organisms, and the change in organisms through time. Skills necessary to examine scientific explanations, conduct experiments, analyze and communicate information, and gather and use information in scientific literature are practiced. The importance of scientific research that validates or challenges ideas is emphasized at this level.



### **4310H HONORS BIOLOGY**

**Grades 9-10**

**1 Credit**

**NOTE:** Students may be concurrently enrolled in Earth Science.

This advanced course, designed as a pre-AP and IB course, investigates biochemical life processes, cellular organization, mechanisms of inheritance, dynamic relationships among organisms, and the change in organisms through time for entrance into college, AP, and/or IB courses. Skills necessary to examine scientific explanations, conduct experiments, analyze and communicate information, and gather and use information in scientific literature are integral components. There is strong emphasis on lab work and independent research to validate or challenge ideas is emphasized at this level. Instruction will provide more detailed labs and projects with tools and technology including: calculators, computers, probes and sensors, and microscopes are used when feasible.

### **4410 CHEMISTRY**

**Grades 10-12**

**1 Credit**

**Prerequisite:** *Algebra II or concurrent enrollment*

This course is designed to introduce the student to the basic theories of chemistry. 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.

### **4410H HONORS CHEMISTRY**

**Grades 10-12**

**1 Credit**

**Prerequisite:** *Algebra II or concurrent enrollment*

The advanced chemistry course, designed as a pre- AP and IB course, is a fast-paced course that explores, in depth, chemistry concepts and the scientific process in preparation for entrance into college, AP, and/or IB courses. 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.

### **4510 PHYSICS**

**Grades 10-12**

**1 Credit**

**Prerequisite:** *Algebra II or concurrent enrollment*

This course covers the laws of mechanics, electricity and magnetism, electro-magnetic wave theory, elementary nuclear physics and relativity. It requires competence in the metric system and conversions, scientific notation, and manipulation of algebraic equations.

### **4510H HONORS PHYSICS**

**Grades 10-12**

**1 Credit**

**Prerequisite:** *Algebra II or concurrent enrollment*

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

## **Advanced Placement Courses**

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. AP courses are college-level courses that prepare and encourage students to take the course's AP examination for possible college credit.



**4370AP AP BIOLOGY****Grades 10-12****1 Credit#****Note: This course may not be audited.****Prerequisite: *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.

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

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

**4470AP AP CHEMISTRY****Grades 11-12****1 Credit#****Note: This course may not be audited.****Prerequisite: *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.

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

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

**4573AP AP PHYSICS 1****Grades 11-12****1 Credit#****Note: This course may not be audited.****Prerequisite: *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.

**4574AP AP PHYSICS 2****Grade 12****1 Credit#****Note: This course may not be audited.****Prerequisite: *Pre-calculus or concurrent enrollment***

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.

## **4270AP AP ENVIRONMENTAL SCIENCE**

**Grades 10-12**

**1 Credit#**

**Note: This course may not be audited.**

**Prerequisite: Two laboratory sciences and 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.

## **Dual Enrollment Courses**

### **4320DE DE BIOLOGY (BIO 101)**

**Grades 11-12**

**1 Credit#**

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

### **4420DE DE CHEMISTRY (CHM 111)**

**Grades 11-12**

**1 Credit#**

**Prerequisite: Completion of Algebra II with a C or better and a cumulative high school GPA of 3.0 or higher**

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

### **4220DE DE ENVIRONMENTAL SCIENCE (ENV 121)**

**GRADES 11-12**

**1 Credit#**

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

### **4510DE DE PHYSICS (PHY 201)**

**GRADES 11-12**

**1 Credit#**

Dual Enrollment Physics is a college level course that covers classical mechanics and thermodynamics. Includes kinematics, Newton's law of motion, work, energy, momentum, rotational kinematics, dynamic and static equilibrium, elasticity, gravitation, fluids, simple harmonic motion, calorimetry, ideal gas law, and the laws of thermodynamics. Students who successfully complete the course will receive four college credits through Germanna Community College as well as one year of high school credit.

## **Commonwealth Governor's School Courses**

AP courses are college-level courses that prepare and encourage students to take the course's AP examination for possible college credit.

#### **4270APG SCIENCE 9: AP ENVIRONMENTAL SCIENCE**

**Grade 9**

**1 Credit#**

**Prerequisite:** *Geometry or concurrent enrollment*

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. 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.

#### **4370APG SCIENCE 10: AP BIOLOGY**

**Grade 10**

**1 Credit#**

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

#### **4420DEG SCIENCE 11: DE CHEMISTRY (CHM 101)**

**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.

### **International Baccalaureate Courses**

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

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

#### **IB BIOLOGY (HL)**

**4390IB Grade 11**

**4391IB Grade 12**

**1 Credit per Course#**

**Prerequisite:** *Biology or Honors Biology, and Chemistry for IB year one*

**Prerequisite:** *IB year one for IB year two*

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

**4380IB IB BIOLOGY 11 (SL)****Grade 11****1 Credit#*****Prerequisite: Biology or Honors Biology and Chemistry or concurrent enrollment***

This 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. Key points of the first year are structure and function, universality versus diversity, and equilibrium within systems.

**4381IB IB BIOLOGY 12 (SL)****Grade 12****1 Credit#*****Prerequisite: 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#*****Prerequisite: Chemistry or Honors Chemistry, and Biology for IB year one******Prerequisite: IB year one for IB year two***

IB Chemistry is a two-year course that provides an overview of the major principles and processes in the areas of stoichiometric relationships, atomic structure, periodicity, chemical bonding and structure, energetics/thermochemistry, chemical kinetics, equilibrium, acids and bases, redox processes, organic chemistry, measurement, and data processing. The second year provides atomic structure, the periodic table—the transition metals, chemical bonding and structure, energetics/thermochemistry, chemical kinetics, equilibrium, acids and bases, redox processes, organic chemistry, measurement, and analysis.

**4480IB IB CHEMISTRY 11 (SL)****Grade 11****1 Credit#*****Prerequisite: Chemistry or Honors Chemistry, and Biology***

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 and expansion of laboratory techniques as related to contemporary chemistry, to include experiment design. Students in this course continue to the second year of IB Chemistry (SL) or IB Chemistry (HL), based on grade achieved.

**4481IB IB CHEMISTRY 12 (SL)****Grade 12****1 Credit#*****Prerequisite: 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 and expansion of laboratory techniques as related to contemporary chemistry, to include experiment design.

**IB PHYSICS (HL)****4590IB Grade 11****4591IB Grade 12****1 Credit per Course#*****Prerequisite: Honors Physics and Algebra II for year one******Prerequisite: IB year one for 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.

**IB PHYSICS 1 (SL)****4580IB Grade 11****4581IB Grade 12****1 Credit per Course#*****Prerequisite: Algebra II******Prerequisite: IB year one for IB year two***

This is 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, thermal physics, energy production, atomic, nuclear, and particle physics, and at least one of the following optional topics: relativity, engineering physics, imaging, or astrophysics. Emphasis is on problem-solving, proficiency in mathematical usage, and improvement and expansion of laboratory techniques as related to contemporary physics, including experimental design.

**4281IB IB ENVIRONMENTAL SYSTEMS AND SOCIETIES (SL)****Grades 11 or 12****1 Credit#*****Prerequisite: 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.

**IB ENVIRONMENTAL SYSTEMS AND SOCIETIES (HL)****4282IB Grade 11****4283IB Grade 12****1 Credit per course#*****Prerequisite: Biology or Chemistry or Honors Biology or Honors Chemistry for IB year one******Prerequisite: IB year one for IB year two***

This two-year interdisciplinary course examines the deeper relationship and interaction between the environment, individuals, and societies. Students will inquire and investigate the relationships involved in the environmental system including ecosystem dynamics, atmospheric and oceanic physics, and hydrological systems. Topics studied will include climate change, biodiversity loss, and food security giving students insight into understanding the mechanics and purpose of human constructed systems and the function of natural ones. Additional modules may include environmental law, environmental and ecological economics, and environmental ethics.

**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*****Note: Students may be concurrently enrolled in Earth Science******Prerequisite: Biology or Environmental Science***

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.

#### **4330 BIOLOGY II: ANATOMY AND PHYSIOLOGY**

**Grades 11-12** (*Grade 10, if prerequisite met*)

**1 Credit**

*Prerequisite: Biology*

*Recommended Prerequisite: Concurrent enrollment in Chemistry*

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. Lab emphasis is on dissection and microscope usage.

#### **4240 EARTH SCIENCE II: GEOLOGY**

**Grades 10-12**

**1 Credit**

**Note: Students may be concurrently enrolled in Biology.**

*Prerequisite: Earth Science or Environmental 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. 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.

#### **4250 EARTH SCIENCE II: OCEANOGRAPHY**

**Grades 11-12**

**1 Credit**

*Prerequisite: Earth Science or Environmental 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. 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 highly recommended for all students. The ability to speak a world language is a valuable asset for personal and professional growth. The study of world languages fosters respect for cultural diversity while enhancing communication skills that are essential in a global context. World languages courses meet elective credit requirements for the Standard Diploma. For the Advanced Studies Diploma, students must complete either three years of one language or two years of two different languages.

### General Courses

#### American Sign Language

##### **5990 AMERICAN SIGN LANGUAGE LEVEL I**

**Grades 10-12**

**1 Credit**

This course is designed to give students a foundation of sign language and the culture of the deaf community. Students will learn appropriate behaviors, showing awareness of and respect for deaf culture. Deaf culture is taught through discussions, activities, reading, and videos. This is a performance-based course with an emphasis on vocabulary and grammatical skills through the use of the language. Immersion strategies are used in this course.

##### **5995 AMERICAN SIGN LANGUAGE LEVEL II**

**Grades 10-12**

**1 Credit**

*Prerequisite: American Sign Language I*

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**

*Prerequisite: American Sign Language II*

The course includes vocabulary-building and mastery of grammar through rigorous receptive and expressive language activities. This course includes receptive and expressive readiness activities, sign vocabulary, ASL grammar structure, receptive and expressive fingerspelling, conversational behaviors and various aspects of deaf culture. Immersion strategies are used in this course.

#### French

##### **5110 FRENCH LEVEL I**

**Grades 8-12**

**1 Credit**

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

##### **5120 FRENCH LEVEL II**

**Grades 9-12**

**1 Credit**

*Prerequisite: French Level I*

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*****Prerequisite: French Level II***

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*****Prerequisite: French Level III***

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*****Prerequisite: German Level I***

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*****Prerequisite: German Level II***

Students complete their study of basic grammar and vocabulary and continue to learn to communicate in real-life situations with increasing precision and accuracy. Culture is woven into this course as students explore the use of the language in a wide range of cultural contexts.

**5240 GERMAN LEVEL IV****Grades 10-12****1 Credit*****Prerequisite: German Level III***

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

*Prerequisite: Latin Level I*

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

*Prerequisite: Latin Level II*

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

*Prerequisite: Latin Level III*

Students will deepen their understanding of Latin literature and culture by reading and analyzing original works by classical authors. Latin IV is an advanced language course designed for students who have mastered foundational Latin grammar and vocabulary.

## Spanish

### 5510 SPANISH LEVEL I

Grades 8-12

1 Credit

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

### 5520 SPANISH LEVEL II

Grades 9-12

1 Credit

*Prerequisite: Spanish Level I*

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

*Prerequisite: Spanish Level II*

Students deepen their understanding of the components of a world language while building the study skills necessary for language acquisition. As they continue to develop proficiency in listening, speaking, reading, and writing, students

engage in more advanced, active practice in real-world situations and across diverse cultural contexts. This level is designed to help students become more confident and effective communicators, preparing them to navigate our increasingly international world with greater ease and cultural awareness.

#### **5540 SPANISH LEVEL IV**

**Grades 10-12**

**1 Credit**

***Prerequisite: Spanish Level III***

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**

**Note: Students will take an assessment to ensure proper placement according to prior knowledge and study of Spanish.**

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 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, literature, and history. This course is intended to build a sense of community among the schools' advanced speakers of the language.

#### **5521 SPANISH FOR FLUENT SPEAKERS LEVEL II**

**Grades 9-12**

**1 Credit**

**Note: Students will take an assessment to ensure proper placement according to prior knowledge and study of Spanish.**

***Prerequisite: 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, literature, and cultural heritage while focusing on reading, writing, vocabulary development, and participating in consciousness-raising activities about Spanish language, identity and culture.

#### **5531 SPANISH FOR FLUENT SPEAKERS LEVEL III**

**Grades 10-12**

**1 Credit**

***Prerequisite: Spanish for Fluent Speakers II***

This course offers a third level of formal study for native, heritage, or fluent Spanish-speaking students. This course focuses on the development of advanced communicative competence in reading, writing, speaking and listening in Spanish. Students will also continue to develop awareness and understanding of Hispanic cultures, including language variation, customs, geography, history, literature, and current events. Upon completion of this course, students may progress into DE Spanish, AP Spanish Language, or IB Spanish.

### **Advanced Placement Courses**

AP courses are college-level courses that prepare and encourage students to take the course's AP examination for possible college credit.

#### **5170AP AP FRENCH**

**Grades 11-12**

**1 Credit#**

***Prerequisite: French Level IV or Level III with teacher approval***

AP French is an advanced, sequential course designed to develop proficiency in the language motivated students. Students will be expected to master all of the course objectives in a rigorous and accelerated manner. The course is taught in the target language and emphasizes communication through the use of authentic materials.

### **5270AP AP GERMAN**

**Grades 11-12**

**1 Credit#**

**Prerequisite:** *German Level IV or Level III with teacher approval*

AP German is an advanced, sequential course designed to develop proficiency in the language. Students will be expected to master all of the course objectives in a rigorous and accelerated manner. The course is taught in the target language and emphasizes communication through the use of authentic materials.

### **5370AP AP LATIN**

**Grades 11-12**

**1 Credit#**

**Prerequisite:** *Latin Level IV or Level III with teacher approval*

AP Latin is an advanced course designed for students who wish to deepen their understanding of the Latin language and Roman culture and includes an in-depth study of the texts prescribed by the College Board.

### **5570AP AP SPANISH**

**Grades 11-12**

**1 Credit#**

**Prerequisite:** *Spanish Level IV or Level III with teacher approval or Spanish for Fluent Speakers III*

AP Spanish is an advanced, sequential course designed to develop proficiency in the language. Students will be expected to master all of the course objectives in a rigorous and accelerated manner. The course is taught in the target language and emphasizes communication through the use of authentic materials.

## **Dual Enrollment Courses**

### **5140DE DE Intermediate French IV (FRE 201 and 202)**

**Grades 11-12**

**1 Credit#**

**Prerequisite:** *French level III*

This course continues to develop understanding, speaking, reading, and writing skills. It enables students to achieve proficiency at or above the Intermediate-mid level as defined by the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency guidelines. In keeping with the National Standards for Foreign Language Education, culture is embedded in this language course. The course will be taught in the target language.

### **5240DE DE Intermediate German IV (GER 201 and 202)**

**Grades 11-12**

**1 Credit#**

**Prerequisite:** *German level III*

This course continues to develop understanding, speaking, reading and writing skills. It enables students to achieve proficiency at or above the Intermediate-mid level as defined by the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency Guidelines. In keeping with the National Standards for Foreign Language Education, culture is embedded in this language course. The course will be taught in the target language.

### **5540DE DE Intermediate Spanish IV (SPA 201 and 202)**

**Grades 11-12**

**1 Credit#**

**Prerequisite:** *Spanish level III or Spanish for Fluent Speakers III*

This course continues to develop understanding, speaking, reading, and writing skills. It enables students to achieve proficiency at or above the Intermediate-mid level as defined by the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency Guidelines. In keeping with the National Standards for Foreign Language Education, culture is embedded in this course. The course will be taught in the target language.

## **International Baccalaureate Courses**

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

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

**5542IB IB SPANISH B IV (SL)**

**5142IB IB FRENCH B IV (SL)**

**5242IB IB GERMAN B IV (SL)**

**Grades 10 or 11**

**1 Credit per Course#**

***Prerequisite: Target language level III or SFS III***

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 taught 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#**

***Prerequisite: IB target language B IV 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. 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 taught 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#**

***Prerequisite: IB target language B IV 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. 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. The course will be taught in the target language.

**IB LATIN (SL)**

**5340IB Grade 11**

**5350IB Grade 12**

**1 Credit per Course#**

***Prerequisite: Latin Level III for IB year one***

***Prerequisite: IB year one for IB year two***

In this two-year course, selected passages from prescribed authors and topics in Latin will be read. 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.

**IB SPANISH AB INITIO (SL)**  
**5553IB Grade 10 or 11**  
**5563IB Grade 11 or 12**  
**1 Credit per Course#**

This is a two-year intensive study of Spanish language through the study of language, themes, and texts. Communication is evidenced through receptive, productive, and interactive skills across a range of contexts and purposes that are appropriate to the level of the course. Spanish Ab Initio is organized into five prescribed themes: identities, experiences, human ingenuity, social organization, and sharing the planet. This course is designed for students with little or no prior experience in the Spanish language.

## 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**  
*Prerequisite: 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**  
*Prerequisite: 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**  
*Prerequisite: 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**  
*Prerequisite: Art III*

Art IV is a course designed to increase and develop skills in selected subject areas for the visually mature and

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**

***Prerequisite: Art I***

The course is designed for students interested in developing more sophisticated skills in working with three-dimensional media. Students will explore a variety of 3-D materials to solve sculpture problems through construction methods of fabrication, assemblage, carving, casting, and modeling. Students will also learn the methods of working with clay such as coiling, slab building, and throwing on the wheel. Through these methods, students are encouraged to explore their personal styles of art making while producing a diverse body of work.

### **9170 ART HISTORY (NON-STUDIO ELECTIVE)**

**Grades 10-12**

**1 Credit**

This course is designed for students interested in learning to understand, evaluate, and appreciate art and its history in a non-studio setting. A broad range of artistic styles, media, and ideas from the past and present are used to examine the relationship and meaningful contribution of art to society. Students view significant artworks from around the world through readings, research, slides, videos, and museum visits, while also participating in course discussions, visual presentations, research, and problem solving. Writing skills are important in the description, analysis, and comparison of these works. This course complements courses in the humanities, providing multicultural and interdisciplinary connections.

### **9190 PHOTOGRAPHY AND GRAPHIC DESIGN I**

**Grades 9-12**

**1 Credit**

This course allows students to think creatively and solve visual problems while using technology to create expressive artworks. Students explore and practice standard black and white photographic processes by using cameras, films, lighting effects, and applying basic darkroom techniques. They are introduced to digital photographic processes and develop proficiency, using various technologies for art making. Students learn skills in Adobe Creative Suite, along with the history of photography. A portfolio that showcases meaningful designs and photographs will be developed.

**Note: Students are required to have access to a digital camera of 8mp or more, a film camera, and purchase necessary film/photographic paper.**

**Schools offering course: BPHS, SHS**

### **9191 PHOTOGRAPHY AND GRAPHIC DESIGN II**

**Grades 10-12**

**1 Credit**

***Prerequisite: Photography and Graphic Design I***

This course expands knowledge on the study of black and white photography, alternative processes, and the digital process. Students apply an in-depth understanding of equipment and artistic practices to solve complex visual problems. Working with others to design, package, and promote a publication is an important element in this course. Students also learn to critique and evaluate portfolios in both digital and traditional media.

**Note: Students are required to have access to a digital camera of 8mp or more, a film camera, and purchase necessary film/ photographic paper.**

**Schools offering course: BPHS, SHS**

### **9192 PHOTOGRAPHY AND GRAPHIC DESIGN III**

**Grades 11-12**

**1 Credit**

***Prerequisite: Photography and Graphic Design II***

This course engages students in the advanced study of photographic and technology-based design processes while

developing the approach and discipline of a working artist. Students expand their capability in the application of technology to craft expressive original art and generate visual solutions to objective-based problems. A final required portfolio, which shows evidence of technical proficiency, quality, and experience, demonstrates students' commitment to the communication of ideas through digital and photographic media. Students are asked to apply professional exhibition techniques to display personal work.

**Note: Students are required to have access to a digital camera of 8mp or more, a film camera, and purchase necessary film/ photographic paper.**

**Schools offering course: SHS**

## Music

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

## Band

### 9232 CONCERT BAND

**Grades 9-12**

**1 Credit**

**Recommended Prerequisite: 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 Prerequisite: 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 members of this ensemble. Students are expected to practice 30 minutes per day.

### 9250 PERCUSSION ENSEMBLE

**Grades 9-12**

**1 Credit**

**Recommended Prerequisite: 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 Prerequisite: 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 Prerequisite: 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.

### **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 Prerequisite: 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 Prerequisite: 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.

**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**

***Prerequisite: 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**

**Note: Rehearsals and performances may be required of students outside of the school day.**

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.

***Schools offering course: BPHS, CFHS, MVHS, NSHS, SHS***

### **9247 GUITAR II**

**Grades 10-12**

**1 Credit**

**Note: Rehearsals and performances may be required of students outside of the school day.**

***Prerequisite: 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.

***Schools offering course: BPHS, CFHS, MVHS, NSHS, SHS***

### **9248 GUITAR ENSEMBLE**

**Grades 11-12**

**1 Credit**

**Note: Rehearsals and performances may be required of students outside of the school day.**

***Prerequisite: 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 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.

***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**

**Prerequisite: 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**

**Note: Students in this course are highly encouraged to participate in school productions.**

**Prerequisite: 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.

### **1423 THEATRE ARTS III**

**Grades 11-12**

**1 Credit**

**Note: Students in this course are highly encouraged to participate in school productions.**

**Prerequisite: 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.

### **1426 THEATRE ARTS IV**

**Grades 11-12 or audition by teacher**

**1 Credit**

**Note: Students in this course are expected to participate in school productions.**

**Prerequisite: 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.

### **1435 TECHNICAL THEATRE I**

**Grades 9-12**

**1 Credit**

**Note: This is not a performance-based class. This is the backstage work of the theatre.**

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.

### **1448 TECHNICAL THEATRE II**

**Grades 10-12**

**1 Credit**

**Note: Participation in school productions is expected.**

**Prerequisite: 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.

### **1450 TECHNICAL THEATRE III**

**Grades 10-12**

**1 Credit**

**Note: Participation in school productions is expected.**

**Prerequisite: 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.

## **Advanced Placement Courses for Art**

Students will be prepared for and are encouraged to take the course's AP examination or portfolio submission for possible college credit.

### **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#**

**Note: Students enrolled in this course must be willing to work independently and meet portfolio submission deadlines as established by the teacher.**

**Prerequisite: 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).

### **9151AP AP ART HISTORY (NON-STUDIO ELECTIVE)**

**Grades 11-12**

**1 Credit#**

**Prerequisite: Art History or teacher recommendation**

This course is designed for students interested in learning to understand, evaluate, and appreciate art and its history in a non- studio setting. A broad range of artistic styles, media, and ideas from the past and present are used to examine the relationship and meaningful contribution of art to society. Students learn to look at significant works of arts from around the world with intelligence and sensitivity. Through writing, readings, research, visual presentations, and museum visits, students examine the major forms of artistic expression of the past and of distant cultures, as well as those of our own time and environment.

## Dual Enrollment Courses for Art

### 9170DE Art History (ART 101 and 102)

Grades 11-12

1 Credit#

Dual Enrollment Art History will develop students' basic knowledge and comprehension of historical art movements in order to critically evaluate the role of social, cultural, and global connections through art historical analysis. This course surveys the history and interpretation of architecture, painting and sculpture from the prehistoric era through the modern era.

## Advanced Placement Courses for Music

### 9226AP AP MUSIC THEORY

Grades 11-12

1 Credit#

*Prerequisite: Music Theory or teacher recommendation*

AP Music Theory develops a student's ability to recognize, understand, and describe the basic elements of music literacy and composition. This is approached by addressing fundamental aural, analytical, and compositional skills using both listening and written exercises. Building on this foundation, the course progresses to include more creative tasks, such as the harmonization of a melody by selecting appropriate chords, composing a musical bass line to provide two-voice counterpoint, or the realization of figured-bass notation. Students will be prepared and are encouraged to take the AP exam for possible college credit.

## International Baccalaureate Courses for Visual and Performing Arts

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

### IB VISUAL ARTS (SL)

9194IB Grade 11

9196IB Grade 12

1 Credit per Course#

*Prerequisite: Art II for IB year one*

*Prerequisite: IB year for IB year two*

This two-year sequence 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#

*Prerequisite: Art II for IB year one*

*Prerequisite: IB year one for 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.

### IB THEATRE ARTS (SL)

1432IB Grade 11

1434IB Grade 12

1 Credit per Course#

*Prerequisite: Theatre Arts II or Technical Theatre II for IB year one*

*Prerequisite: IB year one for IB year two*

In this two-year sequence, 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. 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#**

*Prerequisite: Theatre Arts II or Technical Theatre II for IB year one*

*Prerequisite: IB year one for IB year two*

In this two-year sequence, 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. Students in this course are encouraged to participate in school productions.

**IB MUSIC (SL)**

**9296IB Grade 11 or 12**

**1 Credit#**

*Prerequisite: Music Theory*

*Prerequisite: IB Music students must be concurrently enrolled in a performance class.*

This course includes the study of all music, including western and world music, and explores 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.

**IB MUSIC (HL)**

**9295IB Grade 11**

**9297IB Grade 12**

**1 Credit per Course#**

*Recommended Prerequisite: Music Theory for IB year one*

*Prerequisite: IB year one for IB year two*

*Prerequisite: IB Music 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.



## Health, Physical Education, and Driver Education Courses

---

**Physical Education** is an academic discipline that involves the study of human movement and its impact on health and quality of life. Physical Education provides all students access to standards-based instruction that promotes health literacy and the motivation to engage in the health-enhancing physical activity needed to achieve and maintain a balanced healthy life.

**Health Education** increases health literacy, helps students understand how to achieve and maintain a healthy lifestyle, and fosters the motivation, skills, and self-efficacy necessary to make informed and healthy choices, avoid risky behaviors, and build healthy families, relationships, schools and communities.

**Driver Education** programs in Virginia schools focus on safe driving attitudes, skill development, and appropriate responses to hazards. The Commonwealth's standards for Driver Education require extended, supervised practice with a licensed parent or guardian to develop precision in the application of skills and processes to effectively manage risks.

Two (2) Health and Physical Education credits are required for both the Standard and Advanced Studies diplomas and may be obtained in the 9th and 10th grades.

### General Courses

#### 7300 HEALTH AND PHYSICAL EDUCATION 9

Grade 9

1 Credit

Physical Education instruction is required and emphasizes the participation in lifetime fitness activities and how it relates to personal wellness. Activities include badminton, volleyball, tennis, speed ball, dance, flag football, aerobics, soccer, recreational games, basketball, golf, running, and fitness stations. During the health portion of this course, students will study alcohol, tobacco, and drugs, diseases of the body, mental and emotional health, family life, safety and injury prevention and violence prevention.

#### 7400/7405 HEALTH AND PHYSICAL EDUCATION 10

Grade 10

1 Credit

**Note: The 2025-2026 fee for the optional "Behind the Wheel" program \$300.00. Age and licensing requirements must be met.**

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 Education is a part of the health requirement (course code 7405). Other health instruction includes family life, wellness, and healthy living components.

### Elective Courses

#### 7640 STRENGTH AND BODY I

Grades 11-12

1 Credit

This elective is offered for motivated students seeking daily participation in weight training and cardiovascular fitness. This course will provide the student with the opportunity to design and implement individual fitness routines specific to his or her needs. Participants will gain a working knowledge of muscle groups and the exercises that complement them, along with an understanding of how the human body benefits from cardiovascular activity. The course will be held in the weight room while enjoying a variety of additional fitness-based activities such as plyometrics, speed, and agility drills.



## **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 10-12**

**1 Credit**

***Recommended Prerequisite: 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.

## **7662 SPORTS MEDICINE II**

**Grades 11-12**

**1 Credit**

**Note: This course requires participation in activities outside the scheduled class period, including evenings and weekends (minimum of 5 hours per week).**

***Prerequisite: 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.

**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*****Prerequisite: 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 (EL) students to develop English language proficiency, the teaching of academic vocabulary, key concepts, and background knowledge necessary for success in content courses.

### Student Credit Options

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

### **4266 ESOL ENVIRONMENTAL SCIENCE**

**Grades 9-10**

**1 Credit**

This course is designed for Level I and II English Learners to introduce the student to vocabulary, concepts, phenomena, systems and processes to better understand the natural world. The course will build on the middle school science content and investigations to prepare students for successive entry into Biology to earn verified credit. Instruction will build science literacy through inquiry, student data collection and analysis using appropriate tools, laboratory experiences, and field work including a meaningful watershed experience.

### **5730 ESOL ENGLISH FOR ACADEMIC PURPOSES I**

**Grades 9-12**

**1 Credit**

**Note: Students must be concurrently enrolled in English.**

This course is designed to develop reading, writing, listening, and speaking skills of English Learners. This language development course promotes English literacy while building content knowledge and skills for the language arts standards of learning.

### **5736 ESOL ENGLISH FOR ACADEMIC PURPOSES II**

**Grades 9-12**

**1 Credit**

**Note: Students must be concurrently enrolled in English.**

This course is designed to develop reading, writing, listening and speaking skills for English Learners. This language development course builds on the learning in the first course supporting English literacy while concurrently building content knowledge and skills for the language arts standards of learning.

### **5732 ESOL ALGEBRA READINESS**

**Grades 9-12**

**1 Credit**

**Note: Available to ELP Level I and II students that meet qualifying criteria. Students must be concurrently enrolled in Algebra I.**

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.

### **5715 FOUNDATIONS OF LITERACY**

**Grades 9-12**

**1 Credit**

This is an elective course designed to provide direct, explicit, and intensive reading and mathematics instruction to English Learners. This course is designated for English Learners with English Language Proficiency (ELP) level 1 or 2 AND a SLIFE designation who have significant gaps in their home language instruction, and literacy. This course will equip students for success in core classes, instruction will focus on the essential components of literacy. Literacy instruction will encompass phonemic awareness, phonics, reading fluency (including oral skills), vocabulary development, and reading comprehension strategies.

### **5735 FOUNDATIONS OF MATHEMATICS**

**Grades 9-12**

**1 Credit**

This is an elective course designed to provide direct, explicit, and intensive reading and mathematics instruction to English Learners. This course is designated for English Learners with English Language Proficiency (ELP) level 1 or 2 AND a SLIFE designation who have significant gaps in their home language instruction, and mathematics. This course will equip students for success in core classes, instruction will focus on the essential components of mathematics. Math instruction will include essential components of numeracy, computation, and geometry which include counting (including subitizing), comparisons of quantities and figures, decomposing and recomposing, patterning, estimation, geometry, and generalized algebraic reasoning skills.

### **5722 ENGLISH LANGUAGE DEVELOPMENT CONCEPTS I**

**Grades 9-12**

**1 Credit**

Entering English learners develop their English language proficiency through intensive instruction that supports content and academic language development of the Virginia SOL Standards utilizing the four domains—reading, writing, listening, and speaking. This course is aligned with the WIDA English language development (ELD) standards and provides academic language instructions through the WIDA Language Standards of social and instructional, language arts, math, science, and social studies.

### **5724 ENGLISH LANGUAGE DEVELOPMENT CONCEPTS II**

**Grades 9-12**

**1 Credit**

Emerging English learners develop their English language proficiency through intensive instruction that supports content and academic language development of the Virginia SOL Standards utilizing the four domains—reading, writing, listening, and speaking. This course is aligned with the WIDA English language development (ELD) standards and provides academic language instructions through the Language Standards of language arts, math, science, and social studies.

### **5726 ENGLISH LANGUAGE DEVELOPMENT CONCEPTS III**

**Grades 9-12**

**1 Credit**

Developing English learners develop their English language proficiency through intensive instruction that supports content and academic language development of the Virginia SOL Standards utilizing the four domains—reading, writing, listening, and speaking. This course is aligned with the WIDA English language development (ELD) standards and provides academic language instructions through the Language Standards of language arts, math, science, and social studies.

### **5728 ENGLISH LANGUAGE DEVELOPMENT CONCEPTS IV**

**Grades 9-12**

**1 Credit**

Expanding English learners develop their English language proficiency through intensive instruction that supports content and academic language development of the Virginia SOL Standards utilizing the four domains—reading, writing, listening, and speaking. This course is aligned with the WIDA English language development (ELD) standards and provides academic language instructions through the Language Standards of language arts, math, science, and social studies.

## Additional Credit Opportunities

---

### **0600 FRESHMAN SUCCESS 101**

**Grade 9**

**1 Elective Credit**

Freshman Success 101 offers the opportunity for students to explore career options through identifying their personal interests and aligning them with academic curriculum, course offerings, and CTE credentials. Students will also engage in character education and enhance their study and organizational skills. Critical elements of this course are also embedded in first-year center required coursework. The course also includes a service learning component. This course requires students to participate in learning experiences outside the school day including evenings and weekends

### **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 for and encouraged to take the AP Computer Science Principles exam.

## Advanced Placement Capstone Courses

### **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.

**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**

This course equips high school students with entrepreneurial vision, tenacity, confidence, and leadership skills needed to tackle social challenges at home and abroad. 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.

**9097 LEADERSHIP****Grades 9-12****1 Credit**

Students will develop effective leadership skills, understand organizational planning, use effective workplace communication, examine resource management, resolve conflict, and plan for the future. Students will examine and use project management tools to plan and execute a project.

## Career and Technical Education and Industry Credentials

---

Stafford Schools offers a wide variety of rigorous and engaging Career and Technical Education (CTE) programs designed to improve academic and technical skills attainment to support students interested in pursuing employment, enlistment, or enrollment after high school. CTE offers leadership opportunities through Career and Technical Student Organizations and delivers instruction through realistic, hands-on applications through state approved forms of Work-Based Learning (WBL). All students are encouraged to seek CTE courses that provide a foundation for their career plans and interests.

CTE instruction provides relevance through problem-based learning that prepare students for high-skill, high-wage, and in-demand careers including: employment in the workforce, enlistment in the military, or enrollment in a post-secondary institution/program.

CTE courses are offered in the following program areas:

- Agriculture
- Business and Information Technology
- Career Connections
- Family and Consumer Science
- Health and Medical Science
- Marketing
- Junior Reserve Officer Training Corps (JROTC)
- Technology Education
- Trade and Industrial Education

### Workplace Readiness Skills

Virginia's 22 Workplace Readiness Skills (WRS) for the Commonwealth reinforce learning in the classroom and essential durable skills. Attendance, self-discipline, and safety awareness are vital to the successful enrollment and completion of CTE courses. The three core WRS areas include:

- Personal qualities and abilities: creativity, work ethic, and problem solving;
- Interpersonal skills: conflict resolution, teamwork, and respect for diversity; and
- Professional competencies: information security, professionalism, and career and life management.

### CTE Completer

Students pursuing either an Advanced Studies Diploma or a Standard Diploma enhance their career plans by enrolling in CTE courses. A CTE Completer is a student who has met the requirements for a CTE concentration (sequence) and all requirements for high school graduation, or an approved alternative education program. Students who complete a CTE sequence may be eligible for a Career and Technical Education diploma seal.

### CTE Industry Credentials

All students are offered opportunities to earn an industry credential. Credentials provide students with evidence of advanced educational preparation through industry-validated programs, add value to a transcript for postsecondary education, and demonstrate to a potential employer the student's workforce preparedness. Students should contact their CTE teacher or counselors for more details. Credential offerings are based on state alignment to the course, teacher licensure/certification, and funding

A credential is defined as:

- State-Issued Professional License required for entry into a specific occupation as determined by a Virginia state licensing agency such as Cosmetology, Certified Nurse Aide (CNA), etc.
- Industry Certification from a recognized industry, trade, or professional association validating essential skills of a particular occupation. For example: ServSafe Food Protection Manager Certification offered by the National Restaurant Association, and/or stackable industry certifications leading to a credential such as:

Automotive Service Excellence (ASE) Entry-Level Certification Tests, Microsoft Office Specialist (MOS) Examinations; etc.

- Occupational Competency Assessment, a national standardized assessment of skills/knowledge in a specific career and/or technical area such as: NOCTI, Electrical Level One Assessment (National Center for Construction Education and Research (NCCER), etc.
- Workplace Readiness Skills CTE Consortium of States (CTECS).

### CTE Industry Credentials

Stafford Schools offer students opportunities to earn an industry credential. Credential offerings are based on state alignment to the course, teacher licensure/certification, and funding. Students should contact their CTE teacher or counselors for more details.

Course Title	Course	Industry Credential Offered
Accounting I	6320	CTECS Workplace Readiness
Accounting II	6321	CTECS Workplace Readiness
Advanced Manufacturing Systems II	8427	CTECS Workplace Readiness
Aerospace Engineering (PLTW)	8428	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Architectural Drawing and Design	8437	CTECS Workplace Readiness
Auto Body Technology I	8676	CTECS Workplace Readiness
Auto Body Technology II	8677	Automotive Service Excellence (ASE) or CTECS Workplace Readiness
Auto Body Technology III	8678	Automotive Service Excellence (ASE) or CTECS Workplace Readiness
Automotive Technology I	8502	Automotive Service Excellence (ASE) or CTECS Workplace Readiness
Automotive Technology II	8507	Automotive Service Excellence (ASE) or CTECS Workplace Readiness
Automotive Technology III	8508	Automotive Service Excellence (ASE) or CTECS Workplace Readiness
Biomedical Innovations (PLTW)	8382	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Business Law	6131	CTECS Workplace Readiness
Business Management	6135	CTECS Workplace Readiness
DE Business Management	6135DE	CTECS Workplace Readiness
Cabinetmaking I	8604	CTECS Workplace Readiness
Cabinetmaking II	8605	CTECS Workplace Readiness



<b>Course Title</b>	<b>Course</b>	<b>Industry Credential Offered</b>
Carpentry I	8601	CTECS Workplace Readiness
Carpentry II	8602	CTECS Workplace Readiness
Carpentry III	8603	CTECS Workplace Readiness
Child Development and Parenting	8232	CTECS Workplace Readiness
Civil Engineering and Architecture (PLTW)	8430	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Communication Systems	8415	CTECS Workplace Readiness
Computer Integrated Manufacturing (PLTW)	8442	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Computer Information Systems I	6612	Microsoft Office Specialist (MOS) Student Choice Test or CTECS Workplace Readiness
Computer Information Systems II	6613	Microsoft Office Specialist (MOS) Student Choice Test or CTECS Workplace Readiness
Introduction to Construction Trades	9071	CTECS Workplace Readiness
Cosmetology I	8745	CTECS Workplace Readiness
Cosmetology II	8746	Virginia Cosmetology State License Exam or CTECS Workplace Readiness
Criminal Justice I	8702	CTECS Workplace Readiness
Criminal Justice II	8703	CTECS Workplace Readiness
Culinary Arts I	8275	National Restaurant Association (NRF) ServSafe or CTECS Workplace Readiness
Culinary Arts II	8276	National Restaurant Association (NRF) ServSafe or CTECS Workplace Readiness
Culinary Arts Specialization	8279	END of Course American Culinary Federation (ACF), if applicable or CTECS Workplace Readiness
Cybersecurity I	6302	CTECS Workplace Readiness
Cybersecurity II	6304	Test Out Network Pro or CTECS Workplace Readiness
Cybersecurity III	6306	Test Out Security Pro or CTECS Workplace Readiness,
DE VA Teachers for Tomorrow I	9062DE	CTECS Workplace Readiness
DE VA Teachers for Tomorrow II	9072DE	Teacher Praxis Core Test or CTECS Workplace Readiness
Database Design and Management	6660S	CTECS Workplace Readiness

<b>Course Title</b>	<b>Course</b>	<b>Industry Credential Offered</b>
Design, Multimedia, and Web Technologies I	6630	Microsoft Office Specialist (MOS) Student Choice Test or CTECS Workplace Readiness
Design, Multimedia, and Web Technologies II	6631	Microsoft Office Specialist (MOS) Student Choice Test or CTECS Workplace Readiness
Digital Applications	6611	CTECS Workplace Readiness
Digital Electronics (PLTW)	8440	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Digital Visualization	8459	CTECS Workplace Readiness
Drafting: Fundamentals	8530	CTECS Workplace Readiness
Drafting: Mechanical	8531	American Design Drafting Association (ADDA), Mechanical or CTECS Workplace Readiness
Drafting: Architectural	8532	American Design Drafting Association (ADDA), Architectural or CTECS Workplace Readiness
Drafting: Advanced	8562	American Design Drafting Association (ADDA), Architectural or Mechanical or CTECS Workplace Readiness
Early Childhood Education and Services I	8285	CTECS Workplace Readiness
Early Childhood Education and Services II	8286	National Occupational Competency Testing Institute (NOCTI) Early Childhood or CTECS Workplace Readiness
Economics and Personal Finance	6120	WISE Financial Literacy
Electricity I	8533	CTECS Workplace Readiness
Electricity II	8534	CTECS Workplace Readiness
Electricity III	8535	CTECS Workplace Readiness
Emergency Medical Technician I	8333	CTECS Workplace Readiness
Emergency Medical Technician II, III	8334/ 8335	Emergency Medical Technician (EMT) State License or CTECS Workplace Readiness
Emergency Medical Telecommunication	8337	Emergency Telecommunicator Certification (ETC) or CTECS Workplace Readiness
Employment for Education I	9085	CTECS Workplace Readiness
Engineering Analysis and Applications	8451	CTECS Workplace Readiness
Engineering Design and Development (PLTW)	8443	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Engineering Drawing and Design	8436	CTECS Workplace Readiness

<b>Course Title</b>	<b>Course</b>	<b>Industry Credential Offered</b>
Engineering Explorations	8450	CTECS Workplace Readiness
Engineering Practicum	8453	CTECS Workplace Readiness
Engineering Concepts and Processes	8452	CTECS Workplace Readiness
Engineering Studies	8491	CTECS Workplace Readiness
Family Relations	8225	CTECS Workplace Readiness
Fashion Marketing I	8140	CTECS Workplace Readiness
Fashion Marketing II	8145	CTECS Workplace Readiness
Firefighter I and II	8705/8706	Firefighter I and II Certification Examination or CTECS Workplace Readiness
Greenhouse Plant Production and Management	8035	CTECS Workplace Readiness
Health Informatics	8308	CTECS Workplace Readiness
Heating, Ventilation, Air Conditioning and Refrigeration I	8550	CTECS Workplace Readiness
Horticulture Sciences	8034	CTECS Workplace Readiness
Human Body Systems (PLTW)	8380	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
IB Business and Management and Supervision (SL)	IB6135	CTECS Workplace Readiness
Imaging Technology	8455	CTECS Workplace Readiness
Information Technology Fundamentals	6670	TestOut IT Fundamentals Pro Certification or CTECS Workplace Readiness
Introduction to Engineering Design (PLTW)	8439	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Introduction to Fashion Careers	8248	CTECS Workplace Readiness
Introduction to Health and Medical Sciences	8302	CTECS Workplace Readiness
Introduction to Interior Design	8255	CTECS Workplace Readiness
Java Programming	6661	Certiport IT Specialist Certification Exam or CTECS Workplace Readiness
Landscaping I	8036	CTECS Workplace Readiness
Landscaping II	8037	CTECS Workplace Readiness

<b>Course Title</b>	<b>Course</b>	<b>Industry Credential Offered</b>
Life Planning	8227	CTECS Workplace Readiness
Manufacturing Systems	8425	CTECS Workplace Readiness
Marketing	8120	CTECS Workplace Readiness
Strategic Marketing	8130	CTECS Workplace Readiness
Masonry I	8512	CTECS Workplace Readiness
Masonry II	8513	CTECS Workplace Readiness
Masonry III	8514	CTECS Workplace Readiness
Master Barbering I	8743	CTECS Workplace Readiness
Master Barbering II	8744	Virginia Master Barbers State License Exam or CTECS Workplace Readiness
Medical Assistant I	8345	CTECS Workplace Readiness
Medical Assistant II	8346	Certified Clinical Medical Assistant (CCMA) or CTECS Workplace Readiness
Medical Interventions (PLTW)	8381	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Military Science I (JROTC)	7913	Armed Services Vocational Aptitude Battery (ASVAB) or CTECS Workplace Readiness
Military Science II (JROTC)	7916	Armed Services Vocational Aptitude Battery (ASVAB) or CTECS Workplace Readiness
Military Science III (JROTC)	7918	Armed Services Vocational Aptitude Battery (ASVAB) or CTECS Workplace Readiness
Military Science IV (JROTC)	7919	Armed Services Vocational Aptitude Battery (ASVAB) or CTECS Workplace Readiness
Nurse Aide I	8360	CTECS Workplace Readiness
Nurse Aide II	8362	Certified Nurse Aide (C.N.A.) Exam or CTECS Workplace Readiness
Nutrition and Wellness	8229	CTECS Workplace Readiness
Office Specialist I	6740	CTECS Workplace Readiness
Office Specialist II	6741	CTECS Workplace Readiness
Office Specialist III	6742	CTECS Workplace Readiness
Plumbing I	8551	CTECS Workplace Readiness

<b>Course Title</b>	<b>Course</b>	<b>Industry Credential Offered</b>
Principles of Biomedical Science (PLTW)	8379	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Principles of Business and Marketing	6115	CTECS Workplace Readiness
Principles of Engineering (PLTW)	8441	Project Lead the Way (PLTW) End of Course Test or CTECS Workplace Readiness
Production Systems	8447	CTECS Workplace Readiness
Programming I	6640	CTECS Workplace Readiness
Programming I DE	6640DE	CTECS Workplace Readiness
Programming II	6641	CTECS Workplace Readiness
DE Programming II	6641DE	CTECS Workplace Readiness
STAT Programming	6640S	CTECS Workplace Readiness
Small Engine Technology I	8725	CTECS Workplace Readiness
Small Engine Technology II	8726	CTECS Workplace Readiness
Sports and Entertainment Marketing	8175	CTECS Workplace Readiness
Sports and Entertainment Management	8177	CTECS Workplace Readiness
Technical Drawing and Design	8435	CTECS Workplace Readiness
Television and Media Production I	8688	CTECS Workplace Readiness
Television and Media Production II	8689	CTECS Workplace Readiness
Television and Media Production III	8690	CTECS Workplace Readiness

## Career and Technical Education Courses

---

Note: Number of credits indicates the number of instructional blocks in which instruction is delivered.

### **9062DE DE VIRGINIA TEACHERS FOR TOMORROW I**

**Grades 11**

**1 Credit**

*Please refer to Teachers for Tomorrow Pathway*

Teachers for Tomorrow (TfT) is an approved Virginia Department of Education (VDOE) program offered to high school juniors and seniors interested in pursuing a career in education. The program is designed to attract high school students to the field of education through exposure to a world-class curriculum and hands-on experience that focuses on teaching. This course sequence provides an overview of the development of human beings from birth to adolescence to explore K-12 education. Students build a foundation for the structure and governance of teaching, and how to apply professional teaching techniques in the classroom.

### **9072DE DE VIRGINIA TEACHERS FOR TOMORROW II**

**Grades: 12**

**1 Credit**

*Prerequisite: DE Virginia Teachers for Tomorrow I*

Students will continue to explore careers in Education and Training. The primary focus of the class is to act as the teacher applying teaching methods and strategies previously learned. This course allows students to prepare for careers in education as they research post-secondary options, learn about the teacher certification process, and participate in a practicum experience. **NOTE: Stafford Schools will offer a letter of intent to hire students who successfully complete this program, complete a College/University Education program, and are eligible to earn a teacher license.**

## **Junior Reserve Officer Training Corps (JROTC)**

Stafford Schools offers Junior Reserve Officer Training Corps (JROTC) programs for four branches of the United States Military. Students interested in participating in JROTC can only enroll in the branch offered at their high school.

### **Air Force JROTC (Housed at North Stafford High School)**

Aerospace Science (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. The basic history course is taught every year, and the advanced courses are rotated annually.

Leadership Education (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.

### **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**

***Prerequisite: Air Force Military Science I***

This advanced course is designated to acquaint the student with the aerospace environment, the human requirements of flight, principles of aircraft flight, and principles of navigation. The course begins with a discussion of the atmosphere and weather. After developing an understanding of the environment, how that environment affects flight is introduced. Discussions include the forces of lift, drag, thrust, and weight. Students also learn basic navigation including map reading, course plotting, and the effects of wind. The portion on the Human Requirements of Flight contains information on human physiology. The leadership portion of the course concentrates on Life Skills and Career Opportunities. Topics include choosing one's path, job searching, financial planning, and career opportunities. AS III cadets serve as trainers in class and are encouraged to serve on Group Staff.

### **7918AF AIR FORCE MILITARY SCIENCE III**

**Grades 10-12**

**1 Credit**

***Prerequisite: Air Force Military Science II***

This science course includes up-to-date information in space science and space exploration. The course begins with the interest in astronomy and early ideas of the heavens, through the Renaissance, and on to modern astronomy. It provides an in-depth study of the Earth, Sun, stars, Moon, and solar system, including the terrestrial and the outer planets. It discusses issues critical to travel in the upper atmosphere such as orbits and trajectories, unmanned satellites, and space probes. It investigates the importance of entering space and discusses manned and unmanned space flights, focusing on concepts surrounding spaceflight, space vehicles, launch systems, and space missions. The course covers human aspects of spaceflight, focusing on the human experience in space. It also examines advances in space technology, including robotics in space, the Mars Rover, and commercial uses of space.

### **7919AF AIR FORCE MILITARY SCIENCE IV**

**Grades 10-12**

**1 Credit**

***Prerequisite: 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**

***Prerequisite: Army Military Science I***

The second level of Military Science builds on the first year of instruction. The curriculum focuses on Wellness, Fitness and First Aid where cadets are provided information and strategies needed to take responsibility for their physical and mental wellness, learn how to assess their level of fitness, develop plans for nutrition and exercise improvement habits, and learn strategies to control stress. This unit also helps cadets to make responsible choices about substance use and measures and develop proficiency in providing basic first aid. In Geography, Map Skills, and Environmental Awareness, cadets learn map reading and land navigational skills and develop global awareness as they compare physical, political, economic and cultural elements of continents, regions, and countries.

### **7918AR ARMY MILITARY SCIENCE III**

**Grades 11-12**

**1 Credit**

***Prerequisite: 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**

***Prerequisite: 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 taught 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**

***Prerequisite: Marine Corps Military Science I***

This second course builds on the general introduction provided in Marine Corps I, to further develop the traits of citizenship and leadership in cadets, and to introduce cadets to technical areas of marine science. The course provides ongoing history, communication techniques, disciplined study habits, management skills, first aid, drug abuse prevention, map reading, physical fitness, and workplace readiness skills.

### **7918MC MARINE CORPS MILITARY SCIENCE III**

**Grades 11-12**

**1 Credit**

***Prerequisite: 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**

***Prerequisite: 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 taught during the summer months.

### **7913NA NAVY MILITARY SCIENCE I**

**Grades 9-11**

**1 Credit**

This first course introduces students to the meaning of citizenship, the elements of leadership, and the value of scholarship in attaining life goals; engenders a sound appreciation for the heritage and traditions of America, with recognition that the historically significant role of sea power will be important in America's future; and develops in each cadet a growing sense of pride in his/her organization, associates, and self. These elements are pursued at the fundamental level. The course includes Maritime Geography, Sea Power, Introductions to Navigation, Health Education, First Aid, and Drug, Alcohol, and Tobacco Abuse Prevention.

### **7916NA NAVY MILITARY SCIENCE II**

**Grades 10-12**

**1 Credit**

***Prerequisite: 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**

***Prerequisite: 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**

***Prerequisite: Navy Military Science III***

This fourth course focuses solely on practical leadership. The intent is to assist students in understanding leadership and improving leadership skills through leadership positions, under supervision, then helping them analyze the reasons for their varying degrees of success throughout the year. Classroom activities include seminars, reading assignments, classroom presentations, and practical work with younger cadets. The course curriculum includes instruction in theoretical and applied aspects of leadership, training, and evaluation of performance. Students will become aware of the techniques used to create motivation, develop goals and activities for a work group, and the proper ways to set a leadership example. Cadets will also apply these principles when dealing with younger cadets in the areas of military drill and inspections, athletic events, and in other school activities.

## **Agriculture and Natural Resources**

Future Farmers of America (FFA) is the co-curricular organization for horticulture students.

### **8034 HORTICULTURE SCIENCES**

**Grades 9-12**

**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 Prerequisite: 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 I**

**Grades 11-12**

**1 Credit**

***Recommended Prerequisite: 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***

## **8037 LANDSCAPING II**

**Grades 11-12**

**1 Credit**

**Note: Students must be concurrently enrolled in Landscaping I and Landscaping II.**

***Prerequisite: Landscaping I***

In this course, students will gain practical experiences in landscape design, landscape construction, and landscape maintenance. Students will use technology; plant and soil science; landscaping tools, equipment, and machinery; and business management fundamentals to prepare for a variety of landscaping employment and postsecondary educational opportunities. Students will explore the management of landscape enterprises and continue to develop the soft skills necessary for success in the landscaping industry.

***Schools offering course: NSHS***

## **Business and Information Technology**

Future Business Leaders of America (FBLA) is the co-curricular organization for Business and Information Technology students.

## **6320 ACCOUNTING I**

**Grades 10-12**

**1 Credit**

***Recommended Prerequisite: Digital Applications***

Students study the basic principles, concepts, and practices of the accounting cycle for various business structures with an emphasis on sole proprietorships and partnerships. Students learn fundamental accounting procedures using manual and electronic systems.

## **6321 ACCOUNTING II**

**Grades 11-12**

**1 Credit**

***Prerequisite: Accounting I***

Students gain in-depth knowledge of accounting procedures and techniques used to solve problems and make financial decisions for various business structures with an emphasis on corporations. Students also learn to use accounting and/or spreadsheet software to analyze and interpret business applications.

**6131 BUSINESS LAW****Grades 11-12****1 Credit**

Students examine the foundations of the American legal system by learning concepts related to laws affecting business and individuals. Topics include contracts, individual rights and responsibilities, crimes, law enforcement, and the courts.

**6135 BUSINESS MANAGEMENT****Grades 10-12****1 Credit**

Students study management concepts and leadership styles as they explore business functions, economics, various business structures, and management responsibilities. Supervision, human relations, communication, and employability skills are enhanced.

**6135IB IB BUSINESS MANAGEMENT (SL)****Grades 11 or 12****1 Credit#**

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

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.

**6135DE DUAL ENROLLMENT BUSINESS MANAGEMENT****Grades 10-12****1 Credit#**

This dual enrollment course exposes students to the functions and topics of modern business, including: economics, management, finance, accounting, marketing, production, international business, and small business. Students study management concepts and leadership styles as they explore various business structures and management responsibilities. Supervision, human relations, communication, decision making and employability skills are enhanced in this one year dual enrollment course.

**6612 COMPUTER INFORMATION SYSTEMS I****Grades 9-12****1 Credit****Recommended Prerequisite:** *Digital Applications*

Students use introductory word processing, spreadsheet, database, and presentation software to complete practical application and software integration activities. They explore computer concepts, operating systems, and emerging technologies.

**6613 COMPUTER INFORMATION SYSTEMS II****Grades 10-12****1 Credit****Prerequisite:** *Computer Information Systems I*

Students apply problem solving through advanced word processing, spreadsheet, database, presentation, and integration of software. They learn advanced computer concepts, operating systems, and emerging technologies.

**6302 CYBERSECURITY I****Grades 10-12****1 Credit****Prerequisite:** *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.

### **6304 CYBERSECURITY II**

**Grades 11-12**

**1 Credit**

***Prerequisite: Cybersecurity I***

Cybersecurity Software Operations is designed to teach many aspects of computer support and network administration. Students learn networking concepts, from usage to components, and create peer-to-peer network systems and client server networks. Students learn how to install and configure network cards and connect them to networks; to install the operating systems; to create, set up, and manage accounts; to load software; and to establish, implement, and maintain network integrity security plans. This course may cover software-based network operating systems, such as Windows Server or Linux, to prepare students with a foundation in computer network administration.

### **6306 CYBERSECURITY III**

**Grades 11-12**

**1 Credit**

***Prerequisite: Cybersecurity II***

Students explore security analysis and network security, monitoring and detecting security incidents in information systems and networks. The course introduces tools and tactics to manage cybersecurity risks, identify common threats, evaluate an organization's security, collect and analyze cybersecurity intelligence, and handle cybersecurity incidents. Students will understand threats, attacks and vulnerabilities, architecture and design considerations in a business environment, implementation of security operations, risk and incident response, ethics, and cryptography. Instruction will emphasize preparation for industry certification.

***Schools offering course: CFHS***

### **6660 DATABASE DESIGN AND MANAGEMENT**

**Grades 10-11**

**1 Credit**

***Prerequisite: Information Technology Fundamentals***

This course includes database design and Structured Query Language (SQL) programming. Students study database fundamentals, including database development, modeling, design, and normalization. In addition, students are introduced to database programming with SQL. Students gain the skills and knowledge needed to use features of database software and programming to manage and control access to data.

***Schools offering course: BPHS***

### **6630 DESIGN, MULTIMEDIA, AND WEB TECHNOLOGIES I**

**Grades 10-12**

**1 Credit**

***Recommended Prerequisite: Digital Applications or Computer Information Systems I***

Students develop skills in creating desktop publications, multimedia presentations/projects, and websites using industry standard application software. Students incorporate principles of layout and design in completing publications and projects.

### **6631 DESIGN, MULTIMEDIA, AND WEB TECHNOLOGIES II**

**Grades 10-12**

**1 Credit**

***Prerequisite: Design, Multimedia, and Web Technologies I***

Students develop advanced skills in creating interactive media, websites, and publications for print and electronic distribution. Students design portfolios that may include business cards, newsletters, mini-pages, webpages, multimedia presentations/projects, calendars, and graphics.

## **6611 DIGITAL APPLICATIONS**

**Grades 9-12**

**1 Credit**

This course is designed for secondary school students to develop real-life, outcome-driven approach skills for digital citizenship, basic computer operations, keyboarding, application software (word processing, spreadsheets, multimedia applications, databases), and career exploration. This course promotes skills that can be applied across the curriculum and offers preparation relevant to 21st century skills and post-secondary education.

## **6120 ECONOMICS AND PERSONAL FINANCE (also listed under History and Social Sciences)**

**Grades 10-12**

**1 Credit**

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

## **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**

***Prerequisite: Database Design and Management***

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: BPHS and CFHS***

## **6115 PRINCIPLES OF BUSINESS AND MARKETING**

**Grades 9-10**

**1 Credit**

Students explore the roles of business and marketing in the global economy. They learn to make decisions as consumers, wage earners, and citizens. Students will also enhance their interpersonal, communication, and employability skills.

## **6640 PROGRAMMING I**

**Grades 10-12**

**1 Credit**

***Recommended Prerequisite: Information Technology Fundamentals Digital Applications or Computer Information Systems I***

Students explore computer concepts, use logic procedures, and implement programming procedures using one or more programming languages, such as Visual Basic. In addition, HTML is used to program Web pages.

### **6640DE DUAL ENROLLMENT PROGRAMMING I**

**Grades 10-12**

**1 Credit#**

***Recommended Prerequisite: Information Technology Fundamentals***

This dual enrollment course provides an exploration of construction, algorithm development, coding, debugging, and documentation of console and graphical user interface applications, principles and practices of software development. Includes instruction in critical thinking, problem solving skills, and essential programming logic in structured and object-oriented design using contemporary tools.

***Schools offering course: BPHS and CFHS***

### **6641 PROGRAMMING II**

**Grades 11-12**

**1 Credit**

***Prerequisite: Programming I***

Building on a foundation of programming skills, students will use object-oriented programming to develop applications for Windows, database, multimedia, games, mobile, and/or Web environments. Students will have the opportunity to explore and create applications related to the information technology and game design industries.

### **6641DE DUAL ENROLLMENT PROGRAMMING II**

**Grades 11-12**

**1 Credit#**

***Prerequisite: Programming I or DE Programming I***

Dual Enrollment courses that provide skills for solving complex problems and working with advanced topics using object-oriented programming. Topics include data structures, graphical user interfaces, simple database connectivity, sorting, and searching.

### **6640S STAT PROGRAMMING**

**Grades 10-12**

**1 Credit**

***Recommended Prerequisite: Information Technology Fundamentals***

This speciality course is exclusive to the STAT Information Technology cohort. This course teaches the fundamentals of programming through computer concepts, use logic procedures, and implement programming procedures using one or more programming languages. Students use object-oriented programming to develop database applications, interactive multimedia applications including game applications, mobile applications, and web applications. Students continue to develop their employability skills as they research pathways for continuing education and careers in the information technology industry.

***School offering course: BPHS***

## **Marketing**

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

### **9085 EMPLOYMENT FOR EDUCATION I**

**Grades 9-11**

**1 Credit**

***Prerequisite: Application and Interview***

This course is available to 9th, 10th and 11th grade students to complete an application and interview process, and if selected, will be enrolled by their case manager. The course enables students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students will learn ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self-advocacy, customer-service, and life skills. Students explore labor market needs through an applied employment education format and may participate in work-based learning experiences.



**8140 FASHION MARKETING I****Grades 10-12****1 Credit*****Recommended Prerequisite: Interest in fashion career***

Students develop general marketing skills necessary for successful employment in fashion marketing, general marketing skills applied to the apparel and accessories industry, and specialized skills unique to fashion marketing. Personal selling, sales promotion, purchasing, physical distribution, market planning, and product/ service technology are part of this course.

**8145 FASHION MARKETING II****Grades 11-12****1 Credit*****Prerequisite: Fashion Marketing I***

Students with a career interest in fashion marketing gain in-depth knowledge of the apparel and accessories industry and skills important for supervisory-management employment in apparel businesses. They develop advanced skills unique to fashion marketing and advanced general marketing skills applied to the apparel and accessories industry. Professional selling, sales promotion, buying, merchandising, marketing research, product/ service technology, and supervision related to the content are part of this course.

**8120 MARKETING****Grades 10-12****1 Credit**

Students are introduced to the functions and foundations involved in the marketing of goods, services, and ideas and achieve the skills necessary for successful marketing employment. Students study risk management, selling, promotion, pricing, purchasing, marketing-information management, product/service planning, distribution, and financing. Foundation skills include economics, human resources, and marketing and business abilities necessary for success in marketing occupations.

**8130 STRATEGIC MARKETING****Grades 11-12****1 Credit*****Recommended Prerequisite: Marketing***

Students learn to leverage marketing activities to best differentiate themselves and their businesses. Students will also participate in supervisory and management activities focusing on the marketing mix, purchasing, financing, human resources, global marketing, pricing, distribution, selling, operations research, and promotion. Students will prepare for marketing careers and postsecondary education, continuing to enhance self-presentation, communication, and leadership skills. Students may participate in work-based learning and DECA co-curricular events as a part of the course.

**8175 SPORTS AND ENTERTAINMENT MARKETING****Grades 10-12****1 Credit**

Students are introduced to the functions and foundations involved in the marketing of goods and services as they relate to the sports, entertainment, and recreational marketing field. Students develop skills in the areas of marketing analysis, event marketing, communications, and human relations.

**8177 SPORTS AND ENTERTAINMENT MANAGEMENT****Grades 11-12****1 Credit*****Prerequisite: Sports and Entertainment Marketing***

Students will continue their study of the sports, entertainment, and recreation (SER) industry including the impact of electronic commerce and international marketing in this area. Other topics include market research, market segmentation, and sponsorship as well as planning, implementing, and evaluating SER events, working with agents and personal managers, and appraising the role of labor unions in SER. Additional study will be focused on developing a career plan in the sports, entertainment, and recreation area.



## Health and Medical Sciences

HOSA-Future Health Professionals is the co-curricular organization for Health and Medical Sciences students.

### 8333 EMERGENCY MEDICAL TECHNICIAN I

Grades 11-12

1 Credit

*Recommended Prerequisite: Introduction to Health and Medical Sciences, and /or Biology II: Anatomy and Physiology*

This program is accredited by the Virginia Office of Emergency Medical Services (OEMS) and requires students to be 16 years of age by the first day of school, provide documentation of immunizations and a negative drug screen, capability to read technical reading level of at least grade 10, and a social security number. For detailed information on OEMS requirements, please refer to the Emergency Medical Technician pathway in the "Other Secondary Programs" section of this document. In these courses, students become skilled in identifying and dealing with emergencies such as bleeding, fractures, airway obstruction, and cardiac arrest. Instruction emphasizes proper care and use of common emergency equipment and safe methods for lifting, moving, and transporting injured persons. Supervised on-the-job training and patient-care experiences are part of the instructional program. Program completers may take the EMT state certification examination administered by the Virginia Department of Health. Students are encouraged but not required to consider membership with a volunteer rescue organization. NOTE: The EMT courses require students to devote time outside the school day to participate in related activities occurring in the evening and on weekends. Cardiopulmonary Resuscitation (CPR) certification is required prior to the start of class through AHA Healthcare provider or ARC Professional Cardiopulmonary Resuscitation.

**Schools offering course: CFHS, SHS**

### 8334 EMERGENCY MEDICAL TECHNICIAN II

Grades 11-12

1 Credit

**Note: See description for EMT I above. Students must be concurrently enrolled in EMT I and EMT II.**

*Prerequisite: EMT I*

**Schools offering course: CFHS, SHS**

### 8335 EMERGENCY MEDICAL TECHNICIAN III

Grade 12

1 Credit

*Prerequisite: EMT II*

EMT III is designed as a preparatory course for higher levels of EMS training such as Advanced EMT and Paramedic. Coursework builds on material from EMT I/II; more in-depth lessons on patient assessments techniques, disease processes, and pharmacology are included. Advanced skills including ECG interpretation and advanced airway management are learned. Additionally, students will be introduced to EMS education and teaching methodology. Students will re-certify in Healthcare Provider CPR, and have the opportunity to earn additional certifications as part of the course. Students will earn all Continuing Education hours required for EMT recertification.

**Schools offering course: CFHS**

### 8337 EMERGENCY MEDICAL TELECOMMUNICATIONS

Grades 10-12

1 Credit

Emergency Medical Telecommunications is designed to develop entry-level skills needed in a telecommunication environment for rescue, fire, and police. The course provides the beginning telecommunicator with an understanding of situations encountered in an emergency communications environment. Upon completion, the student will be able to: summarize issues involving the telecommunication's role and responsibilities as a member of health and public safety environment; summarize issues involving available resources to a telecommunicator; the importance of maintaining confidentiality, liability and legal issues involving emergency telecommunicators and their agencies; summarize the process of stress management for inside and outside a communications department/center.

**Schools offering course: CFHS, MVHS, SHS**

### **8308 HEALTH INFORMATICS**

**Grades 10-12**

**1 Credits**

**Recommended Prerequisite:** *Introduction to Health and Medical Sciences*

Students will have the opportunity to explore the importance of safeguarding electronic healthcare information. Students will be introduced to the various technologies and trends that affect the healthcare industry. Students will explore aspects of health informatics to include the history of health information technology (IT) in the United States, the Electronic Health Record (EHR), ethical and privacy issues, and cybersecurity and data breaches.

**Schools offering course:** *BPHS*

### **8302 INTRODUCTION TO HEALTH AND MEDICAL SCIENCES**

**Grades 9-12**

**1 Credit**

This course emphasizes the development of basic skills common to health care. Students explore the diverse opportunities available in the healthcare industry, as well as the educational requirements, personal characteristics, and professional responsibilities for specific fields of interest. The anatomy, physiology, and pathophysiology of the human body, medical terminology, infection control, and legal, ethical, and consumer issues pertaining to health care are studied. CPR and First Aid certifications are obtained. This course is designed for any student interested in any aspect of the healthcare industry.

### **8345 MEDICAL ASSISTANT I**

**Grades 11**

**2 Credits**

**Recommended Prerequisite:** *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*

### **8346 MEDICAL ASSISTANT II**

**Grades 12**

**2 Credits**

**Note:** *May be concurrently enrolled with Medical Assistant I*

**Prerequisite:** *Medical Assistant I*

In this course, students apply and implement medical-assisting skills and techniques learned in Medical Assistant I. They learn management of health records, collection and analysis of laboratory specimens, special diagnostic testing related to basic diseases and disorders, and care and use of equipment. Advanced on-the-job clinical experience in a healthcare facility is a part of the course. Successful completion of Medical Assistant I and Medical Assistant II, may lead to employment in a healthcare setting and an industry credential.

**Schools offering course:** *MVHS*

### **8360 NURSE AIDE I**

**Grades 11-12**

**2 Credits**

**Recommended Prerequisite:** *Introduction to Health and Medical Sciences (including clinical experience)*

This course emphasizes advanced skills obtained in a variety of health care facilities under the supervision of an instructor. Communication and interpersonal skills, infection-control, safety and emergency procedures, recognition of changes in body functioning, personal care needs of both the long-term care and acute care patient are studied. The legal aspects of practice as a certified nurse aide and occupational health and safety measures are also included.

Students will be required to purchase a scrub uniform and white shoes without a logo. A description and cost of the uniform will be provided by the instructor during the first week of class. Additional requirements include a watch with a second hand, have a negative PPD (Tuberculosis screening test), a urine drug screen test, flu shot, TB test, and receive a COVID-19 vaccine prior to clinical placement. All screenings, tests and vaccines must be dated after August of the school year they are entering. This course is approved by the State Board of Nursing and will qualify

the student for participation in Virginia Nurse Aide Competency Evaluation Program (required for certification). Transportation to the clinical sites is provided.

**Schools offering course: NSHS**

### **8362 NURSE AIDE II**

**Grades 11-12**

**2 Credits**

**Note:** See description above. Students must be concurrently enrolled in Nurse Aide I and Nurse Aide II.

**Prerequisite:** Nurse Aide I

**Schools offering course: NSHS, BPHS**

## **Family and Consumer Sciences**

Family, Career and Community Leaders of America (FCCLA) is the co-curricular organization for Family and Consumer Sciences students.

### **8232 CHILD DEVELOPMENT AND PARENTING**

**Grades 10-12**

**1 Credit**

Students focus on assessing the impact of the parenting role in society, taking responsibility for individual growth within the parenting role, preparing for a healthy emotional and physical beginning for parent and child, and meeting developmental needs of children and adolescents.

### **8275 CULINARY ARTS I**

**Grades 10-11**

**2 Credits**

**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.

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. Culinary courses require students to participate in learning experiences outside the school day including evenings and weekends.

**Schools offering course: BPHS, MVHS, SHS**

### **8276 CULINARY ARTS II**

**Grades 11-12**

**2 Credits**

**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.

**Prerequisite:** Culinary Arts I

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. Culinary courses require students to participate in learning experiences outside the school day including evenings and weekends.

**Schools offering course: BPHS, MVHS, SHS**

### **8279 CULINARY ARTS SPECIALIZATION**

**Grade 12**

**2 Credits**

**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 teacher prior to enrollment to determine an area of specialization.

**Prerequisite:** Culinary Arts II and pass the Culinary Arts II end-of-the-year assessment

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. Culinary courses require students to participate in learning experiences outside the school day including evenings and weekends.

**Schools offering course: BPHS, MVHS, SHS**

### **8285 EARLY CHILDHOOD, EDUCATION, AND SERVICES I**

**Grades 10-11**

**2 Credits**

Students prepare for employment or continued education in the field of childcare and early childhood education. Emphasis will be placed on development, implementation, and evaluation of learning activities through first-hand experiences working with young children in an on-site lab setting.

**Schools offering course: BPHS, NSHS**

### **8286 EARLY CHILDHOOD, EDUCATION, AND SERVICES II**

**Grades 11-12**

**2 Credits**

**Prerequisite: Early Childhood, Education, and Services I**

This course is an extension of Early Childhood Education I. It is recommended for those students interested in child-related careers. Emphasis will be placed on occupational functions of early childhood educators. Students continue to obtain on-site lab experiences. Students expand their knowledge of legal, ethical, and education and training requirements for early childhood professionals. Reviewing knowledge, skills, and aptitudes required for careers in early childhood careers and creating a professional portfolio assist students with demonstrating college and career readiness.

**Schools offering course: BPHS, NSHS**

### **8225 FAMILY RELATIONS**

**Grades 9-12**

**1 Credit**

Students enrolled in Family Relations focus on identifying factors that build and maintain relationships, developing communication patterns that enhance family, friend, and work-related relationships, dealing effectively with family and peer stressors and conflicts.

### **8248 INTRODUCTION TO FASHION CAREERS**

**Grades 9-12**

**1 Credit**

Students in Introduction to Fashion Careers focus on identifying and exploring the individual careers within the apparel, accessory, and textile design, manufacturing, and merchandising industry. Units of study include the relationships that exist among all areas of the clothing industry; related global and economic issues; apparel, accessory, and textile technology; exploration of careers, including entrepreneurial opportunities in related areas; and the skills and personal characteristics necessary for success in careers in the apparel, accessory, and textile design, manufacturing, and marketing industry.

### **8255 INTRODUCTION TO INTERIOR DESIGN**

**Grades 9-12**

**1 Credit**

The home furnishings and design competencies focus on careers that relate to the elements and principles of design, cultural impact on the environment, decision-making skills for housing and home furnishings, development of artistic skills, and environmental issues. Emphasis will be placed on basic math, science, and communication skills.

### **8227 LIFE PLANNING**

**Grades 9-12**

**1 Credit**

This course equips students with the skills needed to face the challenges of today's society. Students will develop a life- management plan which includes developing career, community, and life connections; healthy relationships; financial planning; and leadership within the community. Critical thinking and practical problem solving are emphasized through relevant life applications.

## **8229 NUTRITION AND WELLNESS**

**Grades 9-12**

**1 Credit**

Students focus on making choices that promote good health, analyzing relationships between psychological and social needs and food choices, choosing foods that promote wellness, obtaining and storing food for self and family, preparing and serving nutritious meals and snacks, selecting and using equipment for food preparation, and identifying strategies to promote optimal nutrition and wellness of society. Teachers highlight the basic skills of math, science, and communication when appropriate in the content.

## **Technology and Engineering Education**

Technology Student Association (TSA) is the co-curricular organization for Technology Education students.

## **8415 COMMUNICATION SYSTEMS**

**Grades 9-12**

**1 Credit**

Communication Systems provides experiences in the fields of imaging technology, graphic productions, video and media, technical design, and various modes of communicating information through the use of data. Students develop critical-thinking and problem-solving skills using the universal systems model. Students also learn about the impact of communication on society and potential career fields relating to communications. High-quality work-based learning (HQWBL) will provide experiential learning opportunities.

**Schools offering course: CFHS**

## **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**

## **8437 ARCHITECTURAL DRAWING AND DESIGN**

**Grades 10-12**

**1 Credit**

**Prerequisite: 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**

## **8459 DIGITAL VISUALIZATION**

**Grades 10-12**

**1 Credit**

**Recommended Prerequisite: Technical Drawing and Design, Communication Systems or Imaging Technology**

Students will gain experiences related to computer animation by solving problems involving 3D object manipulation, storyboarding, texture mapping, lighting concepts, and environmental geometry. They will produce animations that include interdisciplinary projects related to science, engineering, and the entertainment industry. A major emphasis will be the production of a portfolio that showcases examples of original student work. Students are encouraged to

pursue Technical Drawing and Design, Communication Systems, or Imaging Technology prior to taking this course.

**Schools offering course: CFHS**

### **8450 ENGINEERING EXPLORATIONS**

**Grades 9-11**

**1 Credit**

This course will enable students to examine technology and engineering fundamentals related to solving real-world problems. Students will be exposed to a variety of engineering specialty fields and related careers to determine whether they are good candidates for postsecondary educational opportunities in engineering. Students will gain a basic understanding of engineering history and design, using mathematical and scientific concepts. Students will participate in hands-on projects in a laboratory setting as they communicate information through team-based presentations, proposals, and technical reports.

**Schools offering course: CFHS, MVHS, SHS**

### **8451 ENGINEERING ANALYSIS AND APPLICATION**

**Grades 10-12**

**1 credit**

**Prerequisite: Engineering Explorations**

Engineering Analysis and Applications is the second of a possible four-course sequence that will allow students to apply the engineering design process to areas of the designed world and examine engineering systems. Students will participate in STEM-based, hands-on projects as they communicate information through team-based presentations, proposals, and technical reports.

**Schools offering course: SHS**

### **8452 ENGINEERING CONCEPTS AND PROCESSES**

**Grades 11-12**

**1 Credit**

**Prerequisite: Engineering Analysis and Applications**

This course is the third course in a possible four-course sequence for students 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.

**Schools offering course: SHS**

### **8436 ENGINEERING DRAWING AND DESIGN**

**Grades 10-12**

**1 Credit**

**Prerequisite: Technical Drawing and Design**

In this course students 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.

**School offering course: BPHS, CFHS, MVHS, NSHS**

### **8453 ENGINEERING PRACTICUM**

**Grades 12**

**1 Credit**

**Prerequisite: Engineering Analysis and Applications, Engineering Studies or Engineering Concepts and Processes**

This course will enable students to examine technology and engineering fundamentals related to solving real-world problems. Students examine ethics and intellectual property and design a practicum project, a culmination of knowledge and skill gained in the previous engineering courses. In addition, students continue to investigate engineering specialty fields and related careers to determine whether they are good candidates for postsecondary educational opportunities in engineering. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills.



**Schools offering course: SHS**

### **8491 ENGINEERING STUDIES**

**Grades 10-12**

**1 Credit**

***Prerequisite: Engineering Explorations***

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.

***Schools offering course: CFHS, MVHS***

### **8455 IMAGING TECHNOLOGY**

**Grades 9-12**

**1 Credit**

***Prerequisite: Communication Systems***

This course covers the principles of design in the creation of images. Students explore the development of imaging as a communication medium and its evolution into the digital realm. Image-editing software allows students to enhance images and develop a portfolio. Investigation focuses on career exploration and the application of photographic and imaging technology across various industries.

***Schools offering course: CFHS***

### **8425 MANUFACTURING SYSTEMS I**

**Grades 9-12**

**1 Credit**

This course provides an orientation to careers in various fields of manufacturing. Emphasis will be placed on the major systems in manufacturing, including design, working drawings, manufacturing processes, material handling, production planning, measurement systems, labor issues, occupational safety, and quality control. Students participate in teams and produce manufacturing projects that demonstrate critical elements of manufacturing systems.

***Schools offering course: BPHS, MVHS***

### **8427 ADVANCED MANUFACTURING SYSTEMS II**

**Grades 10-12**

**1 Credit**

***Prerequisite: 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, MVHS***

### **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***

### **Project Lead The Way (PLTW)**

Project Lead The Way, a project-based curriculum designed to engage students in problem solving and STEM

learning. 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). Project Lead the Way courses are weighted as 0.50 additional credit (this includes both Biomedical and Engineering).

### **8439 INTRODUCTION TO ENGINEERING DESIGN - PLTW**

**Grades 9-11**

**1 Credit#**

***Prerequisite: Algebra I***

PLTW Engineering Program introduces students to engineering tools and problem-solving. Through an activity-project-problem-based (APB) approach, students move from structured activities to open-ended projects, applying the engineering design process, math, and science to real-world problems. Working individually and in teams, they document their solutions using engineering notebooks and 3D modeling software. This course is rigorous and fast-paced.

***Schools offering course: NSHS STAT Engineering***

### **8428 AEROSPACE ENGINEERING – PLTW**

**Grades 10**

**1 Credit#**

***Prerequisite: Introduction to Engineering Design***

Aerospace Engineering (AE) dives into the world of flight and space. Students learn how things fly in the air and space by designing and testing parts like wings, engines, and rockets. In addition, students will also use industry-standard software to model orbits and explore how aerospace ideas apply to things like wind turbines and parachutes. Get ready for a challenging and fast-paced course.

***Schools offering course: NSHS STAT Engineering***

### **8440 DIGITAL ELECTRONICS – PLTW**

**Grades 10-12**

**1 Credit#**

***Prerequisite: Introduction to Engineering Design***

In this course, students study electronic circuits that are used to process and control digital signals. The major focus of the DE course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation. In this activity-project-problem-based (APB) course, students will analyze, design, and build digital electronic circuits. While implementing these designs, students will continually hone their professional skills, creative abilities, and understanding of the circuit design process.

***Schools offering course: NSHS STAT Engineering***

### **8430 CIVIL ENGINEERING AND ARCHITECTURE – PLTW**

**Grades 11-12**

**1 Credit#**

***Prerequisites: Algebra II or concurrent enrollment and Digital Electronics or Aerospace Engineering***

This course covers building and site design. Students use mathematics, science, and engineering practices to design residential and commercial projects, documenting their work with 3D architectural software. The course is project-based, moving from structured activities to open-ended problems, and includes both individual and collaborative projects. This accelerated course incorporates engineering calculations, technical documentation, and the use of 3D modeling software.

***Schools offering course: NSHS STAT Engineering***

### **8442 COMPUTER INTEGRATED MANUFACTURING – PLTW**

**Grades 11-12**

**1 Credit#**

***Prerequisite: Algebra II or concurrent enrollment and Digital Electronics or Aerospace Engineering***

The course deepens the skills and knowledge of an engineering student. Students build upon their Computer Aided Design (CAD) experience through the use of Computer Aided Manufacturing (CAM) software. CAM transforms a



digital design into a program that a Computer Numerical Controlled (CNC) mill uses to transform a block of raw material into a product designed by a student. Students learn and apply concepts related to integrating robotic systems such as Automated Guided Vehicles (AGV) and robotic arms into manufacturing systems.

**Schools offering course: NSHS STAT Engineering**

#### **8441 PRINCIPLES OF ENGINEERING - PLTW**

**Grades 11-12**

**1 Credit#**

**Prerequisite: Algebra II or concurrent enrollment and Digital Electronics or Aerospace Engineering**

Principles of Engineering (POE) introduces students to engineering concepts across multiple disciplines, equipping them with technical skills in 3D modeling, prototyping, programming, and robotics. Students apply the engineering design process to real-world problems in areas like robotics, infrastructure, and sustainability. Through an activity-project-problem-based (APB) approach, they move from structured tasks to open-ended projects, developing skills in technical documentation, problem-solving, critical thinking, collaboration, and communication.

**Schools offering course: NSHS STAT Engineering**

#### **8443 ENGINEERING DESIGN AND DEVELOPMENT – PLTW**

**Grade 12**

**2 Credits#**

**Prerequisite: Civil Engineering and Architecture, Computer Integrated Manufacturing, or Principles of Engineering**

PLTW Capstone is an open-ended research course where student teams design and develop an original solution to a well-defined problem. Teams research, define, and justify their problem, create design requirements, and explore multiple solutions before selecting, testing, and modeling their prototype. Throughout the process, students work with experts, enhancing their organizational, communication, and problem-solving skills. The course culminates with teams presenting their solution at Capstone Night.

**Schools offering course: NSHS STAT Engineering**

#### **8379 PRINCIPLES OF BIOMEDICAL SCIENCE – PLTW**

**Grades 9-11**

**1 Credit#**

**Prerequisite: Biology or concurrent enrollment**

This course is designed to provide an overview of all the courses in the Biomedical Science Program and to lay the scientific foundation necessary for student success in the subsequent courses. Students explore concepts of human medicine, research processes, bioinformatics and human physiology. Hands-on projects enable students to investigate human body systems and various health conditions, including heart disease, diabetes, sickle cell disease and infectious diseases. Over the length of the course, students work together to investigate a crime scene and analyze autopsy reports in order to determine the factors that led to the death of a fictional person. After pinpointing those factors, the students investigate lifestyle choices and medical treatments that might have prolonged the person's life. The key biological concepts embedded in the curriculum include homeostasis, metabolism, inheritance of traits and DNA, feedback systems, and defense against disease.

**Schools offering course: BPHS**

#### **8380 HUMAN BODY SYSTEMS - PLTW**

**Grades 10-12**

**1 Credit#**

**Prerequisite: Principles of Biomedical Sciences and Biology**

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: BPHS, NSHS**

### **8381 MEDICAL INTERVENTIONS - PLTW**

**Grades 11-12**

**1 Credit#**

***Prerequisite: Human Body Systems***

***Recommended Prerequisite: AP Biology or Chemistry Honors or concurrent enrollment in either course***

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***

### **8382 BIOMEDICAL INNOVATION - PLTW**

**Grade 12**

**1 Credit#**

***Prerequisite: Medical Interventions***

***Recommended Prerequisite: Physics or AP Physics***

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***

## **Trade and Industrial Education**

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

### **8676 AUTO BODY TECHNOLOGY I – COLLISION AND REPAIR**

**Grades 10-11**

**2 Credits**

Students are taught non-structural analysis, damage repair, and welding. Students learn body and frame construction, and the use of hand and power tools. Students work with a variety of materials, using metal finishing and body filling techniques to prepare surfaces and repair panels. Students learn automotive history, practice shop safety, gain career skills, and use custom techniques. This course is taught by Automotive Service Excellence (ASE) certified instructors.

***Schools offering course: NSHS***

### **8677 AUTO BODY TECHNOLOGY II – PAINTING AND REFINISHING**

**Grades 11-12**

**4 Credits**

***Prerequisite: Auto Body Technology I***

In this course, students are taught to repair, mask, and refinish auto body components and entire vehicles. In addition, they use spray guns and personal safety equipment, apply undercoats and topcoats, work with a variety of materials, and gain career skills. Students continue to improve skills in welding and body repair. This course is taught by Automotive Service Excellence (ASE) certified instructors.

***Schools offering course: NSHS***

## **8678 AUTO BODY TECHNOLOGY III – COLLISION AND REPAIR AND PAINTING AND REFINISHING**

**Grade 12**

**4 Credits**

***Prerequisite: Auto Body Technology II***

Students further apply the tasks/competencies learned in Auto Body Technology I and II. This course may also be used as a capstone course in which students may perfect their auto body skills and move toward employment in the industry. Students who successfully complete this program sequence will be prepared to take and pass the respective ASE exam. This course is taught by Automotive Service Excellence (ASE) certified instructors.

***Schools offering course: NSHS***

## **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. This course is taught by Automotive Service Excellence (ASE) certified instructors.

***Schools offering course: BPHS, NSHS***

## **8507 AUTOMOTIVE TECHNOLOGY II**

**Grades 11-12**

**2 Credits**

***Prerequisite: 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. This course is taught by Automotive Service Excellence (ASE) certified instructors.

***Schools offering course: BPHS, NSHS***

## **8508 AUTOMOTIVE TECHNOLOGY III**

**Grade 12**

**2 Credits**

***Prerequisite: Automotive Technology II***

Students will continue to master skills related to suspension and steering, brakes, electrical/ electronic systems, and engine performance. This course is taught by Automotive Service Excellence (ASE) certified instructors.

***Schools offering course: BPHS, NSHS***

## **8743 MASTER BARBERING I**

**Grade 11**

**3 Credits**

***Prerequisite: Regular attendance is required in order to meet the clinical lab hours. This course adheres to the requirements of the Virginia Board of Cosmetology.***

Barbering is the study of hair, scalp, and skin. Students study and prepare in a clinical lab setting, using mannequins and live models for manipulative practice. The program emphasizes safety and sanitation, communication, and management skills. Related areas of study include physiology, ethics, and professional image. Students develop skills in hair shaping, finger waves, and face shaving. Students also learn the principles of sterilization, sanitation, and bacteriology. Successful completion of required state competencies and hours prepare the students for the Master Barbering II program. Must have a score of 70% or higher to advance on to Master Barbering II.

***Schools offering course: MVHS***

## **8744 MASTER BARBERING II**

**Grades 11-12**

**4 Credits**

***Prerequisite: Passing score of 70% Barbering I and regular attendance is required to meet clinical hours. This course adheres to the requirements of 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 11-12**

**2 Credits**

***Prerequisite: Cabinetmaking I***

Students continue to learn workshop and tool safety and enhance their employability skills as they interpret blueprints; estimate and select materials; cut and shape stock; assemble, fasten, and install components; install interior finishes; apply wood veneers and plastic laminates; finish surfaces; and transport and install cabinets. The technical, problem-solving, leadership, and creative skills learned in Cabinetmaking can be applied in industries well beyond construction trades and professions and can prepare the student for lifelong learning and success.

***Schools offering course: NSHS***

## **8601 CARPENTRY I**

**Grades 10-11**

**BPHS – 1 Credit**

**SHS – 2 Credits**

***Recommended Prerequisite: Introduction to Construction Trades***

Instruction in this course includes the theory and practical application of blueprints and building plans, estimating materials, and finishing of a structure. Proper use of power tools will be demonstrated. Students must successfully complete the 10-hour OSHA Safety Course and comply with OSHA standards throughout the course to be eligible for Carpentry II. Students enrolled at Stafford High School are provided the opportunity to work on the construction of a new home through the Bringing Occupational Opportunities to Students (BOOTS) program.

***Schools offering course: BPHS, SHS***

## **8602 CARPENTRY II**

**Grades 11-12**

**2 Credits**

***Prerequisite: Carpentry I***

This course includes instruction in the skills that provide additional practical experiences related to the complete structural aspect of a building or dwelling and its finishing work. Students will be expected to comply with all OSHA and class safety practices. Students enrolled at Stafford High School are provided the opportunity to work on the construction of a new home through the Bringing Occupational Opportunities to Students (BOOTS) program.

***Schools offering course: BPHS, SHS***

**8603 CARPENTRY III****Grades 12****2 Credits*****Prerequisite: Carpentry II***

This course expands on Carpentry I and II. Students may participate in a work-based learning experience constructing 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 INTRODUCTION TO CONSTRUCTION TRADES****Grades 9****1 Credit**

This introductory course is for students interested in a construction career. Introduction to Construction Trades prepares them to build structures using materials like metal, wood, stone, and concrete. Students rotate through five construction trades, learning National Center for Construction Education & Research (NCCER) core safety components while exploring residential construction and design processes.

***Schools offering course: SHS*****8745 COSMETOLOGY I****Grades 11****3 Credits*****NOTE: (Grade 10, if space available)******Prerequisite: Regular attendance is required in order to meet the clinical lab hours. This course adheres to the requirements of the Virginia Board of Cosmetology.***

In this course, students study and prepare in a clinical lab setting, using mannequins, and live models for skill practice. Students develop skills in hair shaping, finger waves, manicuring, and pedicures. Related areas of study include physiology, ethics, and professional image. Students also learn the principles of sterilization, sanitation, and bacteriology. They develop required safety procedures and study professional ethics. Regular attendance is essential to be successful in this program.

***Schools offering course: MVHS, SHS*****8746 COSMETOLOGY II****Grades 12****4 Credits*****Prerequisite: Passing score of 70% Cosmetology I and regular attendance is required to meet clinical hours. This course adheres to the requirements of the Virginia Board of Cosmetology.***

Students develop skills and technical knowledge relating to hair coloring, hair pressing, facials, cosmetic make-up, and selection of commercial materials. Beauty salon management procedures are also studied. Upon successful completion of 525 required state competencies and 840 hours, students are prepared to take the Virginia Board of Cosmetology licensing exam.

***Schools offering course: MVHS, SHS*****8702 CRIMINAL JUSTICE I****Grades 11****1 Credit**

Students learn the principles, techniques, and practices for pursuing careers within the criminal justice services system. Also provided in this course is an overview of the conflicts, coordination, and interdependency of the major components of the criminal justice system.

***Schools offering course: BPHS, MVHS, NSHS***

## **8703 CRIMINAL JUSTICE II**

**Grades 12**

**2 Credits**

***Prerequisite: 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, MVHS, NSHS***

## **8530 DRAFTING: 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.

***Schools offering course: SHS***

## **8531 DRAFTING: MECHANICAL**

**Grades 10-12**

**2 Credits**

***Prerequisite: Drafting Fundamentals***

This course focuses on creating mechanical drawings for manufacturing purposes. New skills learned include developing auxiliary views, reading tolerances, applying and interpreting weld symbols, specifying fasteners, additive manufacturing (3D printing) and the logic of mechanical assembly. Using 2D and 3D computer-aided design (CAD) software is integral to this course. Portfolio projects will be interspersed throughout the course, culminating in a design project of the student's own design solutions. All students will take the ADDA International Drafter Certification Exam as part of this program.

***Schools offering course: SHS***

## **8532 DRAFTING: ARCHITECTURAL**

**Grades 11-12**

**2 Credits**

***Prerequisite: Drafting Fundamentals***

This course focuses on the creation of code compliant architectural drawings focusing on residential design. The student learns to prepare site plans, floor and foundation plans, electrical plans, elevations, wall sections and structural details. Both manual and CAD techniques are taught and utilized, with the focus on CAD using Autodesk design software. Portfolio projects will be interspersed throughout the course, culminating with the student's own residential house design. All students will take the ADDA International Architectural Drafter Certification Exam as part of this program.

***Schools offering course: SHS***

## **8562 DRAFTING: ADVANCED**

**Grades 11-12**

**2 Credits**

***Prerequisite: Drafting Fundamentals AND Drafting Mechanical or Drafting Architectural***

Building on competencies taught in Drafting, students master the theory and manipulative skills necessary to produce complete and accurate drawings based on the ideas and sketches of engineers, architects, and designers. Students focus on performing architectural drafting as well as mechanical drafting and design operations, using manual drafting, computer-aided design and drafting (CADD), and additive manufacturing (3D printing) techniques. Students may participate in a work-based learning experience.

***Schools offering course: SHS***



### **8533 ELECTRICITY I**

**Grades 10-11**

**2 Credits**

***Recommended Prerequisite: Introduction to Construction Trades***

Students develop the skills and technical knowledge relating to test equipment, electrical circuits, single phase alternating current, residential wiring, estimating cost of labor and material, low voltage systems, wiring single family dwellings, and the use of the National Electrical Code. Students learn basic electrical terms. Students are provided the opportunity to work on the construction of a new home through the BOOTS program (Bringing Occupational Opportunities to Students). Students must successfully complete the 10-hour OSHA Safety Course and comply with OSHA standards throughout the course to be eligible for Electricity II.

***Schools offering course: SHS***

### **8534 ELECTRICITY II**

**Grades 11-12**

**2 Credits**

***Prerequisite: 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**

**Grades 12**

**2 Credits**

***Prerequisite: 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**

***Prerequisite: Stafford Fire and Rescue and National Fire Protection Association (NFPA) requires students to be at least 16 years old by July 1 and pass the NFPA 1582 medical physical. Additional requirements include parent/guardian consent and CPR, HAZMAT operations, and Mayday Awareness certifications.***

Stafford Schools offers a High School Firefighter program (HSFP) through a partnership with Stafford County Fire and Rescue. Firefighting is one of the most dangerous jobs in the world and, therefore, requires complete discipline and attention to achieving the academic and professional standards necessary to successfully fight live fires, address hazardous-materials incidents, and conduct search-and-rescue operations. This course challenges students academically, mentally, and physically and meets the standards of National Fire Protection Association (NFPA) 1001-2013 leading to Firefighting I certification. Students must enroll in FFI (Semester I) and FFII (Semester II) consecutively in the same year. Firefighting will be offered on an every other day schedule. Counselors must verify students have a plan to meet required credits necessary for graduation before they are eligible to participate in the program. The program is application based and includes stringent requirements by Stafford Fire and Rescue and NFPA. The program is contingent on the availability of funding/staffing.

### **8706 FIREFIGHTING II**

**Grades 11-12**

**2 Credits**

***Note: See description above.***

***Prerequisite: Completion of Firefighting I and passing Certification Exam***

## **8503 HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION I**

**Grades 10-11**

**1 Credit**

***Recommended Prerequisite: Introduction to Construction Trades***

Students are taught to professionally install, repair, and maintain the operating conditions of heating, ventilation, air-conditioning, and refrigeration (HVACR) systems. Students work with piping and tubing, study the principles of heat and electricity, install duct systems, and comply with U.S. Environmental Protection Agency (EPA) regulations.

***Schools offering course: SHS***

## **8512 MASONRY I**

**Grades 10-11**

**2 Credits**

***Recommended Prerequisite: Introduction to Construction Trades***

Students develop skills and technical knowledge for laying block and brick, concrete construction, reading blueprints, completing straight wall and corner work, as well as estimating labor and materials. Students are provided the opportunity to work on the construction of a new home through the BOOTS program (Bringing Occupational Opportunities to Students). Students must successfully complete the 10-hour OSHA Safety Course and comply with OSHA standards throughout the course to be eligible for Masonry II.

***Schools offering course: SHS***

## **8513 MASONRY II**

**Grades 11-12**

**2 Credits**

***Prerequisite: Masonry I***

A continuation of Masonry I, students are given additional instruction in the knowledge and skills of mixing and pouring concrete, building arches and columns, stone masonry and required competencies for masonry workers. Students are provided the opportunity to work on the construction of a new home through the Bringing Occupational Opportunities to Students (BOOTS) program. OSHA and class safety practices are mandatory and enforced.

***Schools offering course: SHS***

## **8514 MASONRY III**

**Grades 12**

**2 Credits**

***Prerequisite: Masonry II***

This course expands on Masonry I and II. Students may participate in a work-based learning experience constructing a new home through the Bringing Occupational Opportunities to Students (BOOTS) program. Fundamentals of construction management will be emphasized, including planning, estimating and problem solving on an actual construction job site. OSHA and class safety practices are mandatory and enforced. Hilti certification will be offered in addition to a state-approved industry credential.

***Schools offering course: SHS***

## **8551 PLUMBING I**

**Grades 10-11**

**1 Credit**

***Recommended Prerequisite: Introduction to Construction Trades***

Students are introduced to the plumbing profession and practice mathematical calculations required for plumbing systems. They learn to safely assemble, install, and repair pipes and fittings, and are introduced to installing fixtures of heating, water, and drainage systems, according to specification and plumbing codes.

***Schools offering course: SHS***



### **8725 SMALL ENGINE TECHNOLOGY I**

**Grades 9-12**

**1 Credit**

Students will study the theory, repair and applications of small 4 stroke/cycle internal combustion engines. Students 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**

**Prerequisite: 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**

**Note: Course requires time outside the scheduled class period for activities occurring in the evening and on weekends.**

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.

### **8689 TELEVISION AND MEDIA PRODUCTION II**

**Grades 10-12**

**2 Credits**

**Note: Course requires time outside the scheduled class period for activities occurring in the evening and on weekends.**

**Prerequisite: 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.

### **8690 TELEVISION AND MEDIA PRODUCTION III**

**Grades 11-12**

**2 Credits (280 Hours)**

**Note: Course requires time outside the scheduled class period for activities occurring in the evening and on weekends.**

**Prerequisite: 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.

## **8691 TELEVISION AND MEDIA PRODUCTION INTERNSHIP**

**Grade 12**

**1 Credit**

**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.

**Prerequisite:** *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.

**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
<b>ENGLISH</b>					
<b>GENERAL COURSES</b>					
ALL	1130	English 9	1.0	9	
Center	1130C	Center English 9	1.0	9	
Center	1130HC	Center Honors English 9	1.0	9	
ALL	1130H	Honors English 9	1.0	9	
ALL	1140	English 10	1.0	10	
Center	1140C	Center English 10	1.0	10	
Center	1140HC	Center Honors English 10	1.0	10	
ALL	1140H	Honors English 10	1.0	10	
ALL	1150	English 11	1.0	11	
Center	1150C	Center English 11	1.0	11	
Center	1150HC	Center Honors English 11	1.0	11	
ALL	1150H	Honors English 11	1.0	11	
ALL	1160	English 12	1.0	12	
Center	1160C	Center English 12	1.0	12	
Center	1160HC	Center Honors English 12	1.0	12	
<b>ADVANCED PLACEMENT COURSES</b>					
ALL	1140AP	AP English 10: Seminar	1.0	10	
ALL	1196AP	AP English: Language and Composition	1.0	11	
ALL	1195AP	AP English: Literature and Composition	1.0	12	
<b>DUAL ENROLLMENT COURSES</b>					
ALL	1177DE	DE English Composition	1.0	11-12	
ALL	1198DE	DE English World Literature	1.0	12	DE English Composition or a score of 3 on an AP English exam
<b>COMMONWEALTH GOVERNOR'S SCHOOL COURSES</b>					
ALL	1130G	English 9: Honors English 9	1.0	9	
ALL	1140G	English 10: Honors English 10	1.0	10	
ALL	1196APG	English 11: AP English Language and Composition	1.0	11	
ALL	1195APG	English 12: AP English Literature and Composition	1.0	12	
<b>INTERNATIONAL BACCALAUREATE COURSES</b>					
B-M	1151IB 1161IB	IB Language and Literature (HL)	1.0 per year	11-12	English 10 or Honors English 10 courses for IB year one IB year one for IB year two
<b>ELECTIVE ENGLISH COURSES</b>					
ALL	1300	Oral Communication	1.0	10-12	
M	1301	Communication for Leadership and Public Service	1.0	9	

<b>*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High</b>					
<b>*SCHOOL</b>	<b>COURSE #</b>	<b>COURSE</b>	<b>CREDIT</b>	<b>GRADE</b>	<b>PREREQUISITE</b>
ALL	1200	Journalism I	1.0	9-12	
ALL	1210	Journalism II	1.0	10-12	Journalism I and service on the school's publication staff
ALL	1211	Journalism III	1.0	11-12	Journalism II and service on the school's publication staff
ALL	1212	Journalism IV	1.0	12	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	Photojournalism I and service on the school's publication staff
ALL	1217	Photojournalism III	1.0	11-12	Photojournalism II and service on the school's publication staff
ALL	1218	Photojournalism IV	1.0	12	Photojournalism III and service on the school's publication staff
ALL	1171	Creative Writing I	1.0	9-12	
ALL	1165	Creative Writing II	1.0	10-12	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	Selection for this course is based on a set of criteria to include passing the 8th grade SOL, and NWEA MAP results.
ALL	9491-9494	Developmental Reading	1.0	9-12	Selection based on the recommendation of the IEP team.
ALL	1515-1516	English Review	1.0	11-12	Selection based on teacher recommendation and state assessment results.
ALL	1178	Advanced Writing	1.0	10-12	
<b>HISTORY AND SOCIAL SCIENCES</b>					
<b>GENERAL COURSES</b>					
ALL	2215	World History and Geography I	1.0	9	
Center	2215C	Center World History and Geography I	1.0	9	
Center	2215HC	Center Honors World History and Geography I	1.0	9	
ALL	2215H	Honors World History and Geography I	1.0	9	
ALL	2216	World History and Geography II	1.0	10	
Center	2216C	Center World History and Geography II	1.0	10	
Center	2216HC	Center Honors World History and Geography II	1.0	10	
ALL	2216H	Honors World History and Geography II	1.0	10	
ALL	2360	Virginia and U.S. History	1.0	11	
ALL	2360H	Honors Virginia and U.S. History			
Center	2360C	Center Virginia and U.S. History	1.0	11	
ALL	2440	Virginia and U.S. Government	1.0	12	
Center	2440C	Center Virginia and U.S. Government	1.0	12	

*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High					
*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
<b>ADVANCED PLACEMENT COURSES</b>					
ALL	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	
ALL	2445AP	AP United States Government/Politics	1.0	12	
ALL	2212AP	AP Human Geography	1.0	9-12	
ALL	2902AP	AP Psychology	1.0	11-12	
ALL	2804AP	AP Economics	1.0	11-12	
ALL	2399AP	AP European History	1.0	10-12	
<b>DUAL ENROLLMENT COURSES</b>					
ALL	2360DE	DE United States History	1.0	11	
ALL	2440DE	DE United States Government	1.0	12	
<b>COMMONWEALTH GOVERNOR'S SCHOOL COURSES</b>					
ALL	2399APG	AP European History	1.0	9	
ALL	2445APG	AP U.S. Government	1.0	10	
ALL	2319APG	AP U.S. History	1.0	11-12	
ALL	2212APG	AP Human Geography	1.0	12	
<b>INTERNATIONAL BACCALAUREATE COURSES</b>					
B-M	2806IB	IB Economics (SL) with Personal Finance	1.0	11-12	
B-M	1197IB 1198IB	IB Theory of Knowledge	1.0 per year	11-12	IB year one for IB year two
B-M	2360IB 2361IB	IB History (HL)	1.0 per year	11-12	World History or Honors World History and preferably AP US Government, IB year for IB year two
B-M	2847IB	IB Social and Cultural Anthropology (SL)	1.0	11-12	
B-M	2903IB	IB Psychology (SL)	1.0	11-12	
B-M	6135IB	IB Business Management (SL)	1.0	11-12	
<b>HISTORY AND SOCIAL SCIENCES ELECTIVE COURSES</b>					
ALL	2372	African American History	1.0	10-12	
ALL	2996	Global Issues	1.0	11-12	
ALL	2500	Sociology	1.0	10-12	
ALL	2900	Psychology	1.0	10-12	
M	2455	Policy, Advocacy, and Ethics	1.0	10	

*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High					
*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
<b>MATHEMATICS</b>					
<b>GENERAL COURSES</b>					
ALL	3130	Algebra I	1.0	9-10	
C	3130H	Honors Algebra I	1.0	9	
ALL	3143	Geometry	1.0	9-12	Algebra I
Center	3143C	Center Geometry	1.0	9-12	Algebra I
Center	3143HC	Center Honors Geometry	1.0	9-12	Algebra I
Center	3143HE	Engineering Honors Geometry	1.0	9-12	Algebra I
ALL	3143H	Honors Geometry	1.0	9-10	Algebra 1
ALL	3134	Algebra, Functions, and Data Analysis	1.0	10-12	Algebra I
ALL	3135	Algebra II	1.0	9-12	Geometry or Algebra, Functions, and Data Analysis
Center	3135HE	Engineering Honors Algebra II	1.0	9-12	Geometry
ALL	3135H	Honors Algebra II	1.0	9-10	Geometry
ALL	3138	Data Science	1.0	10-12	Algebra II
ALL	3160	Algebra III with Trigonometry	1.0	11-12	Algebra II
ALL	3162	Pre-calculus: Math Analysis with Trigonometry	1.0	10-12	Algebra II
ALL	3190	Statistics/Probability with Discrete Topics	1.0	11-12	Algebra II
ALL	3199	Calculus	1.0	11-12	Algebra III w/Trigonometry or Pre-calculus: Math Analysis with Trigonometry
<b>ADVANCED PLACEMENT COURSES</b>					
ALL	3192AP	AP Statistics	1.0	11-12	Algebra II
ALL	3177AP	AP Calculus AB	1.0	11-12	Pre-calculus: Math Analysis with Trigonometry
ALL	3178AP	AP Calculus BC	1.0	11-12	Pre-calculus: Math Analysis with Trigonometry
ALL	3185AP	AP Computer Science A	1.0	10-12	Algebra II
<b>DUAL ENROLLMENT COURSES</b>					
ALL	3196DE	DE Quantitative and Statistical Reasoning (MTH 154 and 155)	1.0	11-12	Algebra II
ALL	3162DE	DE Pre-Calculus (MTH 161 and 162)	1.0	11-12	Algebra II with a C or higher. Overall GPA 3.0 or higher
ALL	3178DE	DE Calculus I (MTH 263 and 264)	1.0	11-12	Pre-calculus: Math Analysis with Trigonometry. Overall GPA 3.0 or higher
<b>COMMONWEALTH GOVERNOR'S SCHOOL COURSES</b>					
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	

<b>*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High</b>					
<b>*SCHOOL</b>	<b>COURSE #</b>	<b>COURSE</b>	<b>CREDIT</b>	<b>GRADE</b>	<b>PREREQUISITE</b>
C-N-S	3162G	Honors Pre-Calculus w/Discrete Topics	1.0	10-12	
C-N-S	3162APG	AP Pre-Calculus	1.0	10-12	
C-N-S	3177APG	AP Calculus AB w/Special Topics	1.0	11	
C-N-S	3178APG	AP Calculus BC and Multivariable Calculus	1.0	12	
C-N-S	3192APG	AP Statistics	1.0	12	
<b>INTERNATIONAL BACCALAUREATE COURSES</b>					
B-M	3164IB 3196IB	IB Mathematics: Applications and Interpretation (SL)	1.0	11-12	Algebra II for IB year one IB year one for IB year two
B-M	3167IB 3198IB	IB Mathematics: Analysis and Approaches (SL)	1.0	11-12	Pre-calculus: Math Analysis with Trigonometry for IB year one IB year one for IB year two
B-M	3165IB 3195IB	IB Mathematics: Applications and Interpretation (HL)	1.0	11-12	Pre-calculus: Math Analysis with Trigonometry IB year one for IB year two
B-M	3168IB 3197IB	IB Mathematics: Analysis and Approaches (HL)	1.0	11-12	Pre-calculus: Math Analysis with Trigonometry IB year one for IB year two
<b>SCIENCE</b>					
<b>GENERAL COURSES</b>					
ALL	4210	Earth Science	1.0	9-11	Students may be concurrently enrolled in Biology
ALL	4210H	Honors Earth Science	1.0	9-11	Students may be concurrently enrolled in Biology
ALL	4265	Environmental Science	1.0	9-11	Students may be concurrently enrolled in Biology and Earth Science
ALL	4310	Biology	1.0	9-10	Students may be concurrently enrolled in Earth Science
ALL	4310H	Honors Biology	1.0	9-10	Students may be concurrently enrolled in Earth Science
ALL	4410	Chemistry	1.0	10-12	Algebra II or concurrent enrollment
ALL	4410H	Honors Chemistry	1.0	10-12	Algebra II or concurrent enrollment
ALL	4510	Physics	1.0	11-12	Algebra II or concurrent enrollment
ALL	4510H	Honors Physics	1.0	11-12	Algebra II or concurrent enrollment
<b>ADVANCED PLACEMENT COURSES</b>					
ALL	4370AP/4370A PL	AP Biology/Lab	1.0/1.0.0	10-12	Biology and Chemistry
ALL	4470AP/4470A PL	AP Chemistry/Lab	1.0/1.0	11-12	Algebra II and Chemistry
ALL	4573AP	AP Physics 1	1.0	11-12	Geometry
ALL	4574AP	AP Physics 2	1.0	12	Concurrent enrollment in Pre-calculus
ALL	4270AP	AP Environmental Science	1.0	10-12	Two laboratory sciences and Algebra I
<b>DUAL ENROLLMENT COURSES</b>					
ALL	4220DE	DE Environmental Science (ENV 121)	1.0	11-12	
ALL	4320DE	DE Biology (BIO 101)	1.0	11-12	Biology

*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High					
*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
ALL	4420DE	DE Chemistry (CHM 111)	1.0	11-12	
ALL	4510DE	DE Physics (PHY 201)	1.0	11-12	Pre-calculus: Math Analysis with Trigonometry
COMMONWEALTH GOVERNOR'S SCHOOL COURSES					
C-N-S	4270APG	AP Environmental Science	1.0	9	
C-N-S	4370APG	AP Biology	1.0	10	
C-N-S	4420DEG	DE Chemistry	1.0	11	
C-N-S	4573APG	AP Physics 1	1.0	12	
INTERNATIONAL BACCALAUREATE COURSES					
B-M	4390IB 4391IB	IB Biology (HL)	1.0 per course	11-12	Biology or Honors Biology and Chemistry for IB year one IB year one for IB year two
B	4380IB	IB Biology 11 (SL)	1.0	11	Biology or Honors Biology and Chemistry or concurrent enrollment for IB year one
B	4381IB	IB Biology 12 (SL)	1.0	12	IB Biology 11 (SL)
M	4490IB 4491IB	IB Chemistry (HL)	1.0 per course	11-12	Chemistry or Honors Chemistry and Biology for IB year one IB year one for IB year two
B	4480IB	IB Chemistry 11 (SL)	1.0	11	Chemistry or Honors Chemistry and Biology
B	4481IB	IB Chemistry 12 (SL)	1.0	12	IB Chemistry 11 (SL)
B	4590IB 4591IB	IB Physics (HL)	1.0 per course	11-12	Physics or Honors Physics and Algebra II for IB year one IB year one for IB year two
B-M	4580IB 4581IB	IB Physics (SL)	1.0 per course	11-12	Algebra II for IB year one IB year one for IB year two
B-M	4281IB	IB Environmental Systems and Societies (SL)	1.0	11-12	Biology or Chemistry or Honors Biology or Honors Chemistry
M	4282IB 4283IB	IB Environmental Systems and Societies (HL)	1.0 per course	11-12	Biology or Chemistry or Honors Biology or Honors Chemistry for year one IB year one for IB year two
SCIENCE ELECTIVE COURSES					
ALL	4340	Biology II: Ecology	1.0	11-12	Biology or Environmental Science
ALL	4330	Biology II: Anatomy and Physiology	1.0	11-12	Biology Recommended Prerequisite: Concurrent enrollment in Chemistry
ALL	4240	Earth Science II: Geology	1.0	10-12	Earth Science or Environmental Science
ALL	4250	Earth Science II: Oceanography	1.0	11-12	Earth Science or Environmental Science
WORLD LANGUAGE					
GENERAL COURSES					
ALL	5990	American Sign Language Level I	1.0	10-12	
ALL	5995	American Sign Language Level II	1.0	10-12	American Sign Language Level I
ALL	5997	American Sign Language Level III	1.0	11-12	American Sign Language Level II



<b>*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High</b>					
<b>*SCHOOL</b>	<b>COURSE #</b>	<b>COURSE</b>	<b>CREDIT</b>	<b>GRADE</b>	<b>PREREQUISITE</b>
ALL	5110	French Level I	1.0	8-12	
ALL	5120	French Level II	1.0	9-12	French Level I
ALL	5130	French Level III	1.0	10-12	French Level II
ALL	5140	French Level IV	1.0	11-12	French Level III
ALL	5210	German Level I	1.0	8-12	
ALL	5220	German Level II	1.0	9-12	German Level I
ALL	5230	German Level III	1.0	10-12	German Level II
ALL	5240	German Level IV	1.0	11-12	German Level III
ALL	5310	Latin Level I	1.0	8-12	
ALL	5320	Latin Level II	1.0	9-12	Latin Level I
ALL	5330	Latin Level III	1.0	10-12	Latin Level II
ALL	5340	Latin Level IV	1.0	11-12	Latin Level III
ALL	5510	Spanish Level I	1.0	8-12	
ALL	5520	Spanish Level II	1.0	9-12	Spanish Level I
ALL	5530	Spanish Level III	1.0	10-12	Spanish Level II
ALL	5540	Spanish Level IV	1.0	11-12	Spanish Level III
ALL	5511	Spanish for Fluent Speakers Level I	1.0	8-12	Students will take an assessment to ensure proper placement according to prior knowledge and study of Spanish
ALL	5521	Spanish for Fluent Speakers Level II	1.0	9-12	Students will take an assessment to ensure proper placement according to prior knowledge and study of Spanish
ALL	5531	Spanish for Fluent Speakers Level III	1.0	10-12	Students will take an assessment to ensure proper placement according to prior knowledge and study of Spanish
<b>ADVANCED PLACEMENT COURSES</b>					
C-N-S	5170AP	AP French	1.0	11-12	French Level IV
C-N-S	5270AP	AP German	1.0	11-12	German Level IV
C-N-S	5370AP	AP Latin (Virgil)	1.0	11-12	Latin Level IV
C-N-S	5570AP	AP Spanish	1.0	11-12	Spanish Level IV or Spanish for Fluent Speakers III
<b>DUAL ENROLLMENT COURSES</b>					
ALL	5140DE	DE Intermediate French IV (FRE 201 and 202)	1.0	11-12	French III
ALL	5420DE	DE Intermediate German IV (GER 201 and 202)	1.0	11-12	German III
ALL	5540DE	DE Intermediate Spanish IV (SPA 201 and 202)	1.0	11-12	Spanish III or Spanish for Fluent Speakers III
<b>INTERNATIONAL BACCALAUREATE COURSES</b>					
B-M	5542IB	IB Spanish B IV	1.0	10 or 11	Spanish III or SFS III

<b>*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High</b>					
<b>*SCHOOL</b>	<b>COURSE #</b>	<b>COURSE</b>	<b>CREDIT</b>	<b>GRADE</b>	<b>PREREQUISITE</b>
B-M	5142IB	IB French B IV	1.0	10 or 11	French III
B-M	5242IB	IB German B IV	1.0	10 or 11	German III
B-M	5552IB	IB Spanish B V (SL)	1.0	11 or 12	IB Spanish B course
B-M	5152IB	IB French B V (SL)	1.0	11 or 12	IB French B course
B-M	5252IB	IB German B V (SL)	1.0	11 or 12	IB German B course
B-M	5562IB	IB Spanish B V (HL)	1.0	12	IB Spanish B IV course
B-M	5162IB	IB French B V (HL)	1.0	12	IB French B IV course
B-M	5262IB	IB German B V (HL)	1.0	12	IB German B IV course
B-M	5340IB 5350IB	IB Latin (SL)	1.0 credit per year	11-12	Latin III for IB year one IB year one for IB year two
M	5553IB 5563IB	IB Spanish Ab Initio (SL)	1.0 credit per year	10-12	
<b>VISUAL AND PERFORMING ARTS</b>					
<b>GENERAL COURSES FOR ART</b>					
ALL	9120	Art I	1.0	9-12	
ALL	9130	Art II	1.0	10-12	Art I
N-S	9130H	Honors Art II	1.0	10-12	Art I, teacher 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	Art II
ALL	9145	Art IV	1.0	11-12	Art III
B-C-N-S	9196	Sculpture and Ceramics	1.0	10-12	Art I
ALL	9170	Art History (Non-Studio Elective)	1.0	10-12	
B-S	9190	Photography and Graphic Design I	1.0	9-12	
S	9191	Photography and Graphic Design II	1.0	10-12	Photography and Graphic Design I
S	9192	Photography and Graphic Design III	1.0	10-12	Photography and Graphic Design II
<b>GENERAL COURSES FOR BAND</b>					
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 high school band experience; by audition
C	9296	Jazz Workshop	1.0	10-12	One or more years of high school band experience; by audition
<b>GENERAL COURSES FOR CHORUS</b>					

<b>*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High</b>					
<b>*SCHOOL</b>	<b>COURSE #</b>	<b>COURSE</b>	<b>CREDIT</b>	<b>GRADE</b>	<b>PREREQUISITE</b>
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
<b>GENERAL COURSES FOR ORCHESTRA</b>					
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
<b>GENERAL COURSES FOR MUSIC</b>					
ALL	9225	Music Theory	1.0	10-12	Previous music training required. Students should have a fundamental understanding of music notation.
ALL	9245	Guitar I	1.0	9-12	
ALL	9247	Guitar II	1.0	10-12	Guitar I or teacher recommendation
B-C-M-N	9248	Guitar Ensemble	1.0	11-12	Guitar II or teacher recommendation
S	9214	Music Technology I	1.0	9-12	
S	9298	Music Technology II	1.0	10-12	Music Technology I or teacher recommendation
<b>GENERAL COURSES FOR THEATRE ARTS</b>					
ALL	1410	Theatre Arts I	1.0	9-12	
ALL	1420	Theatre Arts II	1.0	10-12	Theatre Arts I
ALL	1423	Theatre Arts III	1.0	11-12	Theatre Arts II
ALL	1426	Theatre Arts IV	1.0	11-12	Theatre Arts III
ALL	1435	Technical Theatre I	1.0	9-12	
ALL	1448	Technical Theatre II	1.0	10-12	Technical Theatre I
ALL	1450	Technical Theatre III	1.0	10-12	Technical Theatre II
<b>ADVANCED PLACEMENT COURSES FOR ART</b>					
ALL	9150AP	AP Studio Art (Drawing Portfolio)	1.0	11-12	Art III
ALL	9148AP	AP Studio Art (2-D Design Portfolio)	1.0	11-12	Art III
ALL	9149AP	AP Studio Art (3-D Design Portfolio)	1.0	11-12	Art III
ALL	9151AP	AP Art History (Non-Studio Elective)	1.0	11-12	Art History or teacher recommendation

*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High					
*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
<b>ADVANCED PLACEMENT COURSES FOR MUSIC</b>					
ALL	9226AP	AP Music Theory	1.0	11-12	Music Theory or teacher recommendation
<b>DUAL ENROLLMENT COURSES FOR MUSIC</b>					
ALL	9170DE	DE Art History (ART 101 and 102)	1.0	11-12	
<b>INTERNATIONAL BACCALAUREATE COURSES FOR VISUAL AND PERFORMING ARTS</b>					
B-M	9194IB 9196IB	IB Visual Arts (SL)	1.0 per course	11-12	Art II for year one IB year one for IB year two
B-M	9195IB 9197IB	IB Visual Arts (HL)	1.0 per course	11-12	Art II for IB year one IB year one for IB year two
B-M	1432IB 1434IB	IB Theatre Arts (SL)	1.0 per course	11-12	Theatre Arts II or Technical Theatre II for IB year one IB year one for IB year two
B-M	1433IB 1435IB	IB Theatre Arts (HL)	1.0 per course	11-12	Theatre Arts II or Technical Theatre II for IB year one IB year one for IB year two
B-M	9296IB	IB Music (SL)	1.0	11-12	Prerequisite: Music Theory IB Music students must be concurrently enrolled in a performance class.
B-M	9295IB 9297IB	IB Music (HL)	1.0 per course	11-12	Recommended Prerequisite: Music Theory for IB year one IB year one for year two IB Music students must be concurrently enrolled in a performance class.
<b>HEALTH AND PHYSICAL EDUCATION AND DRIVER EDUCATION</b>					
ALL	7300	Health and Physical Education 9	1.0	9	
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	Biology
ALL	7662	Sports Medicine II	1.0	11-12	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	Sport and Fitness for Life I
<b>ENGLISH FOR SPEAKERS OF OTHER LANGUAGES (ESOL)</b>					
ALL	4266	ESOL Environmental Science	1.0	9-10	
ALL	5730	ESOL English for Academic Purposes I	1.0	9-12	
ALL	5736	ESOL English for Academic Purposes II	1.0	9-12	
ALL	5732	ESOL Algebra Readiness	1.0	9-12	

<b>*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High</b>					
<b>*SCHOOL</b>	<b>COURSE #</b>	<b>COURSE</b>	<b>CREDIT</b>	<b>GRADE</b>	<b>PREREQUISITE</b>
ALL	5715	Foundations of Literacy	1.0	9-12	
ALL	5735	Foundations of Mathematics	1.0	9-12	
ALL	5722	English Language Development Concepts I	1.0	9-12	
ALL	5724	English Language Development Concepts II	1.0	9-12	
ALL	5726	English Language Development Concepts III	1.0	9-12	
ALL	5728	English Language Development Concepts IV	1.0	9-12	
<b>ADDITIONAL CREDIT OPPORTUNITIES</b>					
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	
<b>CAREER AND TECHNICAL EDUCATION</b>					
M	9062DE	DE Virginia Teachers for Tomorrow I	1.0	11	
M	9072DE	DE Virginia Teachers for Tomorrow II	1.0	12	Virginia Teachers for Tomorrow I
<b>JUNIOR RESERVE OFFICERS' TRAINING CORPS (JROTC)</b>					
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

<b>*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High</b>					
<b>*SCHOOL</b>	<b>COURSE #</b>	<b>COURSE</b>	<b>CREDIT</b>	<b>GRADE</b>	<b>PREREQUISITE</b>
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
<b>AGRICULTURE AND NATURAL RESOURCES</b>					
N	8034	Horticulture Sciences	1.0	9-12	
N	8035	Greenhouse Plant Production and Management	2.0	10-12	Horticulture Sciences
N	8036	Landscaping I	1.0	11-12	Horticulture Sciences
N	8039	Landscaping II	1.0	11-12	Landscaping I
<b>BUSINESS AND INFORMATION TECHNOLOGY</b>					
ALL	6320	Accounting I	1.0	10-12	Recommended Prerequisite: Digital Applications
ALL	6321	Accounting II	1.0	11-12	Accounting I
ALL	6131	Business Law	1.0	11-12	
ALL	6135	Business Management	1.0	10-12	
B-C	6135DE	DE Business Management	1.0	10-12	
ALL	6612	Computer Information Systems I	1.0	9-12	Recommended Prerequisite: Digital Applications
ALL	6613	Computer Information Systems II	1.0	10-12	Computer Information Systems I
ALL	6302	Cybersecurity I	1.0	10-12	Information Technology Fundamentals
ALL	6304	Cybersecurity II	1.0	11-12	Cybersecurity I
C	6306	Cybersecurity III	1.0	11-12	Cybersecurity II
B-C	6660S	Database Design and Management	1.0	10-11	Information Technology Fundamentals
ALL	6630	Design, Multimedia, and Web Technologies I	1.0	10-12	Recommended Prerequisite: Digital Applications or Computer Information Systems I
ALL	6631	Design, Multimedia, and Web Technologies II	1.0	10-12	Design, Multimedia, and Web Technologies I
ALL	6611	Digital Applications	1.0	9-12	
ALL	6120	Economics and Personal Finance	1.0	10-12	This course is a graduation requirement for students who enter high school in 2011 and all subsequent years.
ALL	6670	Information Technology Fundamentals	1.0	9-11	
B-C	6661	Java Programming	1.0	12	Database Design and Management
ALL	6115	Principles of Business and Marketing	1.0	9-10	
ALL	6640	Programming I	1.0	10-12	Information Technology Fundamentals

<b>*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High</b>					
<b>*SCHOOL</b>	<b>COURSE #</b>	<b>COURSE</b>	<b>CREDIT</b>	<b>GRADE</b>	<b>PREREQUISITE</b>
B-C	6640DE	DE Programming I	1.0	10-12	Information Technology Fundamentals
ALL	6641	Programming II	1.0	11-12	Programming I
B-C	6641DE	DE Programming II	1.0	11-12	DE Programming I or Programming I
B	6640S	STAT Programming	1.0	10-12	Information Technology Fundamentals
<b>MARKETING</b>					
ALL	9085	Employment for Education I	1.0	9-11	Application and Interview
ALL	8140	Fashion Marketing I	1.0	10-12	Interest in fashion career recommended
ALL	8145	Fashion Marketing II	1.0	11-12	Fashion Marketing I
ALL	8120	Marketing	1.0	10-12	
ALL	8130	Strategic Marketing	1.0	11-12	Marketing
ALL	8175	Sports and Entertainment Marketing	1.0	10-12	
ALL	8177	Sports and Entertainment Management	1.0	11-12	Sports and Entertainment Marketing
<b>HEALTH AND MEDICAL SCIENCES</b>					
C-S	8333	Emergency Medical Technician I	1.0	11-12	Recommended Prerequisite: Introduction to Health and Medical Sciences. Students must be 16 years of age by the first day of school in order to enroll in EMT I. EMT I must be successfully completed to enroll in EMT II
C-S	8334	Emergency Medical Technician II	1.0	11-12	See prerequisite above. Must be concurrently enrolled in EMT I and EMT II
C	8335	Emergency Medical Technician III	1.0	12	EMT I and EMT II
C-M-S	8337	Emergency Medical Telecommunications	1.0	10-12	
B	8338	Health Informatics	1.0	10-12	Recommended Prerequisite: Introduction to Health and Medical Sciences
ALL	8302	Introduction to Health and Medical Sciences	1.0	9-12	
M	8345	Medical Assistant I	2.0	11	Recommended Prerequisite: Introduction to Health and Medical Sciences
M	8346	Medical Assistant II	2.0	12	Medical Assistant I
N	8360	Nurse Aide I	2.0	11-12	Recommended Prerequisite: Introduction to Health and Medical Sciences (including clinical experience)
N	8362	Nurse Aide II	2.0	11-12	Must be concurrently enrolled in Nurse Aide I and Nurse Aide II
<b>FAMILY AND CONSUMER SCIENCES</b>					
ALL	8232	Child Development and Parenting	1.0	10-12	
B-M-S	8275	Culinary Arts I	2.0	10-11	
B-M-S	8276	Culinary Arts II	2.0	11-12	Culinary Arts I
B-M-S	8279	Culinary Arts Specialization	2.0	12	Culinary Arts II and Students must successfully pass the Culinary Arts II end-of- the-year assessment

<b>*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High</b>					
<b>*SCHOOL</b>	<b>COURSE #</b>	<b>COURSE</b>	<b>CREDIT</b>	<b>GRADE</b>	<b>PREREQUISITE</b>
B-N	8285	Early Childhood, Education, and Services I	2.0	10-11	
B-N	8286	Early Childhood, Education, and Services II	2.0	11-12	Early Childhood Education I
ALL	8225	Family Relations	1.0	9-12	
ALL	8248	Introduction to Fashion Careers	1.0	9-12	
ALL	8255	Introduction to Interior Design	1.0	9-12	
ALL	8227	Life Planning	1.0	9-12	
ALL	8229	Nutrition and Wellness	1.0	9-12	
<b>TECHNOLOGY AND ENGINEERING EDUCATION</b>					
B-C-M-N	8437	Architectural Drawing and Design	1.0	10-12	Technical Drawing and Design
C	8415	Communication Systems	1.0	9-12	
C	8459	Digital Visualization	1.0	10-12	Recommended Prerequisite: Technical Drawing and Design, Communication Systems or Imaging Technology
C-M-S	8450	Engineering Explorations	1.0	9-11	
S	8451	Engineering Analysis and Application	1.0	10-12	Engineering Explorations
S	8452	Engineering Concepts and Processes	1.0	10-12	Engineering Analysis and Application
B-C-M-N	8436	Engineering Drawing and Design	1.0	10-12	Technical Drawing and Design
S	8453	Engineering Practicum	1.0	12	Engineering Analysis and Application or Engineering Concepts and Processes or Engineering Studies
C-M	8491	Engineering Studies	1.0	10-12	Engineering Explorations
C	8455	Imaging Technology	1.0	9-12	Communication Systems
B-M	8425	Manufacturing Systems I	1.0	9-12	
B	8427	Advanced Manufacturing Systems II	1.0	10-12	Manufacturing Systems or Production Systems
M	8447	Production Systems	1.0	9-12	
B-C-M-N	8435	Technical Drawing and Design	1.0	9-12	
<b>PROJECT LEAD THE WAY (PLTW)</b>					
N	8428	Aerospace Engineering - PLTW	1.0	10	Introduction to Engineering Design
N	8382	Biomedical Innovation-PLTW	2.0	12	Medical Interventions Recommended Prerequisite: Physics/AP Physics
N	8430	Civil Engineering and Architecture – PLTW	1.0	11-12	Algebra II or concurrent enrollment and Digital Electronics or Aerospace Engineering
N	8442	Computer Integrated Manufacturing – PLTW	1.0	11-12	Algebra II or concurrent enrollment and Digital Electronics or Aerospace Engineering
N	8440	Digital Electronics - PLTW	1.0	10-12	Introduction to Engineering Design
N	8443	Engineering Design and Development - PLTW	2.0	12	Civil Engineering and Architecture, Computer Integrated Manufacturing, or Principles of Engineering



*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High					
*SCHOOL	COURSE #	COURSE	CREDIT	GRADE	PREREQUISITE
B-N	8380	Human Body Systems-PLTW	1.0	10-12	Principles of Biomedical Sciences and Biology
N	8439	Introduction to Engineering Design – PLTW	1.0	9-11	Algebra I
N	8381	Medical Interventions-PLTW	1.0	11-12	Human Body Systems Recommended Prerequisite: AP Biology or Chemistry Honors
B	8379	Principles of Biomedical Sciences-PLTW	1.0	9-11	Biology or concurrent enrollment
N	8441	Principles of Engineering-PLTW	1.0	11-12	Algebra II or concurrent enrollment and Digital Electronics or Aerospace Engineering
TRADE AND INDUSTRIAL EDUCATION					
N	8676	Auto Body Technology I – Collision and Repair	2.0	10-11	
N	8677	Auto Body Technology II – Painting and Refinishing	4.0	11-12	Auto Body Technology I
N	8678	Auto Body Technology III – Collision and Repair and Painting and Refinishing	4.0	12	Auto Body Technology II
B-N	8502	Automotive Technology I	1.0	10-11	
B-N	8507	Automotive Technology II	2.0	11-12	Automotive Technology I
B-N	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.
M	8744	Master Barbering II	4.0	11-12	Passing score of 70% or above in Mastering Barbering I and regular attendance is required to meet clinical hours.
N	8604	Cabinetmaking I	1.0	10-11	
N	8605	Cabinetmaking II	2.0	11-12	Cabinetmaking I
B-S	8601	Carpentry I	BPHS - 1.0 SHS - 2.0	10-11	Recommended Prerequisite: Introduction to Construction Trades
B-S	8602	Carpentry II	2.0	11-12	Carpentry I
S	8603	Carpentry III	2.0	12	Carpentry II
S	9071	Introduction to Construction Trades	1.0	9	
M-S	8745	Cosmetology I	3.0	10-11	Regular attendance is required in order to meet the clinical lab hours.
M-S	8746	Cosmetology II	4.0	11-12	Passing score of 70% or above in Cosmetology I and regular attendance is required to meet clinical hours.
B-N-M	8702	Criminal Justice I	1.0	11	
B-N-M	8703	Criminal Justice II	2.0	12	Criminal Justice I
S	8530	Drafting: Fundamentals	1.0	9-11	
S	8531	Drafting: Mechanical	2.0	10-12	Drafting: Fundamentals
S	8532	Drafting: Architectural	2.0	11-12	Drafting: Fundamentals:
S	8562	Drafting: Advanced	2.0	11-12	Drafting Fundamentals AND Drafting Mechanical or Drafting Architectural

<b>*SCHOOL B = Brooke Point C = Colonial Forge M = Mt. View N = North Stafford S = Stafford High</b>					
<b>*SCHOOL</b>	<b>COURSE #</b>	<b>COURSE</b>	<b>CREDIT</b>	<b>GRADE</b>	<b>PREREQUISITE</b>
S	8533	Electricity I	2.0	10-11	Recommended Prerequisite: Introduction to Construction Trades
S	8534	Electricity II	2.0	11-12	Electricity I
S	8535	Electricity III	2.0	12	Electricity II
All	8705	Firefighting I	2.0	11-12	Students must be at least 16 years old by the first day of the course offering. Enrollment also requires parental/guardian consent. Additional requirements, including CPR, HAZMAT operations, and Mayday Awareness, are stipulated for those students seeking NFPA Firefighter I certification.
All	8706	Firefighting II	2.0	11-12	Successful completion of Firefighting I and Certification Exam
S	8503	Heating, Ventilation, Air Conditioning and Refrigeration I	1.0	10-11	Recommended Prerequisite: Introduction to Construction Trades
S	8512	Masonry I	2.0	10-11	Recommended Prerequisite: Introduction to Construction Trades
S	8513	Masonry II	2.0	11-12	Masonry I
S	8514	Masonry III	2.0	12	Masonry II
S	8551	Plumbing I	1.0	10-11	Introduction to Construction Trades recommended
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	2.0	10-12	Television and Media Production I
ALL	8690	Television and Media Production III	2.0	11-12	Television and Media Production II
B-N	8691	Television and Media Production–Internship	1.0	12	Television and Media Production II

**Compliance with State Code and Regulations**

Stafford Schools maintains compliance with all staffing and instructional time requirements as outlined in the *Code of Virginia*, Standards of Quality, and Standards of Accreditation.

**NOTICE**

The Stafford County School Board does not unlawfully discriminate against any person on the basis of race, color, national origin, political affiliation, religion, sex, pregnancy, childbirth or related medical conditions, marital status, mental or physical disability, age, genetic information, sexual orientation, gender identity, or any other characteristic prohibited by state and/or federal law. Inquiries regarding non-discrimination should be directed to the Title IX Coordinator/Human Resources, Stafford Schools, 31 Stafford Avenue, Stafford, VA 22554. Phone: (540) 658-6560 Fax: (540) 658- 5970. Reasonable accommodation upon request.