

High School Course Catalog

— 2024-25 —



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Your Future Starts Here!



Dear High School Student,

We are committed to your thriving future at Prince William County Public Schools (PWCS). This includes choosing a meaningful post-secondary path to pave the way for future study and employment. With a clear focus on your learning, we provide you with rich and engaging experiences to help you to make these decisions. New courses have been developed to provide you with opportunities to explore a variety of career areas. Options are available with the potential to earn college credits through increased Advanced Placement (AP), International Baccalaureate (IB), Cambridge, and dual enrollment (DE) offerings. We have created an environment where you will learn about your strengths, how these personal strengths connect with career opportunities, and what preparation is needed to successfully transition to the world beyond high school and **your vision for a thriving future**.

The 2024-25 High School Course Catalog provides you and your family members with information about available courses, support services, and serves as a resource to you throughout the school year. Use this tool to start meaningful conversations with your parents and guardians, siblings, and other trusted adults who walk alongside you during this journey.

Our PWCS school counselors, college and career counselors, teachers, and administrators will work with you to ensure your continued success in meeting graduation requirements and to be certain that your 2024-25 academic program meets your interests and needs. **Your thriving future starts here.** Embrace every opportunity presented to ensure that you will graduate on time with the knowledge, skills, and habits of mind necessary to create a thriving future for yourself and your community.

Tools for Your Journey

Make the Most of Your High School Experience

Making the transition to high school is an exciting and challenging time for students and their families. There are many options to choose from and a number of requirements to meet. In Prince William County Public Schools, we believe that

all students should have a rigorous educational experience based on curriculum that builds on what students have learned at home, in our community, and at school. The high school experience is designed to prepare students for future employment, further study at the college and university level, and to be effective citizens in our local, national, and global community. It consists of high-quality diploma options, a wide choice of specialty programs, core required coursework, an array of elective offerings, and nontraditional options for earning credits. While academic programs form the core of our high school program, it is also important to take advantage of the many opportunities to participate in the rich extracurricular programs at all of our high schools.

Where Do I Start?

Select the **diploma type** you wish to earn. Students entering the 9th grade are strongly encouraged to consider the Advanced Studies Diploma option to maintain the greatest number of options as they progress through their high school career. School counseling services provide regular opportunities for families to evaluate student progress toward diploma requirements and to make adjustments to the type of diploma selected. All PWCS high schools provide diplomas and certificates to meet the needs of students with different interests and needs.

The purpose of this course description catalog is to describe in general terms the courses taught in Prince William County Public Schools' high schools, grades 9-12. Students should study this course catalog and consult with their parent/guardian, school counselors, and teachers in planning their individual program of study. It is the responsibility of each student and his/her family to ensure that requirements for an Advanced Studies Diploma or a Standard Diploma are met. Graduation requirements are based on the year a student first enters 9th grade. School counselors can help with planning by reviewing test scores and records of past achievements and by discussing current interests and long-term goals. School counselors also have up-to-date information available about various training programs, schools, colleges, universities, and employment possibilities. School counselors review graduation requirements with students annually, and the school counseling staff at each school is available to assist you. Please work closely with your school counselor in making academic planning decisions.

Academic Year

The state requires that the regular academic year is at least 180 days, divided into two semesters. Courses are generally one year in length, and students receive a final grade and one standard unit of credit at the end of the school year for each course successfully completed. Some courses; however, are individually designed for one semester only. A one-semester course receives one-half credit, upon successful completion.

Course Selection

The course selection process in high school is a highly personal task and should be based on the student's aptitude and interests, teacher recommendations, and close collaboration among school, student, and parent/guardian.

Courses listed will be included in the curriculum for the 2024-25 school year if there is sufficient enrollment and available staff. Grade levels listed for courses indicate the grade(s) in which the course is normally taken. All students will be expected to maintain a full-day schedule of classes required to meet the minimum standards necessary for graduation and Virginia Board of Education regulations.

All courses described may not be offered at all schools due to staffing and/or enrollment limitations. School counselors will work very closely with students and parents/guardians to develop academic plans where appropriate substitutions can be made for courses not offered.

When selecting courses for the upcoming school year, students and parents/guardians should choose carefully. The courses selected should be based on the student's ability, past record of academic achievement, interest in the subject, career goal(s), and teacher recommendations. The pursuit of a course of studies leading to entrance into college may include those courses not directly related to college entrance. Fine and Performing Arts (dance, music, theatre, or visual arts) and Career and Technical Education courses offer students the opportunity to explore new areas of study as well as to gain knowledge and skills that may likely prove useful to them in whatever career they choose.

Through careful course selection and close cooperation between the student and the school counselor, a student will be able to pursue their chosen pathway and still have time for other course offerings without excluding any particular area of study.

This catalog includes a listing of courses taught in Prince William County Public Schools' high schools. Not all courses are taught in every high school. Course offerings are contingent on sufficient student interest. This may result in some courses not being available in certain schools even though they are listed for those schools.

A student desiring to take a course offered at a school other than his/her assigned school should contact his/her school counselor for details.

Driver Education

The classroom driver education course is offered as part of the 10th grade health education curriculum in all high schools. When students successfully complete the classroom phase and have secured a learner's permit, they then may take behind-the-wheel driver instruction. Behind-the-wheel driver instruction in Prince William County Public Schools is offered after school and during the summer. There is a fee for behind-the-wheel driver instruction.

Placement/Promotion Procedure

Recommendations concerning instructional placement of students are the responsibility of the teacher and other professional staff directly involved with the students. The final decision concerning placement, however, rests with the principal. Promotion at the high school level is based on the following guidelines:

- Students who are promoted from grade 8 will be placed in grade 9.
- Students in high school progress toward graduation on a course-by-course basis. Students take courses based upon academic performance, academic needs, graduation requirements, and previous credits earned.
- Graduation requirements for students shall be those in effect at the time the student entered the 9th grade for the first time.

The requirements for membership in grades 9-12 are as follows:

Grade Placement

- 9th Grade: Successful completion of grade eight.
- 10th Grade: Five units of credit, three of which must be in required courses.
- 11th Grade: Eleven units of credit, six of which must be in required courses.
- 12th Grade: Sixteen units of credit, nine of which must be in required courses.

To be classified as a 12th grader, a student must be in a program of studies which will enable the student to acquire the minimum number of standard units of credit and verified units of credit required for graduation by June of the senior year or by the end of summer school following the senior year. All alternative programs require the approval of the principal of the high school from which the student will graduate.

Course Requirements

All students, regardless of the diploma type or specialty program selected, will have to complete a set of required core classes in mathematics, science, social studies, English/language arts, physical education, and other subjects. The [Standard](#), and [Advanced Studies](#) Diploma Charts are designed to help students see what required courses must be completed for each diploma type. Some specialty programs offer courses which may be substituted for required classes. Students and their families need to work closely with their school counselor to explore their available course options.

Specialty Programs

Specialty programs allow for career exploration, subject area concentration, and college/university preparation. Prince William County Public Schools provide excellent opportunities for students to explore a wide variety of special programs. These "specialty" programs give students the chance to investigate careers ranging from the various building trades to advanced computer science. Students participating in these programs can earn certifications, licenses, or other professional credentials in an area of study.

In addition to career exploration and concentrated study in fields of interest, all our high schools provide rigorous college preparation through the College Board's Advanced Placement (AP) courses, IB, Programme, or Cambridge Programme (AICE). All three of these programs offer students the possibility of earning college credit for courses completed while in high school. There are also Dual Enrollment and Early Online College courses available to students in PWCS.

Families can explore the wide range of options available in their neighborhood high school program or consider one of the many options presented at our information nights held annually across the county. You can contact the counseling office of any high school for more information about programs of particular interest to you. [Learn more](#) about PWCS specialty programs to make the best choice.

Electives

In addition to the core course requirements and specialty programs, all PWCS high schools offer elective course options which extend and enrich the curriculum, and challenge students. Students may choose these electives to customize their educational experience to meet their interests. Some examples are: advanced physical education, journalism, theatre, fine and performing arts, geography, astronomy, international relations, and many more. Speak with your school counselor to learn about the offerings available at your school.

Why should I take advanced courses during high school?

College Admissions

- **Schedule Strength Matters:** Colleges want to see students challenge themselves to the best of their ability.
- **Preparation for College:** Many students find their college course work to be easier after taking a challenging high school curriculum.
- **Preparation for College Entrance Exams (i.e., SAT, ACT):** Challenging coursework prepares you to perform at high levels on these tests.

Challenge Yourself

- **Rigor is Best:** Most colleges want to see students take English, math, science, social studies, and a world language each year of high school.
- **Lifelong Payoff:** Students who take rigorous courses during high school often do better in college and in turn are able to secure more stable employment.

Start a College Transcript

- **Dual Enrollment:** Students start a college transcript in high school when they take an approved Dual Enrollment course.
- **Head Start:** Students who take college courses, at low or no cost during high school, can save money on college tuition and are more likely to graduate college early or on time.

Balance is Best!

Students should make sure to leave plenty of time to participate in extracurricular activities both at school and in the community.

Graduation Requirements and Your Diploma

The Virginia Board of Education sets forth requirements for students associated with the year the student entered 9th grade for the first time. Students will meet with their school counselor each year to update their Academic and Career Plan (ACP) and diploma type. Prince William County Public Schools Regulation 662-1B, "Graduation Requirements," states that a student must complete all requirements for graduation prior to participation in the graduation ceremony to include earning the required number of standard and verified credits based on the diploma type.

Sequential Elective Information

Standard Diploma

22 Standard Credits, 5 Verified Credits: Students who enter 9th grade in 2018-19 and beyond

	Course	Credits	Verified Credits	Notes
<input type="checkbox"/>	English	4	2	Courses shall include English 9, 10, 11, and 12 or an advanced equivalent.
<input type="checkbox"/>	Math	3	1	Courses shall include at least two different course selections from among Algebra 1; Geometry; Algebra Functions and Data Analysis; Algebra 2, or other mathematics courses above the level of Algebra 2.
<input type="checkbox"/>	Science	3	1	Courses shall include at least two different course selections from among Earth Science, Biology, Chemistry, or Physics or completion of the sequence of science courses required for the IB Diploma.
<input type="checkbox"/>	Social Studies	3	1	Courses shall include U.S. and Virginia History, U.S. and Virginia Government, and one of the following: World History to 1500; World History from 1500.
<input type="checkbox"/>	Health and Physical Education	2		CPR/First Aid/AED Training Courses shall include Health PE 1 and 2. *Students will meet the CPR/First Aid/AED Training requirement while enrolled in an HPE 1 and 2 course in Prince William County Public Schools.
<input type="checkbox"/>	Economics/ Personal Finance (Virtual course component included)	1		Students will meet the Virtual Course graduation requirement after taking and passing this course in a Prince William County Public School.
<input type="checkbox"/>	Electives	6		Students can satisfy the sequential elective requirement with any two credits that demonstrate a progression in the study of a specific field (not two introductory courses) from any discipline. The two sequential electives may be in any discipline as long as the courses are not specifically required for graduation in 8VAC20-131-51 of the standards. Students may take the focused sequence of elective courses in consecutive years or any two years of high school. In addition to the two required sequential elective credits, students will need to satisfy the World Language/Fine and Performing Arts/CTE requirement by taking any of the following combinations: <ul style="list-style-type: none"> • One World Language credit and one Fine and Performing Arts credit. • One World Language credit and one CTE credit. • Two CTE credits. • Two Fine and Performing Arts credits. • One CTE and one Fine and Performing Arts credit.
<input type="checkbox"/>	Other Requirements			CTE Credentialing Exam: Students must take and pass a Career and Technical Education credentialing exam that has been approved by the Virginia Board of Education Or Take one advanced course during their high school career. An advanced course can be defined as any AP/Advanced, IB/Pre-IB, AICE/IGSCE course, or dual enrollment.

Advanced Studies Diploma

26 Standard Credits, 5 Verified Credits: Students who enter 9th grade in 2018-19 and beyond

	Course	Credits	Verified Credits	Notes
<input type="checkbox"/>	English	4	2	Courses shall include English 9, 10, 11, and 12 or an advanced equivalent.
<input type="checkbox"/>	Math	4	1	Courses shall include at least three different course selections from among Algebra 1, Geometry, Algebra 2, or other mathematics courses above the level of Algebra 2.
<input type="checkbox"/>	Science	4	1	Courses shall include at least three different course selections from among Earth Science, Biology, Chemistry, or Physics or completion of the sequence of science courses required for the IB Diploma.

	Course	Credits	Verified Credits	Notes
<input type="checkbox"/>	Social Studies	4	1	Courses shall include U.S. and Virginia History, U.S. and Virginia Government, and both World History to 1500 and World History from 1500; World Geography may be accepted as one of the required World History courses for transfer students.
<input type="checkbox"/>	World Language	3 or 4		Students can satisfy the World Language requirement for the Advanced Diploma with either three years of one language or two years each of two languages.
<input type="checkbox"/>	Health and Physical Education	2		CPR/First Aid/AED Training Courses shall include Health PE 1 and 2. *Students will meet the CPR/First Aid/AED Training requirement while enrolled in an HPE 1 and 2 course in Prince William County Public Schools.
<input type="checkbox"/>	Economics/ Personal Finance (Virtual course component included)	1		Students will meet the Virtual Course graduation requirement after taking and passing this course in a Prince William County Public School.
<input type="checkbox"/>	Electives	3 or 4		Students can satisfy the sequential elective requirement with any two of the three required elective credits that demonstrate a progression in the study of a specific field (not two introductory courses) from any discipline. The two sequential electives may be in any discipline as long as the courses are not specifically required for graduation in 8VAC20-131-51 of the standards. Students may take the focused sequence of elective courses in consecutive years or any two years of high school. Students can satisfy the World Language requirement for the Advanced Diploma with either three years of one language or two years each of two languages. If using World Language courses to meet both the sequential elective requirement and the World Language graduation requirement for an Advanced Studies diploma, students would need a total of five credits in World Language; either five credits of the same language, or (if taking two different languages) two credits of one language and three credits of another language.
<input type="checkbox"/>	Other Requirements			CTE Credentialing Exam: Students must take and pass a Career and Technical Education credentialing exam that has been approved by the Virginia Board of Education Or Take one advanced course during their high school career. An advanced course can be defined as any AP/Advanced, IB/Pre-IB, AICE/IGSCE course, or dual enrollment.

Graduation Information for Students with an Individualized Education Plan (IEP) or 504 Plan

Students with disabilities who have an IEP or 504 plan are encouraged to pursue the Advanced Studies or Standard Diploma. The IEP or 504 team will work with students and their families to determine the appropriate individual path to graduation for the student.

Credit Accommodations

Students entering 9th grade for the first time in 2013-14 and beyond are eligible to pursue an Advanced Studies Diploma, Standard Diploma, or Applied Studies Diploma. Students may use credit accommodations to earn the Standard Diploma if they meet the following eligibility requirements (1) the student has a current IEP or 504 plan with standards-based content goals; (2) the student has a disability that precludes him or her from achieving and progressing commensurate with grade level expectation, but is learning grade level content; (3) the student needs significant instructional supports to access grade level Standards of Learning (SOL) content and to show progress; and (4) based on multiple objective measures of past performance, student might not be expected to achieve the required standard and verified units of credit within the standard time frame. Credit accommodations shall be determined and documented by the student's IEP team or 504 plan committee, including the student where appropriate, at any point after the student's eighth grade year.

Applied Studies Diploma (For Students With An IEP)

Courses Needed: Students with disabilities who complete the requirements of their Individualized Education Program (IEP) and do not meet the requirements for other diplomas shall be awarded the Applied Studies Diploma.

Transition Services (For Students With An IEP)*

Realizing successful post-secondary outcomes is a goal PWCS has for all students. Depending on the severity of disability and the support services required in adult life, successful transition from high school to adult life may require that planning activities begin in elementary school with students exploring their interests in middle school. Starting the process early prepares students with disabilities to think about what they want to be able to do in adult life. High school transition planning includes exploring post-secondary opportunities and employment options and may include connecting with the adult service agencies that may provide the student with services.

Statement Of Needed Transition Services - Beginning No Later Than The First IEP Developed When The Eligible Student Is 14.

Recognizing the need for students with disabilities to engage in effective transition planning, the Individuals with Disabilities Education Act (IDEA) requires that transition planning be part of the Individualized Education Program (IEP). Beginning no later than the first IEP developed when the eligible student is 14, the Team considers the student's need for transition services and documents this discussion. If appropriate, the IEP includes a statement of needed transition services. Such documentation must be reviewed and updated annually thereafter. Students must be invited to all meetings and allowed to participate actively when transition planning is discussed and are encouraged to actively participate.

Linkages To Post School Options - Beginning No Later Than The First IEP Developed When The Eligible Student Is 14 And Update Annually.

Beginning no later than the first IEP developed when the eligible student is 14, the IEP's of students should include a post school vision statement as well as identify the transition services necessary to support the vision. IDEA 2004 defines transition services as a coordinated set of activities for a student with a disability that -

- A. Is designed to be within a results-oriented process, that is focused on improving the academic and functional achievement of the student with a disability to facilitate the student's movement from school to post-school activities, including post-secondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation;
- B. Is based on individual strengths, preferences and interest; and
- C. Includes instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and when appropriate, acquisition of daily living skills and functional vocational evaluation. (P.L. 108-446, Sec 603 (34))

Transfer Students

Students who transfer to a Prince William County Public School from a public school system within the state of Virginia must meet all graduation requirements set forth by the Virginia Department of Education. Students who transfer to a Prince William County Public School from a private or out-of-state school will work with their school counselor to make an individualized graduation plan that allows the student some flexibility in meeting graduation requirements as set forth by the Virginia Department of Education. Students who enroll during the school year after the first 20 hours of instruction will be required to meet the following verified unit of credit requirements for graduation:

Student enters the 9th grade for the first time during 2018-19 and beyond Standard or Advanced Studies Diploma	
<input type="checkbox"/>	Student enters at the beginning of or during 9th grade or at the beginning of 10th grade: Student must obtain all five required verified units of credit.
<input type="checkbox"/>	Student enters at the beginning of or during 10th grade or at the beginning of 11th grade: Student must obtain all five required verified units of credit.
<input type="checkbox"/>	Student enters during 11th grade or at the beginning of 12th grade: Student must obtain two verified units <ul style="list-style-type: none">• One in English• One student selected*
	*One must be earned in mathematics if participation in mathematics testing is required by federal law.
<input type="checkbox"/>	Student enters during 12th grade:

Student enters the 9th grade for the first time during 2018-19 and beyond
Standard or Advanced Studies Diploma

Student may apply for a waiver of verified units with the State Board of Education.

Students transferring with weighted credits from other divisions will have those credits assessed and aligned with similar courses in PWCS. Students may also be granted additional flexibility in meeting some of the course requirements for graduation as outlined in the Virginia Standards of Accreditation. Any student or parent with questions about graduation requirements for transfer students should consult with their assigned school counselor. Students whose parents are active duty military may receive additional flexibility as outlined in the Interstate Military Compact on Educational Opportunity for Military Children. Information for transfer students who enter during 10th grade in 2019-20 and beyond is available in each school counseling office.

Diploma Warranty

Prince William County Public Schools will provide a two-year warranty for diploma recipients. The diploma warranty guarantees minimum competencies in reading, writing, and mathematics. Students receiving a diploma from Prince William County Public Schools:

- Understand, interpret, and analyze written material;
- Carry out oral and written directions or obtain clarification when necessary;
- Express ideas both orally and in writing, using appropriate vocabulary and proper grammar;
- Locate and obtain needed information from common reference materials, computerized databases, maps and diagrams, and resource people;
- Apply basic computation skills; and
- Use problem-solving strategies in the work environment.

Prince William County Public Schools' graduates who are identified by employers as lacking one or more of these minimum competencies may be retrained through Prince William County Public Schools' Evening School program at no expense to the graduate.

Diploma Seals

Regulations Establishing Standards for Accrediting Public Schools in Virginia contain provisions for awards for exemplary performance for students who meet the requirements for graduation as follows:

- 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 will earn the student at least nine transferable college credits in Advanced Placement (AP), IB (IB), Cambridge (AICE), or dual enrollment courses will receive the **Governor's Seal on the Diploma**.
- Students who complete the requirements for a Standard Diploma or an Advanced Studies Diploma with an average of "A" will receive a **Board of Education Seal** on the Diploma.
- **The Board of Education's Career and Technical Education Seal** will be awarded to students who earn a Standard Diploma or an Advanced Studies Diploma, complete a prescribed sequence of Career and Technical Education courses, and either:
 - Maintain a "B" or better average in those courses; or
 - Pass one of the Virginia Department of Education approved industry certifications, occupational competency assessments, or professional licenses. See your school counselor for a list of approved industry certifications.
- **Board of Education's Diploma Seal for Science, Technology, Engineering, and Mathematics (STEM)** will be awarded to students who:
 - Earn either a Standard Diploma or an Advanced Studies Diploma.
 - Satisfy all Math and Science requirements for the Advanced Studies Diploma with a "B" average or better in all course work.
 - Successfully complete a 50 hours or more work-based learning opportunity in a STEM area.
 - Satisfy all requirements for a Career and Technical Education concentration. A concentration is a coherent sequence of two or more state-approved courses as identified in the course listing within the CTE Program Area Guide.
 - Pass one of the following:

- A Board of Education CTE STEM-H credential examination; or
- An examination approved by the Board that confers a college-level credit in a STEM field.
- **The Board of Education's Seal for Excellence in Civics Education** will be awarded to students who earn a Standard Diploma or an Advanced Studies Diploma and satisfy all of the following criteria: (1) complete U.S. and Virginia History and U.S. and Virginia Government with a grade of "B" or higher; (2) 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, Girls Scouts or similar youth organizations; participating in Junior Reserve Officers' 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; and (3) have good attendance and no disciplinary infractions as determined by local school board policies. Any student who enlists in the United States military prior to graduation will be deemed to have met the community service requirement for this seal.
- **The Board of Education's Seal of Biliteracy** will be awarded to students who earn a Board of Education-approved diploma and (1) pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level; and (2) 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 to be approved by the Superintendent of Public Instruction. For purposes of this seal, American Sign Language qualifies as a language other than English.
- **The Board of Education's Seal for Excellence in Science and the Environment** is awarded to students who enter the 9th grade for the first time in the 2018-19 year and thereafter, and meet each of the following criteria:
 - Earn either a Standard or Advanced Studies Diploma.
 - Complete at least three different first-level board-approved laboratory science courses and at least one rigorous advanced-level or postsecondary-level laboratory science course, each with a grade of "B" or higher.
 - Complete laboratory or field-science research and present that research in a formal, juried setting.
 - Complete at least 50 hours of voluntary participation in community service or extracurricular activities that involve the application of science such as environmental monitoring, protection, management, or restoration.

Expand Your Academic Vocabulary

Advanced Placement, IB Diploma, and Cambridge AICE Courses

Certain courses have been designated as AP, IB, and Cambridge Courses (AICE). These courses are externally moderated and exceed the expectations of grade-level objectives for a specific subject. Students taking these courses will have a plus sign (+) beside the course title listed on the student report card and on the student transcript. These courses offer the possibility of weighted credit.

Career and Technical Education Industry Credentialing

Career and Technical Education industry credentialing can be achieved by successful completion of Career and Technical Education coursework which will enable students to participate in Virginia Board of Education approved assessments for industry credentialing. Students who earn these credentials are eligible to earn verified credits toward graduation requirements. All students who enter the 9th grade in 2018-19 and beyond pursuing either the Standard or Advanced Studies Diploma will be required to pass a CTE credentialing exam only if he/she has not taken an advanced or honors course for high school credit.

CPR/First Aid and AED Training

The requirements for the Standard and Advanced Diplomas shall include a requirement to be trained in emergency first aid, cardiopulmonary, resuscitation, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. PWCS students will be trained in these skills while enrolled in Health PE 1.

Dual Enrolled

Students taking courses from a community college, trade school program, college, or university for a credit, while simultaneously enrolled in a Prince William County public high school are said to be dual enrolled. Agreements between the college and PWCS must be in place before courses being approved for dual enrolled credit.

Elective

Electives are additional courses beyond the required courses that are needed to meet the total minimum standard units of credit for graduation.

Fine and Performing Arts or Career and Technical Education

- Fine and Performing Arts courses include those courses which lead to student's aesthetic education in the areas of visual arts, theatre arts, music, dance, creative writing, journalistic writing, or speech. The course taken to satisfy the fine and performing arts requirement may also serve as one of the two courses required to satisfy the sequential electives requirement.
- Career and Technical Education courses focus on 21st-century career skills presented in a real-world setting. All courses listed under Career and Technical Education, except Economics and Personal Finance; and Office Specialist 1, 2, and 3, and Employ 1 and 2 courses listed under Special Education meet this graduation requirement. The course taken to satisfy the CTE requirement may also serve as one of the two courses required to satisfy the sequential elective requirement.

Sequential Electives

According to the Virginia Department of Education's (VDOE) Standards of Quality (SOQ), students who enter the 9th grade for the first time during the 2018-19 school year and beyond who are pursuing either the Standard or Advanced Studies Diploma must complete at least two sequential electives. Students who successfully complete any career and technical education sequence that consists of at least two 36-week courses or semester equivalents that equal two 36-week courses will fully meet this requirement. For students pursuing the Standard Diploma the World Language, Fine and Performing Arts, or Career and Technical Education course credit may be used to partially satisfy the sequential elective requirement.

For students pursuing the Advanced Studies Diploma who enter the 9th grade during the 2018-19 school year and beyond, the Fine and Performing Arts or Career and Technical Education course credit may be used to partially satisfy the sequential elective requirement.

Standards of Learning (SOL)

The Standards of Learning for Virginia Public Schools describe the Commonwealth's expectations for student learning and achievement in English, mathematics, science, history and social science, technology, the fine arts, world language, health and physical education, and driver education for grades K-12.

Standards of Learning Tests (SOL Tests)

SOL tests are End-of-Course (EOC) tests which are required by the Virginia Department of Education (VDOE) to verify attainment of knowledge and skills in specific English, math, science, and social science courses. A standard unit of credit is earned when a student passes the course, he/she is taking. If a student passes the SOL test but fails the course, the student does not retake the SOL test. The student must, however, repeat the course. If a student passes the course but fails the SOL test for that course, the student may retake the SOL test until he/she passes it. Students passing a course may proceed to the next level of a course without having passed the SOL test in the previous level. If both the course and the SOL test are failed, both must be repeated.

Standard Unit of Credit

A standard unit of credit for graduation is based on a minimum of 140 clock hours of instruction and successful completion of the requirements of the course. A semester course receives one-half credit.

Verified Unit of Credit

A verified unit of credit for graduation is based on a minimum of 140 clock hours of instruction, successful completion of the requirements of the course, and achievement of a passing score on the End-of-Course (EOC) Standards of Learning (SOL) test or additional test for that course as approved by the Board of Education. A verified unit of credit is earned when:

1. The course is passed in which a Standards of Learning (SOL) test is administered; and

2. The end-of-course SOL test is passed.

Students must complete five verified units of credit for the Standard and Advanced Studies Diplomas. Students entering a Virginia public school during the 11th grade or at the beginning of the 12th grade have reduced SOL requirements.

Locally Awarded Verified Unit of Credit

Students pursuing the Standard or Advanced Studies Diploma may earn one locally awarded verified unit of credit toward the five verified credits required to graduate. Students with an IEP or 504 plan who are eligible for credit accommodations may earn all verified units of credit through the local award process.

To be eligible to earn locally awarded verified credits in English, mathematics, science, or history/social science, a student must:

- Pass the high school course;
- Score within a 375-399 scale score range on any administration of the Standards of Learning test after taking the test at least twice; and
- Demonstrate achievement in the academic content through an appeal process administered at the local level.

Weighted Credit

Weighted credit refers to grade point values assigned to:

- Advanced Placement courses
- IB courses
- Cambridge courses
- Certain career and technical education courses
- Dual enrollment courses
- Qualifying college courses
- Designated prerequisite courses

Earning High School Credits and Grade Point Average

Ways to Earn Credit

Traditional Classroom

The vast majority of students experience Prince William County Public Schools through the traditional classroom environment where face-to-face collaboration leads to a deep construction of knowledge with our excellent teaching staff. The classroom environment provides the greatest potential for student interaction. It also creates the opportunity to form lifelong friendships with their classmates over an entire school year.

Virtual Courses

Virtual courses provide students with greater flexibility regarding the time, pace, path, and place of their learning. Virtual courses are facilitated by teachers that leverage digital technologies as part of instructional design to help students build understanding and apply their learning in meaningful ways. Virtual courses use a learning management system (LMS) and a variety of digital tools and practices, including instructional content, rich-media, interactions (discussion boards, messaging, video communication, etc.), data and assessment systems, and feedback systems to receive timely and rich data used to guide learning tailored to individual student needs.

Virtual Prince William

Prince William County Public Schools (PWCS) is a pioneer in online learning through our Virtual Prince William (VPW) program. VPW provides an online learning experience, with accelerated (semester-paced) courses taught by highly skilled and certified PWCS teachers. Virtual Prince William offers students the opportunity to take courses online for the completion of graduation requirements, to recover credits, and to balance academic and extracurricular

opportunities. These courses are delivered via Canvas, PWCS' learning management system, and coursework is completed outside school hours. Students and teachers communicate within the learning management system and via PWCS Office 365 email accounts.

VPW courses are both asynchronous and synchronous. Students are expected to be able to work independently and collaborate with their teachers and peers. Asynchronous instruction is designed for students to complete course work independently at a designated pace. While students have some flexibility to choose when they complete asynchronous tasks, they must adhere to course pacing and due dates.

Courses offered in any given school year are dependent on student enrollment and the availability of qualified and appropriately endorsed instructional staff. Students interested in VPW course options should see their school counselor or contact [Virtual Prince William](#).

For additional information, please visit the [Virtual Prince William website](#).

Virtual Virginia

[Virtual Virginia](#), sponsored by the Virginia Department of Education, provides online courses to students across the commonwealth. Students have the opportunity to enroll in courses outside of their regular school day or take advantage of courses that are not currently available in their school.

Virtual Virginia courses utilize both asynchronous and synchronous approaches to instruction, through which students will work independently and collaborate with their teachers and peers. Asynchronous instruction is designed for students to complete course work independently at a designated pace. Examples of asynchronous instruction may include reading content, viewing media, completing assignments, taking a quiz/assessment, or working on a project. Students have flexibility to choose when they complete asynchronous tasks, but they must adhere to the course pacing and due dates.

An essential component of Virtual Virginia instruction is regular interaction between teachers and their students, including email and phone communications and synchronous instructional sessions via video web conferencing. Students can attend daily synchronous instructional sessions led by their teacher. Students will also have the opportunity for daily group and 1:1 instruction.

Virtual Virginia courses meet or exceed rigorous curriculum standards, including the Virginia Standards of Learning (SOL) and the College Board Audit Certification for Advanced Placement (AP) courses. All Virtual Virginia courses are staffed by highly qualified Virginia, licensed instructors with virtual office hours posted within the courses. These virtual office hours provide ample opportunities for students to contact their instructor(s) via telephone, using email, or communicating through a live web-based conferencing tool. In addition to the local mentor, students may access the services of the Virtual Virginia Help Desk for technical issues.

While some courses require tuition, any students participating in the [Early College Scholars program](#) may have their AP course tuition covered by the Virginia Department of Education. Students who plan to take the AP exam are required to pay the AP exam fee.

To learn more about Virtual Virginia opportunities, please visit your school counselor.

Evening School

A limited number of core and elective courses are available in the evenings during the fall and spring semesters. These are courses required for graduation. Course availability is subject to sufficient course requests. Courses are typically 15 weeks in length and taught by certified content teachers. In-person attendance is mandatory. See your school counselor for a registration form and further information about the Evening School program.

Summer Programs

PWCS also offers select courses over the summer. Students may retake coursework if they failed the course in order to receive a passing grade. All students taking a summer school course that requires an end-of-course SOL test, must take the SOL test scheduled during summer school, unless the student has already passed the test.

Alternative Methods for Granting Standard Units of Credit

In some instances, currently enrolled students find it necessary to look for other options to earn a standard unit of credit. Students seeking to earn high school credits from educational institutions outside Prince William County Public Schools or the Virtual Virginia program must request permission to take the course. Credit will only be awarded for the course if permission is granted by the Student Learning Department prior to course enrollment. See your school counselor for more information about alternative options for earning standard units of credit.

Regional Advanced Academic Schools

Thomas Jefferson High School for Science and Technology - Virginia Regional Academic-Year Governor's School

The Thomas Jefferson High School for Science and Technology accepts Prince William County Public Schools' students into its four-year program through an application and testing process. Interested students should ask a designated middle school counselor for an information packet. *Students must complete Algebra 1 by the end of eighth grade, achieve a 3.5 GPA, be enrolled in extended level math and English classes to apply to Thomas Jefferson.* Additional information is available through the Thomas Jefferson Admissions Office at 571-423-3770 or on the [TJHS Admission webpage](#).

The Governor's School @ Innovation Park - Virginia Regional Academic-Year Governor's School

The Governor's School @ Innovation Park is a science, technology, engineering, and mathematics (STEM) initiative of three school divisions, Prince William County, Manassas City, and Manassas Park, in collaboration with George Mason University. The instructional design of the program integrates strands in biology, chemistry, and physics with mathematics, concepts of engineering and technology, and with laboratory research. Learning experiences focus on real-world research with mentorship opportunities in business, industry, government, and university settings. Rising juniors are eligible to apply for the program. Interested students can access the application online on [The Governor's School](#) website. *Students must have completed Algebra 2/Trigonometry and both Biology 1 and Chemistry 1 by the end of the 10th grade to apply and enter the Biology, Chemistry, or Physics threads. Students must have additionally completed Pre-Calculus and Physics in order to be qualified to enter the Engineering thread.*

Nontraditional Education

Independence Nontraditional School

Independence Nontraditional School offers students in grades K-12 a comprehensive instructional program that merges leadership, career, and social skills necessary for success in the 21st century with existing Prince William County Public Schools curricula. Students can expect a rigorous curriculum which promotes the development of academic resilience, social responsibility, and self-respect. The innovative education environment provides flexible learning opportunities to support student success. Day and evening programs are offered. Age-appropriate interventions that address effective and affective development, second language acquisition, and special needs are provided in an inclusive manner.

Students are recommended for placement by school administrators, parents/guardians, or the Student Management and Alternative Programs Department. A nontraditional education plan for each student designed collaboratively by Independence Nontraditional staff, parents/guardians, and the student ensures each student meets his/her educational and graduation goals. Multiple instructional options support seamless student transitions to additional academic, extracurricular, and service-learning opportunities.

Individual Student Alternative Education Plan

The Individual Student Alternative Education Plan (ISAEP) is a program offered through the Virginia Department of Education, which provides students between the ages of 16-17 years old who are at risk of dropping out of school, an opportunity to work toward a General Educational Development (GED) certificate while developing a vocational or career skill. Students must be referred to the program by the school counseling office, with the permission of the parents/guardians, and must meet the eligibility criteria to be admitted to the program. The ISAEP will only be considered for students after all measures to maintain students in a traditional diploma program have been exhausted. Contact the school counseling office for more information regarding the program.

Adult Education

The adult education program provides educational opportunities for adults, 18 and over, who wish to acquire competencies necessary for further education, employment, or personal enrichment. Classes are provided to residents in PWCS, Manassas City and Manassas Park. Adult Education offers courses in English language acquisition, high school completion (which includes GED and the National External Diploma Program - NEDP), bridging, Microsoft Office Specialist, Entrepreneurship and Small Business, Guest Service Gold, Community Engagement, Customer Services and Sales, job readiness, and computer workshops. The Adult Learning Center is also a testing center and delivers over 140 tests through Pearson Vue.

Grade Point Average

Grade-Point Values: All courses taught for credit in Prince William County Public Schools are assigned grade-point values as follows:

Grade-Point Values

Grade	Percentage	Point Value for Courses	Point Value for Designated Advanced Placement, International Baccalaureate, Cambridge, and Dual Enrollment Courses	Point Value for Designated Prerequisite Courses
A	90-100	4 points	5 points	4.5 points
B+	87-89	3.4 points	4.4 points	3.9 points
B	80-86	3 points	4 points	3.5 points
C+	77-79	2.4 points	3.4 points	2.9 points
C	70-76	2 points	3 points	2.5 points
D+	67-69	1.4 points	1.4 points	1.4 points
D	60-66	1 point	1 point	1 point
F	59 and below	0 points	0 points	0 points

When students successfully complete courses identified as 9th, 10th, 11th, or 12th grade courses prior to entering 9th grade, they will receive standard units of credit toward graduation. Such courses will be used in computing the student's high school GPA. Weighted grade points are used to encourage students to take more challenging course work with less risk to their report card grades. Students and their families should note that colleges and universities routinely remove weighted credits to better compare applicants' performance in rigorous courses across school divisions where weighting practices vary.

Omitting a Grade for a High School Credit Taken in Middle School

The Regulations Establishing Standards of Accrediting Public Schools in Virginia have provided families with the option of requesting that grades be omitted from a student's transcript for any high school credit-bearing course taken in middle school. Requests to have a high school credit-bearing course grade removed from a student's transcript must be submitted using the form available in the counseling office or on the school website to the appropriate principal before the deadlines established by the school division. Families who elect to have a grade removed from the transcript should be aware that the decision to have the grade removed is binding and that no grade or associated credit will be awarded for the course once the request has been granted.

Schedule Changes

Students are encouraged to stretch and reach to take advanced levels of course offerings when possible. Should a student request to drop an advanced course, the following steps will be taken prior to approval:

- The teacher will talk with the student to determine why they wish to drop the course and ways in which a student may improve their performance in the class.
- The teacher will notify the parent(s) of the request to drop the course and discuss ways in which the student may improve their performance.

- The student's counselor will work with the student to identify supports that could be put into place (i.e. tutoring during flex, tutoring before/after school, etc.).
- The principal or designee will approve or deny the request.

Each high school sets their own schoolwide schedule change procedures and guidelines. Students must comply with the schedule change process established at their school. Should a student elect to change a class, the following rules will apply:

- Students who drop a year-long course before the end of the first quarter or before the end of the first four weeks for a semester-based course, shall not have the attempt recorded on their transcript.
- Students who drop a year-long course after the end of the first quarter or after the end of the first four weeks for semester-based course, shall receive no credit and a notation shall be made on the student's transcript indicating withdraw failing or withdraw passing.
- Students who drop a year-long course after the end of the first semester or after the end of the first quarter for semester-based courses, shall receive no credit and a failing grade for the course.
- The principal (or designee) may, in extenuating circumstances relating to a student's health or well-being, make an exception to the regulation governing the procedures for dropping a course.
- If a student moves from one level to another level of the same course, the grades earned in the initial course will transfer to the second course. This rule applies even in those cases where the student is moving from an advanced level course to a lower-level course within the same subject (e.g., Advanced English 9 to English 9).

Earning College Credit While in High School

Dual Enrollment Opportunities for Students

What is Dual Enrollment?

Dual Enrollment is an enrichment opportunity that allows high school/home schooled students to earn college credits for courses taken through a sponsoring college/university while still being enrolled in high school. As a dual-enrolled student, you are enrolled in both high school (or home school) and the sponsoring college/university.

Who Can Take a Dual Enrollment Course?

High school juniors and seniors, who meet the established criteria of the sponsoring college/university, are eligible to participate in the dual enrollment courses. Freshmen and sophomores may be granted exceptions on a case-by-case basis.

Where Do I Take a Dual Enrollment Course and What is the Cost?

Dual enrollment courses through Northern Virginia Community College are taken in a PWCS school. There is no charge for tuition. Student should contact their school counselor for more information about courses and fees that may be associated with Dual Enrollment.

I am Ready to Take a Dual Enrollment Course! How Do I Get Started?

Indicate your interest in dual enrollment when you meet with your school counselor to discuss course selection prior to the start of your junior year. Your school counselor will guide you through the next steps to include completing a PWCS Dual Enrollment application and the application for sponsoring college/university.

Methods for Earning College Credit While in High School

As described above, students may take dual enrollment courses as "contract dual enrollment" by attending their community college classes on PWCS high school campuses and receiving instruction from PWCS teachers who are authorized to teach dual enrollment courses by sponsoring college/university.

Students may also take "on campus" courses at the community college for dual enrollment credit for those courses identified in the division's annual list of published dual enrollment offerings.

Students wishing to take courses not included in the division's list of dual enrollment course offerings may take "college credit only" offerings with a sponsoring college/university.

In addition, student can earn college credit through no tuition cost [Early Online College](#) opportunities available in partnership with NOVA.

In all cases, students must meet the entrance requirements of the sponsoring college/university and have their principal's permission to enroll in courses offered for college credit with those schools the division has partnered with for these opportunities.

Students may also earn college credit by taking an Advanced Placement (AP), Cambridge (AICE), or International Baccalaureate (IB) course while in high school. Students receive college credit based on the score they receive on the external exam taken at the conclusion of the course or sequence of courses. Below, a summary of all the ways in which students may earn college credit in a PWCS school is provided.

How Can My High School Course Work Earn Me College Credit?	
Dual Enrollment	<ul style="list-style-type: none"> • Many earned credits with a "C" or better transfer to most four-year colleges • Courses may fall within a specific subject area or may be considered an elective • The awarding of college credit for courses taken in high school varies and students should research the specific school they wish to attend.
Advanced Placement (AP)	<ul style="list-style-type: none"> • Earned exam scores of 3, 4 or 5 may qualify students for 3 or more college credits per AP course. • The awarding of college credit for courses taken in high school varies and students should research the specific school they wish to attend.
International Baccalaureate (IB)	<ul style="list-style-type: none"> • Earned exam score of 4 or higher may qualify the student to earn college credit. • Earned exam scores of 5, 6 or 7 may qualify students for up to 9 college credits per one IB course. • The awarding of college credit for courses taken in high school varies and students should research the specific school they wish to attend.
Cambridge (AICE)	<ul style="list-style-type: none"> • Earned exam grades of E or higher may qualify the student to earn college credit. • Earned exam grades of A or B on A level exams may qualify students for up to 6 college credits per Cambridge course. • The awarding of college credit for courses taken in high school varies and students should research the specific school they wish to attend.

Learn more about [receiving college credit for passing AP, IB, and Cambridge exams](#) at a Virginia four-year college.

Equal Opportunity Schools

Equal Opportunity Schools (EOS) is a PWCS initiative designed to increase all students' access and opportunity to participate in rigorous academic environments such as Advanced Placement, International Baccalaureate, and Cambridge courses. PWCS utilizes EOS to target students in grades 9-12. Once students are enrolled in these courses, the EOS data analysis, outreach, and academic support models are utilized to ensure students realize success. All students have access to Trusted Adults who are familiar with each student's profile.

Set Yourself Up for Success

PWCS Ready to Launch - Pacing for Success

- Students completing the courses and other graduation requirements outlined below will be "Ready to Launch" their thriving future by pursuing postsecondary education at institutions of their choice to include Northern Virginia Community College and four-year universities.
- Students can opt to take a standard level or advanced level (AP, IB, AICE) of any required course depending on the program available at their school.
- Students must complete all requirements for their chosen diploma to include earning verified units of credit for courses which have a Standard of Learning (SOL) test attached.
- Students are encouraged to research admission requirements for highly selective colleges and universities during their 9th grade year.

Subject	Grade 9	Grade 10	Grade 11	Grade 12
<input type="checkbox"/> English	English 9	English 10	English 11	English 12
<input type="checkbox"/> Math	Algebra 1 or Higher	Geometry or Higher	Algebra Functions and Data Analysis, Algebra 2, or higher	Algebra 2 or higher *Algebra 2 + higher, four math for university
<input type="checkbox"/> Science	Earth Science 1, Environmental Science, or Biology 1	Biology 1 or Chemistry 1	Chemistry 1 or Physics 1	Higher Level Science (AP, IB etc.)
<input type="checkbox"/> Social Studies	World History 1	World History 2	U.S. and Virginia History	U.S. and Virginia Government
<input type="checkbox"/> World Language	Level 1 or higher	Level 2 or higher	Level 3 or higher *Recommended for highly selective colleges	Higher Level Language (AP, IB etc.) *Recommended for highly selective colleges
<input type="checkbox"/> Health and Physical Education	Health and Physical Education 1	Health and Physical Education 2		
<input type="checkbox"/> Electives	Fine and Performing Arts or Career and Technical Education (1 credit) Sequential Elective (2 credits - Standard Diploma Only) for students who enter 9th grade prior to 2018-19. Required for all students who enter the 9th grade in 2018-19 and beyond. Other Electives (2 or more credits depending on diploma type)			
<input type="checkbox"/> Additional Graduation Requirements	Economics and Personal Finance	CTE Credentialing Exam or One Advanced Course	Virtual Course	CPR/First/AED Training

See your school counselor for more information about your high school course plan and your postsecondary education plans!

Academic and Career Planning Tools

Academic and career planning is a process for all students to reflect on their interests, values, and future goals to formulate an evolving plan in support of their future goals and success as contributing citizens. This plan is revisited with each student every year. Additional information and resources on College and Career Readiness is available via the [College and Career Readiness website](#).

Academic Career Plan Portfolio - ACPP (kindergarten through 5th grade)

Elementary students learn how to set goals and better understand their own interests and values. They complete career artifacts each year while exploring future career opportunities.

Academic and Career Plan - ACP (6th through 12th grade)

Middle and high school students each have a personal learning plan and course of study that aligns with the student's academic and career goals. Students utilize Naviance, a personalized platform that includes individual self-discovery assessments, goal setting, career and college planning, financial literacy, and academic course planning. Students access Naviance through the single sign-on, Clever, and their Office 365 credentials. Learn more at [PWCS Naviance](#).

Student Vision Profile - (6th through 12th grade)

Each year, your parent/guardian will receive a student vision profile that is customized with information about you and your interests. This document is an excellent tool for you to use to reflect on your after high school plan and to discuss your life choices with members of your family.

Refine Your Vision - College and Education Pathway

Postsecondary Education Options

Students are encouraged to identify their best-fit choice opportunities that align with student-driven values, interests, and goals. Accreditation and state licensures ensure the quality of the education recognized by other organizations. For more information on accreditation, visit the Department of Education.

Career and Technical CTE Institutions

Students are seeking to learn a specific trade and skill for employment. Curriculum is highly specialized with a focus on the skills necessary for industry and career success. Degrees offered include credentials, certificates, and/or associate applied science degrees.

Community College/Junior College (Two Year)

Students are seeking a traditional academic continued education, including core subject course work in addition to elective/major concentrations. Degrees offered include associate degrees, certificates, and applied studies. Often students seek community college with the intention of transferring to a university to complete their bachelor's degree with two remaining years following the completion of an associate degree. Virginia Community College System partners with the Virginia public colleges in guaranteed admissions agreements specific to the university's expectations. See [Northern Virginia Community College](#) to learn more about these agreements and program offerings.

University and Four-Year College Institutions

Students are seeking a traditional academic education with core subject course work in addition to majors of study. These institutions often offer graduate degree programs after the completion of a bachelor's degree. Degrees offered include Bachelor of Arts and/or Science, and some also offer associate degrees, certifications, and graduate level degrees. Schools may be public, receiving funding from the state, or private, not receiving funding from the state. Financial opportunities exist at each type of institution and should be researched prior to applying.

[Take a deep dive into your postsecondary education options here.](#)

What Are Colleges Looking For?

Colleges take a holistic approach to the application process. Admissions officers report that course rigor in areas that interest the student is key to demonstrated college readiness. The overall best match between the student and institution is a high predictor of success and college completion. College entrance exams, while optional for admissions in some cases, could still be used for qualifications for merit scholarships and/or honors programs. Students should create a list of schools that match their values, interests, and goals. Then, students should take a deep dive into each institution's programs of study, scholarships, and honors programs.

Selective Institutions Where 100+ PWCS Students Apply

Data below is based on reported acceptance information reported for the class of 2023 from Prince William County Public Schools.

	Student Reported Acceptance Rate	Average GPA of accepted students	Average SAT of accepted students (combined Verbal and Math)	Average ACT of accepted students (composite score)
Most Selective - National <i>Examples:</i> Princeton University, Cornell University, Duke University, Stanford University, John Hopkins University	1-3%	4.4	1368	31
Highly Selective - VA <i>Examples:</i> University of Virginia, College of William & Mary, University of Richmond, Virginia Tech	8-28%	4.3	1161	28
Very Selective - VA <i>Examples:</i> George Mason, Marymount University, James Madison University, Shenandoah University, Christopher Newport University, Old Dominion University	40-49%	3.8	887	23
Moderately Selective - VA <i>Examples:</i> Virginia Commonwealth University, Liberty University, Radford University, Longwood University	49-51%	3.7	817	23

PWCS Student Acceptance Rates at Popular Colleges

The class of 2023 reported admission decisions prior to graduation. Below are the student self-reported acceptance rates of colleges where more than 85 students applied.

College	Percentage
American University	21%
Boston University	6%
Bridgewater College	52%
Brown University	2%
Carnegie Mellon University	2%
Christopher Newport University	47%
Clemson University	21%
Coastal Carolina University	40%
Columbia University in the City of New York	2%
Cornell University	3%
Duke University	0%
East Carolina University	41%
Florida State University	9%
George Mason University	48%
Georgia Institute of Technology-Main Campus	6%
Hampton University	33%
Harvard University	1%
Howard University	15%
James Madison University	40%
Johns Hopkins University	2%
Liberty University	46%
Longwood University	49%
Louisiana State University	35%
Mary Baldwin University	42%
Marymount University	40%

College	Percentage
Morgan State University	37%
NCAA Eligibility Center	22%
New York University	4%
Norfolk State University	38%
North Carolina A&T State University	29%
North Carolina State University at Raleigh	13%
Northeastern University	12%
Ohio State University-Main Campus	19%
Old Dominion University	49%
Pennsylvania State University-Penn State Main Campus	31%
Princeton University	1%
Radford University	51%
Roanoke College	47%
Shenandoah University	40%
Stanford University	3%
Syracuse University	12%
Temple University	51%
The George Washington University	12%
The University of Alabama	37%
The University of North Carolina at Chapel Hill	5%
The University of Tennessee-Knoxville	16%
Towson University	26%
University of Chicago	1%
University of Florida	10%
University of Lynchburg	53%
University of Mary Washington	42%
University of Maryland-College Park	13%
University of Miami	7%
University of Michigan-Ann Arbor	5%
University of Pennsylvania	1%
University of Pittsburgh-Pittsburgh Campus	31%
University of Richmond	8%
University of South Carolina-Columbia	23%
University of Southern California	4%
University of Virginia-Main Campus	16%
Vanderbilt University	8%
Virginia Commonwealth University	50%
Virginia State University	52%
Virginia Tech	28%
Washington and Lee University	7%
West Virginia University	49%
William & Mary	18%
Yale University	2%

College Admission Standardized Testing Framework

The coronavirus pandemic introduced college admission changes to the testing options for the admission into many colleges, several of which have chosen to continue with these options currently. Each institution decides what requirements and options exist around standardized testing and admission into their institution. Testing policies around optional, blind, or flexible reporting differ from college to college (ex. eligible GPA)

- **Test-blind** admissions is exactly what it sounds like: whether or not a student decides to send their test scores, they won't be considered as part of the application evaluation.
- **Test-optional** lets students decide whether or not they want to submit test scores with their application. Most test-optional schools will consider SAT and ACT scores if they are submitted but focus on other factors they believe are stronger predictors of a student's potential.
- **Test flexible** ;colleges or universities allow students to choose which type of test (or tests) they'd like to submit with their application. If students want to submit the SAT or ACT, they're welcome to do so. Other options include an International Baccalaureate exam or an Advanced Placement test.

*Note: Student SAT/ACT test data does not represent admission outcomes related to test scores. These students may have applied test optional or test blind. It is always best to check the admission requirements and statistics on the college or university's website.

What is Your College Pathway?

- [Virginia Public and Private Four-Year Colleges and Universities](#)
- [Virginia Two-Year Colleges](#)
- [Historically Black Colleges and Universities](#)
- [Hispanic Serving Institutions](#)

Refine Your Vision - Military Pathway

Know Your Options

The U.S. Armed Forces are made up of six military branches:

- Air Force
- Army
- Coast Guard
- Marine Corps
- Navy
- Space Force

In addition to the six military branches, the Army and Air National Guard is a reserve component of the U.S. Armed Forces, and responds to domestic emergencies, overseas combat missions, counter-drug efforts, reconstruction missions, and more. Visit the U.S. military branch webpages below, along with the National Guard, to learn more. There are several options available for students considering a career in military service. Military recruiters visit all high schools throughout the week during lunch. There are many ways to serve our country through enlistment, academy, ROTC, and National Guard. Explore your options for [military careers](#).

Explore Careers

The ASVAB Career Exploration Program is a timed, multi-aptitude exam developed and administered by the Department of Defense. Scores from this exam can give you insight into military options to support your planning.

Make a Connection

You should connect with a service enlistment counselor to identify the right job specialty.

[Learn more about careers in the military and options available to you in PWCS.](#)

Refine Your Vision - Career and Employment

Take Steps to Ensure Success!

1. You may wish to enter the world of work right after high school. Discover more about your options for careers by completing assessments in [Naviance](#) and by [exploring more](#).
2. [Apprenticeships](#) are also a great way to learn more about career pathways.
3. Virginia has [many resources](#) to support you as you enter the world of work.
4. Do your research and choose a pathway that is in high demand. Learn more about the [fastest growing jobs](#) in the state of Virginia.

Realize Your Vision through Action

9th Grade

Investigate

- High school graduation requirements.
- Programs and courses at your school.
- Use Naviance to [strengthen your self-discovery](#).
- Interests as they relate to careers.
- Personal strengths.
- Skills you have and those which you need to build.

Create

- Personal portfolio/academic resume - gather your report cards, evidence of awards and honors, and a list of school and community activities.
- Track your accomplishments and enter into Naviance resume.
- Set your personal and academic goals using Naviance.

Action

- Challenge yourself with rigor in your academic schedule in subjects that are your strength areas.
- Begin to narrow your [postsecondary pathway choice](#).
- Meet with your school counselor and college and career counselor to discuss postsecondary goals.
- Read as much as you can from a variety of materials.
- Learn about what education is needed to contribute to the career you wish to have (college, trades, military, apprenticeships).
- Further strengthen your financial literacy regarding post-high school life and education.
- Prepare for the PSAT by reviewing on Khan Academy and focusing on finishing the year strong academically in your classes.
- Volunteer or work part-time.
- Participate in extracurricular activities, clubs, community organizations, and athletics.
- Update your Academic and Career Plan in Naviance by completing the 9th grade self-discovery activity with your school counselor.

10th Grade

Investigate

- Career options.
 - What are you interested in and curious about?
 - What do you like to do in your free time?
- College entrance requirements at most competitive colleges include:
 - English (4 units);
 - Social Studies (4 units);
 - Science (3-4 units);
 - World Language (3-4 units);
 - Mathematics (3-4 units, at least up to Algebra 2); and

- Fine/Practical Arts Electives (with a focus).
- The cost of postsecondary education; and
- AP / IB / AICE and dual enrollment course offerings.

Create

- Update your personal portfolio/academic resume throughout the school year.
- Update your program of study for high school.
 - What courses might you want to take next year? (Consider rigor.)
- Create a resume using Naviance.
- Update and modify your personal and academic goals as needed.

Action

- Continue to take challenging courses in subjects that you can thrive in.
- Meet with your school counselor to evaluate your current performance as it pertains to future goals.
- Further strengthen your financial literacy regarding post-high school life and education.
- Search and apply for scholarships.
- Read as much as you can from a variety of materials.
 - What careers have yet to be invented?
 - What are you curious about?
 - What are your strengths and areas for growth?
- Attend college visits, ask about majors, student life, scholarships, and the values of the institution.
- Take the PSAT.
- Consider taking the ASVAB for further career investigation.
- Volunteer or work part-time.
- Participate in extracurricular activities.
- Stay involved in your school and community.
- Update your Academic and Career Plan in Naviance by completing the 10th grade self-discovery activity with your school counselor.

11th Grade

Investigate

- College options and the application process;
- Review [NAIA](#) and [NCAA](#) eligibility information for potential college athletes;
- Personal traits and how they relate to future plans; and
- Should I take the ASVAB for career investigation?

Create

- Update personal goals.
- Update personal portfolio.
- Finalize and update your resume in the Naviance.
- Create a list of colleges that meet your interests, needs, and goals.
- Update your program of study for high school.
 - What courses might you want to take next year? (Consider rigor in your strength areas.)
 - AP / IB / AICE and dual enrollment course offerings.

Action

- Continue to take challenging courses to include AP/IB/AICE.
- Take the PSAT in the fall of your junior year.
- Take the SAT or ACT in the spring of your junior year. Remember, SAT preparation is free at the [Khan Academy website](#).
- Further strengthen your financial literacy regarding post-high school life and education.
- Research net price calculators on college websites to anticipate the expected costs. Have a family discussion regarding college financial budget goals and monthly/annual expenses.
- Search and apply for scholarships. Notice college specific scholarships and deadlines.

- Form relationships with teachers and determine who you may ask for a letter of recommendation. Consider who has seen you contribute to the educational process/team.
- Participate in extracurricular activities and consider options for leadership within organizations.
- Attend college fairs and visits.
- Visit trade schools.
- Shadow career professionals in fields that you are interested in.
- Visit college campuses during spring break. Chat with college students home from spring break/for the summer.
- Draft college application essay prompts to help colleges better know you, your story, and your dreams.
- Meet with your school counselor to update your Academic and Career Plan, complete your 11th grade self-discovery assessment, and begin to finalize your postsecondary plan.

12th Grade

Investigate

- College entrance requirements;
- College application deadlines;
- Honors Programs;
- College specific scholarship deadlines;
- Financial aid deadlines;
- Scholarship options: local, organizations, PWCS SPARK, college specific, major specific, needs based, and merit based;
- College majors;
- Internships and research opportunities;
- Community College options with guaranteed admission for transfer; and
- Consider taking the ASVAB for career investigation or military enlistment.

Create

- Update your personal portfolio throughout the school year.
- Finalize your academic resume using the Naviance Student Program.
- Finalize your personal goals.
- Finalize list of colleges, deadlines, and college specific scholarship applications/deadlines.
- Budget for college.

Action

In June-August

- Prepare for the SAT / ACT. Remember, preparation is free at the [Khan Academy website](#).
- Practice completing online applications.
- Practice college essays and ask family, friends, and teachers to review your writing.
- Decide if you will apply to college early.
- Work part-time or intern.
- Volunteer.
- Finalist your college list.

In September

- Meet with your school counselor for your senior interview.
- Register for the fall SAT / ACT tests.
- Create your plan and schedule to complete applications, essays, transcript, and letter requests meeting application deadlines.
- Request recommendations from teachers via email and through Naviance.
- Use your application to request letters from community members or former PWCS employees.
- Search and apply to scholarships including college specific scholarship applications/deadlines.

In October-December

- Complete the Free Application for Federal Student Aid (FAFSA) with your parents/guardian.
- If needed, take the SAT, SAT 2, and/or ACT again.
- Request recommendations from teachers, counselors, and community members as needed.

- Submit college applications prior to the deadline.

In January-March

- Complete scholarship applications with organizations, in Naviance, and with PWCS SPARK. Be sure to check college specific scholarship database.
- Continue to apply to colleges, summer internships, apprenticeship programs, and jobs.

In April

- Review college acceptance decisions.
- Review financial aid award letters/packages. Discuss with college financial aid offices as needed.
- Finalize your post-high school plan.
- Notify your selected school of commitment and submit a deposit check.
- Study for AP / IB / AICE exams and dual enrollment final exam/projects.
- Apply to Northern Virginia Community College if that is your chosen path.
- Consult with your NOVA transition counselor to identify your math and English class placement, any needed remediation, or finalize fall class schedule.
- Continue applying to local scholarships posted in Naviance and PWCS SPARK.

In May

- Take AP / IB / AICE exams.
- Send thank you notes to people who wrote letters of recommendation and any scholarship organizations.
- Celebrate your chosen post-high school plan on decision day.
- Complete the PWCS Senior Survey and inform your college and career counselor of any scholarships you have been offered by completing the scholarship survey.

In June

- Prepare for graduation.
- Register for college courses.
- Pay for enrollment to secure your schedule/housing.
- Continue to strengthen your financial literacy regarding post-high school life and education.
- Complete apprenticeship/job applications and interviews. Ask about benefits, schedule, and opportunity for growth.

In July-August

- Participate in any summer orientation program available at your school of choice.
- Finalize financial aid arrangements.
- Create personal budget.
- Prepare to complete the Free Application for Federal Student Aid (FAFSA) with your family again for the next school year. This should be completed each fall for the following school year.

Connect with your School Counselor and College and Career Counselor

College and career counseling is a process designed to help students better know and understand themselves and the world of work to make career, educational, and life decisions. This is a lifelong process filled with personal changes, situational changes, and unique experiences.

The goal of college and career counseling is to empower students to make decisions and share knowledge while highlighting personal skills/talents to help students make future career and life decisions.

Each PWCS High School has a full-time College and Career Counselor. These highly trained professionals work with the student's school counselor to support the postsecondary planning process. Our school counselors and college and career counselors are trained in supporting the postsecondary planning goals of every student. Students update their Academic Career Plan with the support of their college and career counselor and their school counselors using Naviance and investigate careers, colleges, and opportunities that fit the student's values, interests and goals.

Academic advising is the process where school counselors meet with students to provide feedback in aligning the student's program of study in high school with the student's goals and interests. This collaborative process is transparent to families through ParentVUE, and college and career planning through Naviance.

A collaborative working relationship between students, families and our college and career counselors and school counselors is key to supporting the whole student's future goals. Students are encouraged to meet with their college and career counselor or school counselor throughout the school year and to utilize the resources available.

Participating in Extracurricular Activities

Eligibility to Participate

The following applies to interscholastic athletics, cheerleading, marching band, and drill team.

- A student must pass five subjects and earn a "C" or better in two subjects at the end of the first semester, and at the end of the school year to remain eligible for participation.
- The initial determination of eligibility at the beginning of a new semester is made on the first instructional day of the semester.
- Student assistant electives (e.g., lab assistants and office assistants) shall not be counted toward meeting the standards of eligibility.

Eligibility for Students who Transfer to Another School for a Specialty Program

Students who are granted approval to transfer to a school outside their established attendance area for a Specialty Program shall be eligible to participate in Virginia High School League activities when entering the school as a first-time 9th-grade student, or as a 10th-grade student entering a specialty program for the first time. Any further transferring without a corresponding change of residence will result in a 365-day period of ineligibility.

Only the Superintendent of Schools (or designee) may grant a waiver to the VHSL transfer rule based on a decision made by the school division that requires the transfer of the student, but not for athletic and/or activity purposes. (VHSL Handbook, Transfer Rule 28A-7-1.)

Virginia High School League Participation

The Virginia High School League rules specify that in order to participate in high school athletics, drama, forensics, debate, scholastic bowl, cheerleading, and any academic or athletic activities involved in the competition between/ among schools, a student must have passed five subjects during the preceding semester and must be enrolled in a minimum of five subjects for new credit during the current semester. In addition to meeting Virginia High School League regulations, students will be required to meet PWCS eligibility standards (requirement) each semester. End of the year grades from the previous school year will determine eligibility for the first semester of the next year.

NCAA Eligibility

Students planning to participate in intercollegiate athletics at an NCAA Division I or Division II institution must have their academic and amateurism status certified by the NCAA Eligibility Center. The NCAA rules are complex, students and caregivers should ask school counselors for assistance. It is important to let the school counselor know if a student plans to seek an athletic scholarship to ensure that the course selection process, grade point average tracking, and SAT/ACT testing requirements are tailored to this need. More detailed information is available on the [NCAA website](#).

High School Programs

Career Pathways

Prince William County Public Schools (PWCS) offers a wide variety of rigorous and engaging Career and Technical Education (CTE) courses and programs designed to provide students with authentic, career-focused academic and technical instruction, leadership and networking opportunities, validate knowledge and skills with industry credentials recognized by postsecondary institutions and business/industry, and opportunities to engage in work-based learning (WBL) experiences.

CTE programs prepare students for a variety of high-wage, high-skill and high-demand careers with equitable access to multiple post-secondary options, including postsecondary education enrollment in a two- or four-year college or university, enlisting in military service, and / or gainful employment.

CTE courses and programs are organized by **career clusters** and **career pathways** to align with student interests and regional business and industry. High school students in PWCS can access CTE courses and programs in two ways:

1. **Career Pathways:** Career Pathways are suggested course sequences **available at base schools**. Students express interest during the course selection process and work with school counselors to enroll in elective courses.
2. **Specialty Programs:** Some CTE courses and programs are only available at select locations. All CTE programs are interest-based programs, but a Specialty Program **application is required** if the student must transfer to another school or will be transported to another school site for one or more courses. Visit the [Specialty Programs](#) website to learn more about the application and timeline.

Career Clusters

A career cluster is a **group of careers** that share similar features or common themes. CTE courses in PWCS offer students access to 16 career clusters.

Career Pathways

A career pathway is a **coordinated sequence of high school courses** that leads to a postsecondary career pathway. Students select a program of study, or career pathway, based on academic and career interests. PWCS CTE career pathways also include opportunities to earn relevant industry credentials, which may provide students with increased employment opportunities and/or college credit.

Note: The career pathways are intended to provide a **suggested sequence** and do not guarantee the availability of courses or programs at every high school. To find out which courses are available at your high school, click on the course name within the Career Pathway.

The courses listed in each career cluster and pathway may be available to multiple grade levels.

Specialty Programs

Prince William County Public Schools (PWCS) is pleased to provide students a wide range of high school program opportunities which focus on career exploration, subject area concentration, and college/university preparation.

Specialty and Career and Technical Education (CTE) Programs provide students with opportunities to earn certifications, licenses, or other professional credentials in an area of study. Students can choose from programs tailored to their strengths and interests as they prepare for postsecondary experiences, whether they plan to enter the workforce directly, seek additional training, or enroll in a postsecondary institution.

Students may apply for the specialty program at their base high school, apply to transfer to another high school for a specialty program, or apply to participate in a transport program while remaining at their base school for their academic coursework.

[Learn about specialty program transportation.](#)

Transfer Programs

Students living within the boundaries of the specialty program school may ride their regular bus to school. Students who reside outside the program school boundaries may utilize the network of express bus stops.

Students participating in Specialty Programs outside of their zoned school receive express bus stops. Out-of-boundary Specialty Program students are students who live outside the host school's boundaries but within the specialty school's boundaries.

Express bus stops will be established at express bus stops where six or more students have selected the stop. If your Specialty Program Coordinator has not contacted you by June regarding the express bus stops established for the following school year, you should contact the Specialty Program Coordinator.

Transportation requests, including the selection of a specific express stop, must be returned to the school with the specialty program application and again for every year the student is enrolled in the program.

Parents have the responsibility to provide transportation to and from express bus stops.

Transport Programs

Students attend all core and non-program classes and activities at their base school. A PWCS bus transports students between their base school and their program school for all CTE program classes daily, returning in time to ride their regular bus home.

Career and Technical Education (CTE)

Arts, A/V Technology & Communications

Degree Type

Career Pathways

Arts, A/V Technology & Communications Career Cluster

The Arts, A/V Technology and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services. Careers in this career cluster require a creative aptitude, a strong background in computer and technology applications, a strong academic foundation, and a proficiency in oral and written communication.

Check with your counselor to see which pathways are offered at your school.

Schools

Battlefield High School,
Brentsville District High School,
Colgan High School,
Forest Park High School,
Freedom High School,
Gainesville High School,
Gar-Field High School,
Hylton High School,
Osborn Park High School,
Patriot High School,
Potomac High School,
Unity Reed High School,
Woodbridge High School

Journalism & Broadcasting Pathway

Journalism and Broadcasting Pathway: News analysts, reporters and correspondents gather information, prepare stories and make broadcasts that inform us about local, state, national and international events; present points of view on current issues; and report on the actions of public officials, corporate executives, special interest groups and others who exercise power. Broadcast and sound technicians install, test, repair, set up and operate the electronic equipment used to record and transmit radio and television programs, cable programs and motion pictures. Chief engineers, broadcast field supervisors and trans

Title	Credits
Communication Systems	1
Video and Media Technology	1
Graphic Communications Systems	1
Career Strategies	1

Visual Arts Pathway

Visual Arts Pathway: Visual artists create art to communicate ideas, thoughts or feelings. They use a variety of methods—painting, sculpting or illustrating—and an assortment of materials, including oils, watercolors, acrylics, pastels, pencils, pen and ink, photography, plaster, clay and computers. Their works may be realistic, stylized or abstract and may depict objects, people, nature or events. Visual artists are generally categorized in two groups. Fine artists create art to satisfy their own need for self-expression. Illustrators and graphic designers, on the other hand, put their artistic skills at the service of commercial clients, such as major corporations; retail stores; and advertising, design and publishing firms.

Title	Credits
Information Technology (IT) Fundamentals	1
Design, Multimedia, and Web Technologies	1
Advanced Design, Multimedia, and Web Technologies	1
Career Strategies	1
Total Credits	4

Business Management & Administration

Degree Type

Career Pathways

Business Management & Administration Career Cluster

The Business Management and Administration Career Cluster is focused on careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.

Check with your counselor to see which pathways are offered at your school.

Schools

Battlefield High School,
Brentsville District High School,
Colgan High School,
Forest Park High School,
Freedom High School,
Gainesville High School,
Gar-Field High School,
Hylton High School,
Osborn Park High School,
Patriot High School,
Potomac High School,
Unity Reed High School,
Woodbridge High School

Administrative Support Pathway

Administrative Support: Administrative Support facilitate business operations through a variety of administrative and clerical duties including information and communication management, data processing and collection, and project tracking.

Title	Credits
Office Specialist 1 - Preparation	1
Office Specialist 2 - Preparation	1
Office Specialist 3 - Preparation	1

General Management Pathway

General Management: General Management focuses on careers that plan, organize, direct, and evaluate all or part of a business organization through the allocation and use of financial, human, and material resources.

Title	Credits	
Principles of Business and Marketing	1	
Business Law	1	
Business Management	1	
Entrepreneurship	1	
	Total Credits	3-4

Education & Training

Degree Type

Career Pathways

Education & Training Career Cluster

The Education & Training Career Cluster is focused on planning, managing and providing education and training services, and related learning support services.

Check with your counselor to see which sequences are offered at your school.

Schools

Battlefield High School,
Brentsville District High School,
Colgan High School,
Forest Park High School,
Freedom High School,
Gainesville High School,
Gar-Field High School,
Hylton High School,
Osborn Park High School,
Patriot High School,
Potomac High School,
Unity Reed High School,
Woodbridge High School

Teaching & Training Pathway

Teaching & Training Pathway: In addition to being knowledgeable in their subject, teachers and trainers must have the ability to communicate, inspire trust and confidence, motivate learners, as well as understand their education and emotional needs. Teachers must be able to recognize and respond to individual differences in diverse learners and employ different teaching/training methods that will result in higher learner achievement.

Early Childhood Education Sequence

Title	Credits
Child Development and Parenting	1
Introduction to Early Childhood Education	1
Early Childhood Education and Services 1	2
Early Childhood Education and Services 2	2

Virginia Teachers for Tomorrow Sequence

Title	Credits
Child Development and Parenting	1
Introduction to Early Childhood Education	1
Virginia Teachers for Tomorrow 1	1
Virginia Teachers for Tomorrow 2	1
Total Credits	4-6

Finance - Accounting

Degree Type

Career Pathways

Finance Career Cluster

The Finance Career Cluster is focused on planning, services for financial and investment planning, banking, insurance, and business financial management.

Check with your counselor to see if the pathway is offered at your school.

Schools

Brentsville District High School,
Colgan High School,
Forest Park High School,
Freedom High School,
Gainesville High School,
Gar-Field High School,
Hylton High School,
Osborn Park High School,
Patriot High School,
Potomac High School,
Unity Reed High School,
Woodbridge High School

Accounting Pathway

Accounting Pathway: Accounting encompasses careers that record, classify, summarize, analyze, and communicate a business's financial information/business transactions for use in management decision-making. Accounting includes such activities as bookkeeping, systems design, analysis, and interpretation of accounting information.

Title	Credits
Principles of Business and Marketing	1
Accounting	1
Advanced Accounting	1
Career Strategies	1
Total Credits	4

Hospitality & Tourism

Degree Type

Career Pathways

Hospitality & Tourism Career Cluster

The Hospitality & Tourism Career Cluster is focused on management, marketing and operations of restaurants and other food services, lodging, attractions, recreation events and travel related services.

Check with your counselor to see which pathways are offered at your school.

Schools

Battlefield High School,
Brentsville District High School,
Colgan High School,
Forest Park High School,
Freedom High School,
Gainesville High School,
Gar-Field High School,
Hylton High School,
Osborn Park High School,
Patriot High School,
Potomac High School,
Unity Reed High School,
Woodbridge High School

Recreation, Amusements & Attractions Pathway

Recreation, Amusements & Attractions Pathway: Employees looking for exciting and diverse work situations are best suited for the Recreation, Amusements and Attractions pathway. The work is often demanding but never boring. Good customer service skills are essential for success. Employees must also understand what makes each operation unique. Technical skills are location-specific, and training is handled on the job.

Title	Credits
Principles of Business and Marketing	1
Sports and Entertainment Marketing	1
Sports and Entertainment Management	1
Strategic Marketing	1

Restaurants & Food / Beverage Services Pathway

Employees working in the Restaurant and Food/Beverage Services pathway perform a variety of tasks to maintain operations and promote guest services in eating and drinking establishments.

Title	Credits
Nutrition and Wellness	1
Introduction to Culinary Arts	1

Travel & Tourism Pathway

Title	Credits
Principles of Business and Marketing	1
Opportunities in Hospitality and Tourism	1
Marketing	1
Strategic Marketing	1
Total Credits	2-4

Human Services

Degree Type

Career Pathways

Human Services Career Cluster

The Human Services Career Cluster is focused on preparing individuals for employment in careers that relate to families and human needs such as counseling and mental health services, family and community services, personal care and consumer services.

Check with your counselor to see which pathways are offered at your school.

Schools

Battlefield High School,
Brentsville District High School,
Colgan High School,
Forest Park High School,
Freedom High School,
Gainesville High School,
Gar-Field High School,
Hylton High School,
Independence Nontraditional,
Osborn Park High School,
Patriot High School,
Potomac High School,
Unity Reed High School,
Woodbridge High School

Family & Community Services Pathway

Employees with careers in family and community services help the homeless, housebound, and infirm cope with circumstances of daily living; counsel troubled and emotionally disturbed individuals; train or retrain the unemployed or underemployed; care for the elderly and the physically and mentally disabled; help the needy obtain financial assistance; and solicit contributions for various social services organizations.

Title	Credits
Nutrition and Wellness	1
Life Planning	1
Individual Development	1
Family Relations	1

Consumer Services Pathway

People with careers in consumer sciences assist individuals with decisions and problems relating to finance, real estate, insurance and consumer goods.

Title	Credits
Independent Living	1
Life Planning	1
Career Strategies	1

Counseling & Mental Health Services Pathway

People working in counseling and mental health services assist people with personal, family, educational, mental health, and career decisions and problems.

Title	Credits
Independent Living	1
Life Planning	1
Individual Development	1
Family Relations	1

Early Childhood Development & Services Pathway

People with careers in early childhood development and services nurture and teach children. They provide services in childcare centers, nursery schools, preschools, public schools, private households, family childcare homes, and before- and after-school programs.

If you are looking for a more focused Early Childhood Education program, please see the Education & Training Career Cluster - Early Childhood Education.

Title	Credits	
Child Development and Parenting	1	
Life Planning	1	
Individual Development	1	
Family Relations	1	
Total Credits		3-4

Information Technology

Degree Type

Career Pathways

Information Technology Career Cluster

The Information Technology Career Cluster is focused on building linkages in information technology occupations for entry level, technical and professional careers related to the design, development, support and management of hardware, software, multimedia and systems integration services.

Check with your counselor to see which pathways are offered at your school.

Schools

Battlefield High School,
Brentsville District High School,
Colgan High School,
Forest Park High School,
Freedom High School,
Gainesville High School,
Gar-Field High School,
Hylton High School,
Independence Nontraditional,
Osborn Park High School,
Patriot High School,
Potomac High School,
Unity Reed High School,
Woodbridge High School

Information Support & Services Pathway

Careers in Information Support and Services involve IT deployment, including implementing computer systems and software, providing technical assistance and managing information systems. Successful IT deployment implementation of computer systems and software, provision of technical assistance, creation of technical documentation and management of information systems is critical to the success of most 21st century organizations. People with expertise in Information Support and Services are in high demand for a variety of positions in organizations of all sizes and types, doing work such as integrating multiple databases at a global investment company, enabling employees to share information between the New York, Paris and Hong Kong offices and improving service to customers.

Title	Credits
Digital Applications	1
Computer Information Systems	1
Advanced Computer Information Systems	1
Career Strategies	1

Programming and Software Development Pathway

Careers in Programming and Software Development involve the design development implementation and maintenance of computer systems and software, requiring knowledge of computer operating systems, programming languages and software development. People with expertise in programming and software development work with cutting-edge technologies to develop tomorrow's products for use by businesses and consumers. While many of the career opportunities in this area are in software companies, large organizations of other types such as Financial Services and Business also offer many opportunities. People with expertise in programming and software development are in high demand, doing work such as creating the software that launches and runs NASA space shuttles.

Title	Credits
Programming	1
Advanced Programming	1
Game Design and Development	1
Advanced Game Design and Development	1

Web & Digital Communications Pathway

Careers in Web and Digital Communications involve creating, designing and producing interactive multimedia products and services, including development of digitally-generated or computer-enhanced media used in business, training, entertainment, communications and marketing. Organizations of all types and sizes use digital media to communicate with existing and potential customers, to track transactions, and to collaborate with colleagues. Web and digital communications experts can find employment opportunities in organizations of all sizes and types, doing work such as creating business auction websites that allow people around the world to buy and sell items in real-time.

Title	Credits
Information Technology (IT) Fundamentals	1
Design, Multimedia, and Web Technologies	1
Advanced Design, Multimedia, and Web Technologies	1
Career Strategies	1
Total Credits	4

Manufacturing

Degree Type

Career Pathways

Manufacturing Career Cluster

The Manufacturing Career Cluster is focused on planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing, and process engineering.

Check with your counselor to see if this pathway is offered at your school.

Schools

Battlefield High School,
Brentsville District High School,
Colgan High School,
Forest Park High School,
Freedom High School,
Gainesville High School,
Gar-Field High School,
Hylton High School,
Osborn Park High School,
Patriot High School,
Potomac High School,
Unity Reed High School,
Woodbridge High School

Manufacturing Production Process Development

Employees in manufacturing production process development are responsible for product design and design of the manufacturing process. They work with customers to ensure the manufacturing process produces a product that meets or exceeds customer expectations, and monitor the materials used to manufacture the product.

Title	Credits
Introduction to Engineering Design (PLTW)	1
Computer Integrated Manufacturing (PLTW)	1
Principles of Engineering (PLTW)	1
Engineering Design & Development (PLTW)	1
Total Credits	4

Marketing

Degree Type

Career Pathways

Marketing Career Cluster

The Marketing Career Cluster is focused on planning, managing and performing marketing activities to reach organizational objectives.

Check with your counselor to see which pathways are offered at your school.

Schools

Battlefield High School,
Brentsville District High School,
Colgan High School,
Forest Park High School,
Freedom High School,
Gainesville High School,
Gar-Field High School,
Hylton High School,
Osborn Park High School,
Patriot High School,
Potomac High School,
Unity Reed High School,
Woodbridge High School

Marketing Management Pathway

People with careers in marketing management formulate policies and direct the operations of businesses and corporations, nonprofit institutions and other organizations. In small firms, the owner or chief executive officer may assume all advertising, promotions, marketing, sales and public relations responsibilities. In large firms, which may offer numerous products and services nationally or even worldwide, an executive vice president directs overall advertising, promotions, marketing, sales and public relations policies.

Title	Credits
Principles of Business and Marketing	1
Fashion Marketing or Sports and Entertainment Marketing	1
Marketing	1
Strategic Marketing	1

Merchandising Pathway

Employees in buying and merchandising positions get the product into the hands of the customer. This process includes forecasting, planning, buying, displaying, selling and providing customer service.

Title	Credits
Principles of Business and Marketing	1
Fashion Marketing	1
Advanced Fashion Marketing	1
Strategic Marketing	1

Marketing Communications

Marketing communications employees plan, coordinate and implement marketing strategies advertising promotion and public relations activities. Because of the importance and high visibility of their jobs, these individuals often are prime candidates for advancement.

Title	Credits
Principles of Business and Marketing	1
Fashion Marketing or Sports and Entertainment Marketing	1
Strategic Marketing	1
Total Credits	4

Science, Technology, Engineering & Mathematics

Degree Type

Career Pathways

Science, Technology, Engineering & Mathematics Career Cluster

The Science, Technology, Engineering & Mathematics Career Cluster is focused on planning, managing and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.

Please check with your counselor to see which pathways and course sequences are offered at your school.

Schools

Battlefield High School,
Brentsville District High School,
Colgan High School,
Forest Park High School,
Freedom High School,
Gainesville High School,
Gar-Field High School,
Hylton High School,
Osborn Park High School,
Patriot High School,
Potomac High School,
Unity Reed High School,
Woodbridge High School

Engineering and Technology Pathway

Engineering and Technology Pathway: For a future in the Engineering and Technology pathway, students should study and apply principles from advanced mathematics, life sciences, physical science, earth and space science, and technology. In addition, future engineers and technologists should learn certain processes in mathematics, science and technology. In Grades 9-12, all future engineers and technologists should study mathematics each year, learning important mathematical concepts and processes defined by the National Council of Teachers of Mathematics in Principles and Standards for School Mathematics. With such knowledge and skills, students will be able to demonstrate the following competencies: 1.) Apply mathematics, science and technology concepts to solve problems quantitatively in engineering projects involving design, development or production in various technologies; and 2.) Recognize the core concepts of technology and their relationships with engineering, science and math, and other subjects. All future engineers and technologists should learn important science concepts and processes with an understanding of physics, chemistry and biology as a minimal set. These concepts and processes are defined by the National Research Council in the National Science Education Standards and by the American Association for the Advancement of Science in Benchmarks for Science Literacy. Additionally, learners should become proficient in the areas of technology defined by the Standards for Technological Literacy.

Drawing and Design Sequence

Title	Credits
Technical Drawing and Design	1
Engineering Drawing and Design	1
Engineering Explorations 1	1
Engineering Analysis and Applications	1

Engineering PLTW Sequence

Title	Credits
Introduction to Engineering Design (PLTW)	1
Principles of Engineering (PLTW)	1
Digital Electronics or Civil Engineering and Architecture	
Engineering Design & Development (PLTW)	1

Software Engineering PLTW Sequence

Title	Credits
Software Engineering Essentials (PLTW)	1
Software Engineering (PLTW)	1

Science & Mathematics Pathway

Title	Credits
Technology Foundations	1
Sustainability and Renewable Technologies	1
Total Credits	2-4

Information Technology Program

Degree Type

Specialty Programs

Information Technology Career Cluster

The Information Technology Career Cluster is focused on building linkages in information technology occupations for entry level, technical and professional careers related to the design, development, support and management of hardware, software, multimedia and systems integration services.

Information Technology Program

With the speed and breadth of innovative change, students entering the next-generation technological workplace will need to be able to adapt to rapid change while thinking critically and creatively. The ever-changing and interactive nature of the technology workplace will also require students to demonstrate highly developed social and technical intelligence. The Information Technology Programs will provide interested students the opportunity to become engaged in an intensive technological program of studies developed through a collaborative relationship with the business and academic community.

Some courses in these programs are offered for Dual Enrollment through a partnership with Northern Virginia Community College.

A series of professional certificate programs are designed for the Standard or Advanced Diploma Student. These areas of study will immerse the student in a one- or two-year program of study, which after successful completion of the exam, could lead to professional industry certification.

Program Type

Transfer

Schools

Forest Park High School

Information Technology Program Sequencing

Grades 9 and 10

Choose at least one course each year, grade 9 and 10.

Title	Credits
Advanced Computer Mathematics	1
Information Technology (IT) Fundamentals	1
IT Programming DE or Programming I	1
IT Graphic Design	1
AP Computer Science A	1
Cybersecurity Systems Technology	1
Game Design and Development	1
IT Computer Graphics 1	1
IT Multimedia Software Design and Development 1	1
Design, Multimedia, and Web Technologies	1
Photography 1	1

Programming Concentration

Grades 11 and 12

Title	Credits
Data Structures and Algorithms	1
Advanced Computer Studies	1
Advanced Programming or IT Advanced Programming DE	1

Networking Concentration

Grades 11 and 12

Title	Credits
Cybersecurity Systems Technology	1
Cybersecurity Systems Technology (DE)	1
Advanced Cybersecurity Systems Technology	2

Gaming Concentration

Grades 11 and 12

Title	Credits
Game Design and Development	1
Advanced Game Design and Development	1

Media Concentration

Grades 11 and 12

Title	Credits
Advanced Design, Multimedia, and Web Technologies	1
Photography 2	1
IT Computer Graphics 2	1
AP Studio Art Drawing	1
Total Credits	4

Military Science (JROTC)

Government & Public Administration - Military Science

Degree Type

Career Pathways

Government & Public Administration Career Cluster

The Government & Public Administration Career Cluster is focused on planning and performing government functions at the local, state and federal levels, including governance, national security, foreign service, planning, revenue and taxation, and regulations.

Military Science - JROTC

The Junior Reserve Officers' Training Corps (JROTC) program prepares high school students for leadership roles while making them aware of their rights, responsibilities, and privileges as American citizens. JROTC programs provide instruction and rewarding opportunities that will benefit the student, community, and nation by teaching young adults self-discipline, self-confidence, and leadership skills. JROTC programs are conducted at accredited secondary schools by instructors who are retired Air Force, Army, Coast Guard, Marine Corps, and Navy officers and enlisted personnel.

Check with your counselor to see which JROTC branch is offered at your school.

Schools

Battlefield High School,
 Brentsville District High School,
 Colgan High School,
 Forest Park High School,
 Freedom High School,
 Gainesville High School,
 Gar-Field High School,
 Hylton High School,
 Osbourn Park High School,
 Patriot High School,
 Potomac High School,
 Unity Reed High School,
 Woodbridge High School

National Security Pathway

National Security Pathway: Maintaining a strong national security encompasses such diverse activities as running a hospital, commanding a tank, programming computers, operating a nuclear reactor, or repairing and maintaining a helicopter. The military provides training and work experience in these fields and many others for more than 2.5 million people who serve in the active Army, Navy, Marine Corps, Air Force, and Coast Guard, their Reserve components, and the Air and Army National Guard.

Air Force JROTC

Title	Credits
Air Force JROTC 1	1
Air Force JROTC 2	1
Air Force JROTC 3	1
Air Force JROTC 4	1

Army JROTC

Title	Credits
Army JROTC 1	1
Army JROTC 2	1
Army JROTC 3	1
Army JROTC 4	1

Marine Corps JROTC

Title	Credits
Marine Corps 1	1
Marine Corps 2	1
Marine Corps 3	1
Marine Corps 4	1

Navy JROTC

Title	Credits
Navy JROTC 1	1
Navy JROTC 2	1
Navy JROTC 3	1
Navy JROTC 4	1

Total Credits	4
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Courses

Advanced Placement

AP Computer Science A

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. This course prepares a student for Advanced placement in computer science by means of the Advanced Placement Examination Level A in Computer Science of the College Entrance Board. Students are required to take the AP Computer Science A examination which is administered in May.

Credits 1

Grades

10, 11, 12

Course Designation

Advanced Placement (AP),
Weighted (1.0W)

Schools

Battlefield High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Woodbridge High School

Requirements

Teacher recommendation

Prerequisites

[Geometry](#)

Notes

AP Computer Science A may be used for a math, science, or CTE standard credit to satisfy graduation. For a CTE standard credit, a student must (i) successfully complete a CTE program sequence in programming or related programming sequence and earn a score of three or higher on the AP Computer Science A examination.

AP Computer Science Principles

The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and world. This course may not be used for a math credit. This course is equivalent to the Software Engineering (PLTW) course. Therefore, students who have taken the Software Engineering (PLTW) course should not enroll in this AP Computer Science course as additional credit will not be granted.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Advanced Placement (AP),
Weighted (1.0W)

Schools

Brentsville District High School
Colgan High School
Forest Park High School
Gainesville High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School

Prerequisites

[Algebra 1](#)

AP Seminar

The Capstone curriculum is designed to further develop inquiry and research skills as applied to topics of global relevance. The program helps foster communication, collaboration, and creative skills to improve college and career readiness and success. Students participating in this program have required tasks that include a team project, and individual presentation, and a written exam.

Credits 1

Grades

11, 12

Course Designation

Advanced Placement (AP),

Weighted (1.0W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Woodbridge High School

Prerequisites

None

Business and Information Technology

Accounting

Accounting students study the basic principles, concepts, and practices of the accounting cycle for a service business and a merchandising business. Topics covered include analyzing transactions, journalizing and posting entries, preparing payroll records and financial statements, and managing cash control systems. Business ethics and professional conduct are emphasized. Students learn fundamental accounting procedures.

Credits 1

Grades

10, 11, 12

Schools

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Advanced Accounting

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

Credits 1

Grades

11, 12

Course Designation

Weighted (0.5W)

Schools

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Accounting](#)

Advanced Computer Information Systems

Students apply problem-solving skills to real-life situations through Advanced integrated software applications, including multimedia presentations, printed, electronic, and web publications. Students work individually and in groups to explore Advanced computer maintenance activities, website development, programming, networking, emerging technology, and employability skills.

Credits 1

Grades

10, 11, 12

Course Designation

Weighted (0.5W)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osbourn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Prerequisites

[Computer Information Systems](#)

Advanced Design, Multimedia, and Web Technologies

In this course, students acquire advanced skills in design, multimedia, and web development by applying project management principles to create professional quality digital media projects. Work-based learning experiences allow students to apply layout and design techniques in real-world situations. Students create portfolios that include a résumé, certifications earned, and a variety of print, multimedia, and website projects produced in the course.

Credits 1

Grades

10, 11, 12

Course Designation

Dual Enrollment (DE),

Weighted (0.5W),

Weighted (1.0W)

Schools

Brentsville District High School

Colgan High School

Forest Park High School

Gainesville High School

Gar-Field High School

Osborn Park High School

Potomac High School

Unity Reed High School

Prerequisites

[Design, Multimedia, and Web Technologies](#)

Advanced Game Design and Development

Students will work collaboratively in teams to refine their game design skills as they apply graphic design, animation, audio and writing skills to create innovative games for education and entertainment. This project-based course enhances problem-solving, project management, and communication skills through the analysis, design, construction, and critique of interactive games. Students will learn about career opportunities in game design and development and investigate the training and certification requirements.

Credits 1

Grades

10, 11, 12

Course Designation

Weighted (0.5W)

Schools

Colgan High School

Forest Park High School

Gainesville High School

Potomac High School

Woodbridge High School

Prerequisites

[Game Design and Development](#)

Advanced Programming

Building on their foundation of programming skills, Advanced Programming 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 and engage in various career-building activities.

**Check with your counselor to see if this course is offered as Dual Enrollment at your school.

Credits 1

Grades

11, 12

Course Designation

Dual Enrollment (DE),

Weighted (0.5W),

Weighted (1.0W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gar-Field High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Programming](#)

Notes

Advanced course: 0.5 weight

Dual Enrollment course: 1.0 weight

Business Law

Students examine the foundations of the American legal system and learn the rights and responsibilities of citizens and businesses. Students gain knowledge and skills by exploring economic and social concepts related to laws governing business and individuals. Focus areas include contracts, consumer protection, criminal law, tort law, international law, family/domestic law, employment law, cyber law, and careers in the legal profession. Students may combine classroom instruction and work-based learning opportunities in an approved position with continuing supervision.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School
Colgan High School
Forest Park High School
Gainesville High School
Hylton High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

None

Business Management

Students study basic management concepts and leadership styles as they explore business ownership, planning, operations, marketing, finance, economics, communications, the global marketplace, and human relations. Quality concepts, project management, problem solving, and ethical decision making are an integral part of the course.

Credits 1

Grades

10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School
Forest Park High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School

Prerequisites

None

Computer Information Systems

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

Credits 1

Grades

9, 10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School
Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

None

Design, Multimedia, and Web Technologies

Students apply creativity and technology to create visual design, multimedia projects, and web projects, using industry-standard software. Work-based learning experiences allow students to apply layout and design techniques in real-world situations. Students create portfolios that include a résumé, certifications earned, and a variety of projects produced in the course.

Credits 1

Grades

10, 11, 12

Course Designation

Dual Enrollment (DE),

Weighted (1.0W)

Schools

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Osborn Park High School

Potomac High School

Unity Reed High School

Prerequisites

None

Economics and Personal Finance

This course meets the graduation requirement for Economics and Personal Finance. The following PWCS courses may be substituted to meet this requirement: AP Economics, IB Economics, Personal Living and Finances, AP Macroeconomics and Microeconomics through Virtual Virginia (must take both classes), AICE Economics, IB Business Management. Students learn how 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 help provide the basis for responsible citizenship and career success. In addition to developing personal finance skills, students in the 36-week course study basic occupational skills and concepts in preparation for entry-level employment in the field of finance. The course incorporates all economics and financial literacy objectives included in the Code of Virginia. Students must successfully complete the online curriculum in order to satisfy a graduation requirement.

Credits 1

Grades

10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Entrepreneurship

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

**Check with your counselor to see if this course is offered as Dual Enrollment at your school.

Credits 1

Grades

10, 11, 12

Course Designation

Dual Enrollment (DE),

Weighted (1.0W)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gar-Field High School

Osborn Park High School

Patriot High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Game Design and Development

The game design industry is the fastest revenue growing entertainment medium and has created many new job disciplines. In this project-based course, students will create innovative games through the application of graphic design, animation, audio, and writing skills. Students will work in teams while developing problem-solving, critical thinking, and effective communication skills. They will analyze, design, prototype, and critique interactive games within a project management environment. Career opportunities across multiple industries, including the entertainment and educational arenas, will be explored.

Credits 1

Grades

9, 10, 11, 12

Schools

Colgan High School

Forest Park High School

Gainesville High School

Patriot High School

Potomac High School

Woodbridge High School

Prerequisites

None

IT Advanced Web Technologies (DE)

Students will engage in website development process using HTML, XHTML, Dynamic HTML, XML, Server-side technologies, Java applets, tables, frames, metadata and Cascading Style Sheets. Industry certification competencies will be used for the course.

Credits 1

Grades

11, 12

Course Designation

Dual Enrollment (DE),

Weighted (1.0W)

Schools

Forest Park High School

Prerequisites

[IT Web Technologies \(DE\)](#)

IT Web Technologies (DE)

Students will develop an in-depth understanding of the internet and essential webpage development skills using extensible HTML, and incorporating images, hyperlinks, tables, forms and frames. Students will learn to write code manually, as well as use GUI authoring tools. Industry certification competencies will be used for this course.

Credits 1

Grades

10, 11, 12

Course Designation

Dual Enrollment (DE),

Weighted (1.0W)

Schools

Forest Park High School

Prerequisites

None

Information Technology (IT) Fundamentals

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 webpage and game design.

Credits 1

Grades

9, 10

Schools

Battlefield High School
Colgan High School
Forest Park High School
Potomac High School

Prerequisites

None

Principles of Business and Marketing

Students discover the roles of business and marketing in the free enterprise system and the global economy. Students examine basic financial concepts of banking, insurance, credit, taxation, and investments to provide a strong background for making sound decisions as consumers, wage earners, and citizens. The real-world effects of technology, effective communication, and interpersonal skills is evident throughout the course. This course also supports career-development skills and explores career options.

Credits 1

Grades

9, 10

Schools

Battlefield High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

None

Programming

Students in the Programming course explore programming concepts, use algorithmic procedures, implement programming procedures with one or more standard languages, and master programming fundamentals. Coding is used throughout the course. Graphical user interfaces may be used as students design and develop interactive multimedia applications, including game programs. In addition, students employ hypertext markup language (HTML) or JavaScript to create webpages. Students develop their employability skills through a variety of activities.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School
Colgan High School
Forest Park High School
Freedom High School
Gar-Field High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

None

Family and Consumer Sciences

Child Development and Parenting

Students enrolled in Child Development and Parenting learn about parenting roles and responsibilities and parenting practices that maximize human growth and development. They focus on ensuring a healthy start for parent and child, balancing work and family, and understanding support systems that provide services for families.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

None

Independent Living

Independent Living students become prepared to meet the challenges of living on their own. Students build life skills focusing on creating and maintaining healthy relationships and making responsible financial, consumer, nutrition, and housing decisions.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Independence Nontraditional
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

None

Nutrition and Wellness

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

This course connects to the following career pathways:

[Human Services](#)

[Hospitality & Tourism](#)

Credits 1

Grades

9, 10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Independence Nontraditional

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Virginia Teachers for Tomorrow 1

Virginia Teachers for Tomorrow (VTfT) I fosters student interest, understanding, and appreciation of the teaching profession and allows secondary students to explore careers in the education and training career cluster and related pathways. Students build a foundation for teaching; learn the history, structure, and governance of teaching; apply professional teaching techniques in classroom and field experiences; and reflect on their teaching experiences. Dual enrollment (DE) credit may be available.

Credits 1

Grades

11, 12

Course Designation

Dual Enrollment (DE),

Weighted (1.0W)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Virginia Teachers for Tomorrow 2

Students continue to explore careers in the education and training career cluster and related pathways. This course provides hands-on opportunities for students to examine careers in education, observe professional practice, and apply professional standards and educational theory. In an authentic practicum experience, students will be able to teach lessons, manage classrooms, create learning opportunities, and build their professional portfolio in the process. Dual enrollment (DE) credit may be available.

Credits 1

Grades

12

Course Designation

Dual Enrollment (DE),

Weighted (1.0W)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Virginia Teachers for Tomorrow 1](#)

Marketing

Marketing

Students will learn how products are developed, branded, and sold. They will analyze industry trends and gain hands-on experience in the marketing of goods, services, and ideas and be prepared for success in postsecondary education and employment. Topics include professionalism in the workplace, product planning and positioning, promotion, pricing, selling, economic issues, and changes in the marketplace. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Forest Park High School

Freedom High School

Gar-Field High School

Patriot High School

Woodbridge High School

Prerequisites

None

Sports and Entertainment Management

Students will build on prior knowledge of sports and entertainment marketing. This course focuses on the principles of management and planning supported by research and by financial, economic, ethical, and legal concepts. Students will be able to plan and execute an event, establish a sports, entertainment, or recreation marketing product/business, and develop a career plan. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills.

Credits 1

Grades

11, 12

Course Designation

Weighted (0.5W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Prerequisites

[Sports and Entertainment Marketing](#)

Sports and Entertainment Marketing

This course helps students develop a thorough understanding of fundamental marketing concepts and theories as they relate to the sports and entertainment industries. Students will investigate the components of customer service, branding, product development, pricing and distribution, business structures, sales processes, digital media, sponsorships and endorsements, as well as promotion needed for sports and entertainment events. The course explores career options and develops workplace readiness skills. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills.

Credits 1

Grades

10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Woodbridge High School

Prerequisites

None

Project Lead The Way (PLTW) Engineering

Civil Engineering and Architecture (PLTW)

In this specialization course for Project Lead the Way (PLTW), students collaborate on both the development of community-based building and design projects and conceptual design for project presentations.

Credits 1

Grades

11, 12

Course Designation

Weighted (1.0W)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Gainesville High School

Gar-Field High School

Osborn Park High School

Patriot High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Introduction to Engineering Design \(PLTW\)](#)

Digital Electronics (PLTW)

Students use computer simulations to learn about the logic of electronics as they design, test, and actually construct circuits and devices. They apply control system programming and explore sequential logic and digital circuitry fundamentals. Topics in computer circuitry are also presented.

Credits 1

Grades

10, 11, 12

Course Designation

Weighted (1.0W)

Schools

Colgan High School

Forest Park High School

Gainesville High School

Gar-Field High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Introduction to Engineering Design \(PLTW\)](#)

Engineering Design & Development (PLTW)

In this capstone course in Project Lead the Way (PLTW), teams of students, guided by community mentors, work together to research, design, and construct solutions to engineering problems. Students synthesize knowledge, skills, and abilities through an authentic engineering experience. Students are expected to develop and formally present an independent-study project and a team-oriented project that are critiqued by an evaluation committee.

Credits 1

Grades

12

Course Designation

Weighted (1.0W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Gainesville High School

Gar-Field High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Introduction to Engineering Design \(PLTW\)](#)

Introduction to Engineering Design (PLTW)

In this foundation course in Project Lead the Way (PLTW), students use 3D computer modeling software as they learn the engineering-design process and solve design problems for which they develop, analyze, and create product models.

Credits 1

Grades

9, 10

Course Designation

Weighted (1.0W)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Principles of Engineering (PLTW)

In this foundation course in PLTW, students explore the engineering profession and the fundamental aspects of engineering problem solving. Students study the historical and current impacts of engineering on society, including ethical implications. Mathematical and scientific concepts will be applied to fundamental engineering topics, including mechanics and electrical-circuit theory.

Credits 1

Grades

10, 11

Course Designation

Weighted (1.0W)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Introduction to Engineering Design \(PLTW\)](#)

Technology and Engineering Education

Video and Media Technology

This Video and Media Technology course allows students to explore video and media technology, from the history of the field to current methods of planning and producing video media. Students will learn the basics of camera operation, audio, lighting, and editing by creating their own videos from storyboard to presentation.

Credits 1

Grades

10, 11, 12

Schools

Forest Park High School

Hylton High School

Patriot High School

Prerequisites

[Digital Visualization](#)

Trade and Industrial Education

Advanced Cybersecurity Systems Technology

This Advanced Cybersecurity Systems Technology course provides students with training in procedures for optimizing and troubleshooting concepts for computer systems, subsystems, and networks. Students explore the following:

- Basic network design and connectivity
- Network documentation
- Network limitations and weaknesses
- Network security, standards, and protocols

Students will gain a basic understanding of emerging technologies including unified communications, mobile, cloud, and virtualization technologies. The course prepares students for postsecondary education and training and a successful career in information technology. Upon successful completion of the course, students may qualify to take CompTIA's A+ and Network+ certification exams.

Credits 2

Grades

11, 12

Course Designation

Dual Enrollment (DE),

Weighted (1.0W)

Schools

Forest Park High School

Potomac High School

Prerequisites

[Cybersecurity Systems Technology](#)

Cybersecurity Systems Technology

Students enter the world of computer networking and learn to troubleshoot networks and networking devices, using system tools and diagnostic software. They develop skills in computer networking, resource sharing, and associated security risks. In addition, students explore the relationships between internal and external computer components.

Credits 1

Grades

10, 11

Schools

Forest Park High School

Freedom High School

Patriot High School

Potomac High School

Army JROTC

Army JROTC 1

This introductory course is designed for all students in their first year of Military Science. Curriculum units are taught in American Citizenship, Techniques of Communication, Leadership, Presidential Physical Fitness testing, Basic Drill and Ceremony, First Aid and Your Health, Drug Abuse Prevention, Map Reading, Military History, Customs and Courtesies of the Army, Basic Leadership Skills, and Life Management Skills. Students are inspected in a designated Army cadet uniform once a week and participate in military drill and field trips. Co-curricular activities include Drill/Color Guard, Air Rifle Team, Raider Team, and active participation in community events/service projects and in unit social activities such as a dining-in and military ball.

Credits 1

Grades

9, 10, 11, 12

Schools

Forest Park High School

Woodbridge High School

Requirements

Students planning to enroll in JROTC programs must meet program entry requirements. Student must be able to participate in the JROTC physical fitness program, dress in regulation uniform and meet and maintain the personal grooming standards as outlined in the USA Cadet Command Regulation.

Army JROTC 2

This second-year course includes Techniques of Communication, Leadership, Presidential Physical Fitness testing, Drill and Ceremony, First Aid and Hygiene, Drug Abuse Prevention, Map Reading, American Military History, Career Opportunities, Role of the U.S. Army, and Technology Awareness. Students are inspected in their designated Army Cadet uniform once a week, participate in military drill, and also attend field trips. Second-year cadets begin to assume leadership positions in the unit and in various extracurricular activities as listed in Military Science 1.

Credits 1

Grades

10, 11, 12

Schools

Forest Park High School

Woodbridge High School

Requirements

Students planning to enroll in JRTOC programs must meet program entry requirements. Student must be able to participate in the JROTC physical fitness program, dress in regulation uniform and meet and maintain the personal grooming standards as outlined in the USA Cadet Command Regulation, and must have successfully completed Army JROTC 1 or equal level in another JROTC program.

Prerequisites

[Army JROTC 1](#)

Army JROTC 3

This third-year course includes curriculum study in Techniques of Communication, Leadership, Presidential Physical Fitness testing, Drill and Ceremony, First Aid, Drug Abuse Prevention, Map Reading, American History, Citizenship, Career Opportunities, Role of the U.S. Army, Technology Awareness, and Motivational Programs. Students assume increasing positions of leadership and participate in the full range of activities. Students also teach new cadets in customs and courtesies, rules and regulations, proper wearing of the Army Cadet uniform, and drill.

Credits 1

Grades

11, 12

Schools

Forest Park High School

Woodbridge High School

Requirements

Students planning to enroll in JRTOC programs must meet program entry requirements. Student must be able to participate in the JROTC physical fitness program, dress in regulation uniform and meet and maintain the personal grooming standards as outlined in the USA Cadet Command Regulation and must have successfully completed Army JROTC 1 and 2.

Prerequisites

[Army JROTC 2](#)

Army JROTC 4

This fourth-year course includes curriculum units of study in leadership and the graded practical application of previous course work and experience in planning and executing organizational functions. Students organize and lead the Cadet Corps in all activities. The Cadets Corps of senior students are encouraged and are self motivated to display leadership potential and the ability to live and work cooperatively with others through the effective understanding and application of the leadership traits, principles, styles, and the Army core values. Senior students have a goal to be able to critically analyze quality leadership traits; and use the application of effective management techniques for planning and decision-making/problem-solving processes (as well as the ethical decision-making process) and supervision in staff and command/leadership positions.

Credits 1

Grades

12

Schools

Forest Park High School

Woodbridge High School

Requirements

Students planning to enroll in JROTC programs must meet program entry requirements. Student must be able to participate in the JROTC physical fitness program, dress in regulation uniform and meet and maintain the personal grooming standards as outlined in the USA Cadet Command Regulation and must have successfully completed Army JROTC 1, 2, and 3.

Prerequisites

[Army JROTC 3](#)

Special Education

Compensatory Skills

Compensatory Skills is designed to provide students with individualized remediation and compensatory skills in their specific academic area(s) of need as identified through the eligibility and IEP process.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Requirements

Any student whose Individualized Education Program (IEP) indicates the appropriateness of the compensatory skills course offering.

Prerequisites

None

Notes

Students can take Compensatory Skills each year up to four years.

EMPLOY 1

Employment Opportunities For Youth (EMPLOY) provides special education students with skills that will facilitate their entry into suitable occupations in accordance with their individual educational needs, aptitudes, and interests.

The focus of EMPLOY 1 is career awareness. Students will have opportunities to learn about their personal preferences, interests, and a variety of careers and occupations, and begin to build their self-advocacy skills.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School
Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Requirements

Any student who is receiving special education services and whose Individualized Education Program (IEP) and transition goals indicate the appropriateness of the EMPLOY curriculum.

Notes

EMPLOY courses can fulfill Sequential Elective requirement and Career and Technical Education (CTE) completer sequence elective.

EMPLOY 2

Employment Opportunities For Youth (EMPLOY) provides special education students with skills that will facilitate their entry into suitable occupations in accordance with their individual educational needs, aptitudes, and interests.

The focus of EMPLOY 2 is the development of employability and life management skills. Students are provided opportunities to develop communication skills, independent living skills, personal/social skills, and job search and retention skills.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School
Brentsville District High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Requirements

Any student who is receiving special education services and whose Individualized Education Program (IEP) and transition goals indicate the appropriateness of the EMPLOY curriculum.

Notes

It is recommended that a student complete EMPLOY 1 before enrolling in EMPLOY 2.

EMPLOY courses can fulfill Sequential Elective requirement and Career and Technical Education (CTE) completer sequence elective.

EMPLOY 3

Employment Opportunities For Youth (EMPLOY) provides special education students with skills that will facilitate their entry into suitable occupations in accordance with their individual educational needs, aptitudes, and interests.

EMPLOY 3 is a two-period class with periods scheduled back-to-back. The focus for EMPLOY 3 is to reinforce and enrich the goals of EMPLOY 1 and EMPLOY 2, as well as vocational exploration and the development of marketable job skills through the completion of an unpaid internship.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Requirements

Any student who is receiving special education services and whose Individualized Education Program (IEP) and transition goals indicate the appropriateness of the EMPLOY curriculum.

Notes

It is recommended that a student complete EMPLOY 1 and/or EMPLOY 2 before enrolling in EMPLOY 3.

EMPLOY courses can fulfill Sequential Elective requirement and Career and Technical Education (CTE) completer sequence elective.

EMPLOY 4

Employment Opportunities For Youth (EMPLOY) provides special education students with skills that will facilitate their entry into suitable occupations in accordance with their individual educational needs, aptitudes, and interests.

The focus of EMPLOY 4 is to provide students with an opportunity to apply their self-awareness, employability, self-advocacy, and life management skills in order to obtain and retain employment. During the school year, students complete a minimum of 396 hours of competitive employment.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Potomac High School
Unity Reed High School
Woodbridge High School

Requirements

Any student who is receiving special education services and whose Individualized Education Program (IEP) and transition goals indicate the appropriateness of the EMPLOY curriculum.

Notes

It is recommended that a student complete EMPLOY 1 and/or EMPLOY 2 before enrolling in EMPLOY 4.

EMPLOY courses can fulfill Sequential Elective requirement and Career and Technical Education (CTE) completer sequence elective.

Explore

PWCS partners with community businesses to provide opportunities for student explorers to discover their interests, preferences, and potential for successful postsecondary employment outcomes. Explorers spend most of their day engaged in work-based learning activities that provide opportunities for hands-on exploration of their career interests and preferences. In addition to acquiring marketable job skills, students learn to manage and meet the demands of competitive work, as well as develop the soft skills required of the 21st century workplace, such as responsibility, self-confidence, team-spiritedness, a good work attitude, and self-motivation and management.

Credits 1

Grade: 12 Postgraduate

Schools

Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Requirements

Any student with a disability, aged 18 - 21, who has completed the requirements for an Applied Studies Diploma and whose IEP team has determined the need for an unpaid, community-based, High-Quality Work-Based Learning internship experience in a supported environment.

Prerequisites

None

Notes

Check with your counselor to see if this course is offered at your school.

Life Skills

The focus of Life Skills is to enhance the student's social, emotional, and academic success. Students will develop and enhance communication skills, organizational/study techniques, and social intervention skills. Stress management techniques will also be taught. The students will participate in the development of a transition plan and explore skills needed for employment/post-secondary education as well as for learning and self-advocacy.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School
Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Requirements

Any student who is receiving special education services and whose Individualized Education Program (IEP) indicates the appropriateness of the Life Skills course offering.

Prerequisites

None

Math Strategies

Math Strategies is designed to provide students with direct and explicit instruction on how to expand math concepts (i.e., math calculation and math reasoning), and use strategies to strengthen learned math skills through research-based math instructional programs.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School
Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Requirements

Any student who is receiving special education services whose Individualized Education Program (IEP) indicates the appropriateness of the Math Strategies course offering.

Prerequisites

None

Notes

This course may be taken multiple times throughout high school.

Personal Living and Finance

This course can replace Economics and Personal Finance as a graduation requirement for any student whose Individual Education Program (IEP) indicates eligibility for the Credit Accommodation. This course addresses the need for students to have the skills to manage personal finances and to make sound financial decisions.

Credits 1

elective credit for Standard or Advanced Studies

Diplomas

Grades

10, 11, 12

Schools

Battlefield High School
Brentsville District High School
Forest Park High School
Gar-Field High School
Hylton High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Requirements

Any student who is receiving special education services and whose Individual Education Program (IEP) indicates the appropriateness of the Personal Living and Finance Course.

Prerequisites

None

Social Skills 1

This course will provide students with direct instruction in specific social skills using research- and evidence-based programs and strategies. The purpose of this course is to increase academic achievement through the teaching and remediation of social skills. When completed, students will be able to demonstrate appropriate behavior in changing environments, effective communication skills, positive relationships with others, project a positive self-image, and utilize social skills in the learning process. This course may be used to satisfy the sequential elective requirement.

Credits 1

Grades

9, 10, 11, 12

Schools

Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Requirements

Any student who is receiving special education services and whose Individualized Educational Program (IEP) indicates the appropriateness of the Social Skills 1 course offering.

Prerequisites

None

Social Skills 2

This course will provide students with direct instruction in a higher level of specific social skills than introduced in Social Skills 1, including anger control and decision making. The purpose of this course is to increase academic achievement through the teaching and refining of social skills. Students will be able to demonstrate appropriate behavior in changing environments, effective communication skills, positive relationships with others, project a positive self-image, and utilize social skills in the learning process. This course may be used to satisfy the sequential elective requirement.

Credits 1

Grades

10, 11, 12

Schools

Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Requirements

Any student who has completed Social Skills 1 and whose Individualized Educational Program (IEP) indicates the appropriateness of the Social Skills 2 course.

Prerequisites

None

Transitional Work Skills

This course is intended to address the vocational needs of middle and high school students participating in the Virginia Alternate Assessment Program. Course proficiencies can contribute in the development of the student's transition plan. Pre-vocational and vocation tasks will be the fundamental areas of instruction. The focus of this course, Transitional Work Skills, is to provide students with opportunities to develop competencies required for increased independence and to facilitate post-secondary employment. This course will be open to any student who is receiving special education services at the middle and high school level whose Individualized Education Program (IEP) indicates the need for vocational skills, to include students with disabilities who are English learners.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Forest Park High School

Gainesville High School

Gar-Field High School

Hylton High School

Patriot High School

Potomac High School

Woodbridge High School

Requirements

Any student whose Individualized Educational Program (IEP) indicates the appropriateness of Transitional Work Skills is eligible for this course.

Prerequisites

None

English

Advanced English 9

Advanced English 9 focuses on the close reading, analytical writing, and language skills that have immediate relevance for students and that will be essential for their future coursework. Texts take center stage in the Advanced English 9 classroom, where students engage in close, critical reading of a wide range of literary and nonfiction works. The course teaches the reader to observe the small details within a text to arrive at a deeper understanding of the whole. It also teaches the writer to focus on crafting complex sentences as the foundation for writing to facilitate complex thinking and communicate ideas clearly. This course is an integral component of the multidisciplinary program of studies established for the Biotechnology Center (BIOTECH), Center for Environmental and Natural Sciences (CENS), Center for the Fine and Performing Arts (CFPA), Center for International Studies and Languages (CISL). For additional information, refer to the description of these programs in the specialty program section. This course meets all objectives in the English 9 Standards of Learning.

Credits 1

Grades

9

Course Designation

Weighted (0.5W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Woodbridge High School

Requirements

Successful completion of Grade 8 and interest in

Advanced study

Prerequisites

None

Advanced English 10

Advanced English 10 spotlights the recursive moves that matter in preparing students for the demands of college and career ready reading and writing. This course builds upon the foundational routines of close observation, critical analysis, and appreciation of author's craft learned in Advanced English 9. As readers, students develop an awareness of how poets, playwrights, novelists, and writers of nonfiction manipulate language to serve their unique purposes. As writers, students compose more nuanced essays without losing sight of the importance of well-crafted sentences and a sense of cohesion. This course is an integral component of the multidisciplinary program of studies established for the Biotechnology Center, Center for Environmental and Natural Sciences, Center for the Fine and Performing Arts, Center for International Studies and Languages. For additional information, refer to the description of these programs in the specialty program section. This course meets all of the objectives for the English 10 Standards of Learning.

Credits 1

Grades

10

Course Designation

Weighted (0.5W)

Schools

Battlefield High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Hylton High School
Osborn Park High School
Patriot High School
Woodbridge High School

Requirements

Student interest in Advanced study and teacher recommendation

Prerequisites

[Advanced English 9](#) or a grade of B or better in [English 9](#)

English 9

In ninth grade English, students compare fiction and nonfiction texts, with an emphasis on nonfiction. Students make inferences and draw conclusions using explicit and implied textual evidence and use literary terms to analyze a variety of genres. Students use the structural analysis of roots and affixes to analyze complex words. This course engages students in a recursive writing process, with an emphasis on analysis and persuasion. Students gather, analyze, and evaluate information from diverse sources and cite both quoted and paraphrased information. Students analyze and interpret the motives behind media messages. Students use multimodal tools to create presentations both independently and in collaborative groups.

Credits 1

Grades

9

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School
Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Independence Nontraditional
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

None

English 10

In 10th grade English, students compare fiction and nonfiction texts, with an emphasis on nonfiction. Students analyze the cultural and social function and universal themes of fictional texts from different cultures. Students analyze and synthesize information from nonfiction texts. Students use context, structure, and connotations to determine meanings of complex words and phrases. This course engages students in a recursive writing process, with an emphasis on analysis and persuasion while showing relationships among claims, reasons, and evidence from reliable sources. Students create media messages and analyze the cause and effect relationships between mass media coverage and public opinion trends. Students use multimodal tools to create presentations both independently and in collaborative groups. Students use research skills to present information gathered from diverse sources, identify misconceptions and possible bias, and credit sources.

Credits 1

Grades

10

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Independence Nontraditional

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[English 9](#)

English 11

In 11th grade English, students analyze and evaluate relationships among American literature, history, and culture, including contributions of other cultures. Students conduct comparative analyses of multiple texts that address the same topic to determine how authors reach similar or different conclusions. Students use context, structure, and connotations to determine meanings of complex words and phrases. This course engages students in a recursive writing process, with an emphasis on persuasion/argumentation for multiple audiences and purposes. Students create media messages and analyze the cause and effect relationships between mass media coverage and public opinion trends. Students produce a research product, such as a multimodal presentation, that addresses alternative perspectives, synthesizes information from primary and secondary sources, and maintains ethical and legal guidelines for gathering and using information. During this course, students take the end of course Reading and Writing SOL assessments.

Credits 1

Grades

11

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Independence Nontraditional

Osborn Park High School

Patriot High School

Potomac High School

Woodbridge High School

Prerequisites

[English 10](#)

English 12

In 12 grade English, students critically analyze and evaluate relationships among British literature, history, and other cultures. Students review multiple texts to identify and evaluate resources to make decisions and solve problems. Students use context, structure, and connotations to determine meanings of complex words and phrases. This course engages students in a recursive writing process with an emphasis on persuasion/ argumentation to a standard acceptable to both the workplace and to postsecondary education. Students create media messages and analyze the cause and effect relationships between mass media coverage and public opinion trends. Students produce a research product, such as a multimodal presentation, that addresses alternative perspectives, synthesizes information from primary and secondary sources, and maintains ethical and legal guidelines for gathering and using information.

Credits 1

Grades

12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Independence Nontraditional

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[English 11](#)

English - Advanced Placement

AP English Language and Composition

AP English Language and Composition course cultivates the reading and writing skills that students need for college success and for intellectually responsible civic engagement. The course guides students in becoming curious, critical, and responsive readers of diverse texts and becoming flexible, reflective writers of texts addressed to diverse audiences for diverse purposes. The reading and writing students do in the course should deepen and expand their understanding of how written language functions rhetorically: to communicate writers' intentions and elicit readers' responses in particular situations. This course includes nonfiction readings to give students opportunities to identify, explain, and emulate an author's use of rhetorical strategies and techniques. Fiction and poetry may also be assigned to help students understand how various effects are achieved by writers' rhetorical choices. This course satisfies all the objectives for English 11. In May, the students take an exam to qualify for advanced standing in college and/or college credit.

Credits 1

Grades

11

Course Designation

Advanced Placement (AP),

Weighted (1.0W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Woodbridge High School

Requirements

Student interest in advanced study and teacher recommendation

Prerequisites

[Advanced English 10](#) or a grade of B or better in [English 10](#)

AP Literature and Composition

In the AP English Literature and Composition course, students study literary works written in (or translated into) English. Careful reading and critical analysis of such works of fiction, drama, and poetry provide rich opportunities for students to develop an appreciation of how literature reflects and comments on a range of experiences, institutions, and social structures. Students will examine the choices literary writers make and the techniques they utilize. Students develop the skills of literary analysis and composition as they practice analyzing poetry and prose, while composing arguments about their interpretation of a literary work. This course satisfies all the objectives for English 12. In May, the students take an exam to qualify for advanced standing in college and/or college credit.

Credits 1

Grades

12

Course Designation

Advanced Placement (AP),
Weighted (1.0W)

Schools

Battlefield High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Hylton High School
Osborn Park High School
Patriot High School
Woodbridge High School

Requirements

Student interest in advanced study and teacher recommendation

Prerequisites

[AP English Language and Composition](#) or a grade of B or better in [English 11](#)

English - Dual Enrollment

College Composition 12 (DE)

Both ENG 111 and ENG 112 must be taken to earn credit for English 12. ENG 111, College Composition I, is a fall semester course that is designed to prepare students for various types of college level writing. The three main goals of the course are to instruct students in the Process of Writing, Expository and Argumentative Writing, and Critical Thinking and Research. Students need a C or better at the end of the first semester to enroll in the second semester course. Students that do not have a C or better will be moved to a non-college-level course to satisfy English 12. ENG 112, College Composition II, is a spring semester course that continues to prepare students for various types of college level writing focusing on critical essays and argumentation. Students will read, study, research, and respond to a variety of literary texts reflecting the human experience. The four main goals of the course are to instruct students in the Process of Writing, Critical Thinking and Writing, Argument, and Research.

Credits 1

Grades

12

Course Designation

Dual Enrollment (DE),
Weighted (1.0W)

Schools

Battlefield High School
Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Woodbridge High School

Prerequisites

[English 11](#)

SOL College Composition 11 (DE)

Both ENG 111 and ENG 112 must be taken to earn credit for English 11. At the completion of this course students will take the English SOL exams. The course will be supplemented to support preparation for the SOL tests. ENG 111, College Composition I, is a fall semester course that is designed to prepare students for various types of college-level writing. The three main goals of the course are to instruct students in the Process of Writing, Expository and Argumentative Writing, and Critical Thinking and Research. Students need a C or better at the end of the first semester to enroll in the second semester course. Students that do not have a C or better will be moved to a non-college level course to satisfy English 11 and SOL requirements. ENG 112, College Composition II, is a spring semester course that continues to prepare students for various types of college level writing focusing on critical essays and argumentation. Students will read, study, research, and respond to a variety of literary texts reflecting the human experience. The four main goals of the course are to instruct students in the Process of Writing, Critical Thinking and Writing, Argument, and Research.

Credits 1

Grades

11

Course Designation

Dual Enrollment (DE),

Weighted (1.0W)

Schools

Battlefield High School

Forest Park High School

Freedom High School

Patriot High School

Woodbridge High School

Prerequisites

[English 10](#)

Survey of World Literature 12 (DE)

Both ENG 251 and ENG 252 must be taken to earn credit for English 12. ENG 251, Survey of World Literature I, is a fall semester course that is designed to introduce students to selected major works that represent the development of world literature from about 1650 to present. The four main goals of this course are to increase knowledge of historical movements, enhance critical thinking skills via literary study, develop greater proficiency in written and oral expression, and understand social differences in values and education. ENG 252, Survey of World Literature II, is a spring semester course that is designed to introduce students to selected major works that represent the development of world literature from the ancient world to about 1650. The four main goals of this course are to increase knowledge of historical movements, enhance critical thinking skills via literary study, development greater proficiency in written and oral expression, and understand social differences and values in education.

Credits 1

Grades

12

Course Designation

Dual Enrollment (DE),

Weighted (1.0W)

Schools

Battlefield High School

Forest Park High School

Hylton High School

Patriot High School

Woodbridge High School

Prerequisites

[SOL College Composition 11 \(DE\)](#)

English - Electives

Creative Writing 1

Students write and revise extensively to develop voice and style as experiment with a variety of subjects, genres, techniques, purposes, and audiences producing polished writing in fiction, non-fiction, poetry, and drama. Students will submit their work for publication in the school's literary magazine.

Credits 1

Grades

11, 12

10 with Permission

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Unity Reed High School

Woodbridge High School

Requirements

Successful mastery of Grade 9 and Grade 10 Language Arts objectives

Creative Writing 2

Students who have completed the first level of Creative Writing refine their skills in writing and revising to further develop their style. They examine the composing processes of professional writers and participate in the process of producing a literary magazine.

Credits 1

Grades

11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Woodbridge High School

Prerequisites

[Creative Writing 1](#)

Photo Journalism - Yearbook

Students learn various aspects of publication while assisting in the production of the high school yearbook. Students participate in each step of production from planning the ladder diagram to distribution of the completed publication. This course may be taken more than once for credit.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Requirements

Yearbook staff assignment

Prerequisites

[Journalism 1](#)

Reading Improvement

Students develop and reinforce basic reading and study skills. They learn techniques applicable to content reading and they develop word analysis and comprehension skills.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Forest Park High School

Freedom High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Requirements

Students reading two to four years below grade level

Band

Accelerated Band

The high school band program offers various courses to develop the student's musical skills. Students learn technical and ensemble skills through the study of related literature. Some after-school rehearsals and performances are required of all students as an integral part of these courses. This course may be taken more than once for credit.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Woodbridge High School

Requirements

Audition *or* permission of the instructor

Prerequisites

None

Accelerated Brass

The high school band program offers various courses to develop the student's musical skills. Students learn technical and ensemble skills through the study of related literature. Some after-school rehearsals and performances are required of all students as an integral part of these courses. This course may be taken more than once for credit.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School
Forest Park High School
Freedom High School
Gar-Field High School
Osborn Park High School
Patriot High School
Potomac High School
Woodbridge High School

Requirements

Audition *or* permission of the instructor

Prerequisites

None

Advanced Band

The high school band program offers various courses to develop the student's musical skills. Students learn technical and ensemble skills through the study of related literature. Some after-school rehearsals and performances are required of all students as an integral part of these courses. Advanced Band will require extensive practice, rehearsal, and performance outside of school. This course may be taken more than once for credit.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Weighted (0.5W)

Schools

Battlefield High School
Brentsville District High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Requirements

Audition *or* permission of the instructor

Prerequisites

None

Intermediate Band

The high school band program offers various courses to develop the student's musical skills. Students learn technical and ensemble skills through the study of related literature. Some after-school rehearsals and performances are required of all students as an integral part of these courses. This course may be taken more than once for credit.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School
Forest Park High School
Freedom High School
Gar-Field High School
Hylton High School
Independence Nontraditional
Osborn Park High School
Patriot High School
Potomac High School
Woodbridge High School

Requirements

Audition *or* permission of the instructor

Prerequisites

None

Intermediate Percussion

The high school band program offers various courses to develop the student's musical skills. Students learn technical and ensemble skills through the study of related literature. Some after-school rehearsals and performances are required of all students as an integral part of these courses. This course may be taken more than once for credit.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School
Brentsville District High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Requirements

Audition *or* permission of the instructor

Prerequisites

None

Marching Band

Marching band is offered at all schools as part of the high school band program and is an offering for students who are also enrolled in another band class offering. After-school rehearsals and performances are required of all students as an integral part of this course. Marching Band will require extensive practice, rehearsal, and performance outside of school. This course may be taken more than once for credit.

Credits 0.5

Grades

9, 10, 11, 12

Schools

Battlefield High School
Brentsville District High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Choir

Accelerated Bass Choir

The high school choral program offers various courses to develop a student's musical skills based on their level of ability. Students learn a variety of vocal skills through the study of related choral literature. Students in this class develop technical facility and proficient musicianship through a variety of performance experiences. Through group performances, solos, and ensembles, the student is exposed to standard choral repertoire encompassing various styles and periods of music. Some after-school rehearsals and performances are required of all students as a part of this course. This course may be taken more than once for credit.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School
Forest Park High School
Freedom High School
Gar-Field High School
Osborn Park High School
Patriot High School
Potomac High School
Woodbridge High School

Requirements

Audition *or* permission of the instructor

Prerequisites

None

Accelerated Treble Choir

The high school choral program offers various courses to develop a student's musical skills based on their level of ability. Students learn a variety of vocal skills through the study of related choral literature. Students in this class develop technical facility and proficient musicianship through a variety of performance experiences. Through group performances, solos, and ensembles, the student is exposed to standard choral repertoire encompassing various styles and periods of music. Some after-school rehearsals and performances are required of all students as a part of this course. This course may be taken more than once for credit.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School
Brentsville District High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Requirements

Audition *or* permission of the instructor

Prerequisites

None

Advanced Choir

The high school choral program offers various courses to develop a student's musical skills based on their level of ability. Students learn a variety of vocal skills through the study of related choral literature. Students in this class develop technical facility and proficient musicianship through a variety of performance experiences. Through group performances, solos, and ensembles, the student is exposed to standard choral repertoire encompassing various styles and periods of music. Some after-school rehearsals and performances are required of all students as a part of this course. Advanced Choir will require extensive practice, rehearsal, and performance outside of school. This course may be taken more than once for credit.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Weighted (0.5W)

Schools

Battlefield High School

Brentsville District High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Requirements

Audition *or* permission of the instructor

Prerequisites

None

Beginning Treble Choir

The high school choral program offers various courses to develop a student's musical skills based on their level of ability. Students learn a variety of vocal skills through the study of related choral literature. Students in this class develop technical facility and proficient musicianship through a variety of performance experiences. Through group performances, solos, and ensembles, the student is exposed to standard choral repertoire encompassing various styles and periods of music. Some after-school rehearsals and performances are required of all students as a part of this course. This course may be taken more than once for credit.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Forest Park High School

Freedom High School

Gar-Field High School

Osborn Park High School

Patriot High School

Potomac High School

Woodbridge High School

Requirements

Audition *or* permission of the instructor

Prerequisites

None

Concert Choir

The high school choral program offers various courses to develop a student's musical skills based on their level of ability. Students learn a variety of vocal skills through the study of related choral literature. Students in this class develop technical facility and proficient musicianship through a variety of performance experiences. Through group performances, solos, and ensembles, the student is exposed to standard choral repertoire encompassing various styles and periods of music. Some after-school rehearsals and performances are required of all students as a part of this course. This course may be taken more than once for credit.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Forest Park High School

Freedom High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Requirements

Audition *or* permission of the instructor

Prerequisites

None

Music - Advanced Placement

AP Music Theory

AP Music Theory provides students the learning experience equivalent to a college introductory course in music theory. Major areas of study include compositional procedures, listening skills (particularly those involving recognition and comprehension of melodic and rhythmic patterns), harmonic functions, compositional techniques, music textures, music terminology, notation skills, sight-singing, and score analysis. At the end of the course, students will be prepared to successfully complete the AP Music Theory Examination.

Credits 1

Grades

11, 12

Course Designation

Advanced Placement (AP),

Weighted (1.0W)

Schools

Forest Park High School

Freedom High School

Patriot High School

Prerequisites

Music Theory 1 or one year of a high school music performing ensemble

Orchestra

Advanced Orchestra

Students who enroll in the high school orchestra develop technical and ensemble skills through the study of orchestral literature. Students receive fundamental training in the proper playing of an orchestral instrument, and perform and study literature commensurate with their level of ability. Members of this class form the representative string performing group for the school. Some after-school rehearsals and performances are required of all students as a part of these courses. Advanced Orchestra will require extensive practice, rehearsal, and performance outside of school. This course may be taken more than once for credit.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Weighted (0.5W)

Schools

Battlefield High School

Brentsville District High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Requirements

Audition *or* permission of the instructor

Prerequisites

None

Concert Orchestra

Students who enroll in the high school orchestra develop technical and ensemble skills through the study of orchestral literature. Students receive fundamental training in the proper playing of an orchestral instrument, and perform and study literature commensurate with their level of ability. Members of this class form the representative string performing group for the school. Some after-school rehearsals and performances are required of all students as a part of these courses. This course may be taken more than once for credit.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Requirements

Audition *or* permission of the instructor

Prerequisites

None

Intermediate Orchestra

Students who enroll in the high school orchestra develop technical and ensemble skills through the study of orchestral literature. Students receive fundamental training in the proper playing of an orchestral instrument, and perform and study literature commensurate with their level of ability. Members of this class form the representative string performing group for the school. Some after-school rehearsals and performances are required of all students as a part of these courses. This course may be taken more than once for credit.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Requirements

Audition *or* permission of the instructor

Prerequisites

None

Theatre

Film Studies

This yearlong course seeks to encourage an enjoyment and deeper understanding of different types of film (narrative cinema, documentary, and abstract film) through a critical understanding of how films work artistically, technically, and socially. Through film theory and film production, students will apply a range of critical approaches as well as receiving instruction in video and film production.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gar-Field High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Technical Theatre - Production

Students study the design, scenery, lighting, makeup, sound, costumes, and public relations necessary to ensure successful theatre productions. This course may be taken more than once for credit.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School

Colgan High School

Forest Park High School

Gainesville High School

Gar-Field High School

Osborn Park High School

Patriot High School

Woodbridge High School

Prerequisites

None

Theatre 1: Introduction to Theatre

In this course, students survey the theatre arts. They will have opportunities to experience and appreciate dramatic literature and to participate in the creative processes of performance and production with emphasis in skill development and theatrical opportunities.

Students will be encouraged to determine and investigate personal areas of interest in theatre arts.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School
Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

None

Theatre 2: An Exploration of Performance in Theatre

Students have Advanced opportunities for reinforcement, refinement and expansion of the acting skills learned in Theatre 1: Introduction to Theatre

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School
Brentsville District High School
Forest Park High School
Gainesville High School
Gar-Field High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

[Theatre 1: Introduction to Theatre](#)

Visual Arts - Advanced Placement

AP Studio Art 2D Design

The Advanced Placement studio courses are intended for the highly motivated students committed to serious study in art. To enroll, students must have completed Art 1 and 2. The AP 2D Design Portfolio addresses a broad range of media, skills, and techniques and is comprised of two sections: Sustained Investigation (15 digital images) and Selected Works (5 digital images of 5 original artworks). The digital images are submitted for AP Examination review.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Weighted (1.0W),
Advanced Placement (AP)

Schools

Battlefield High School
Colgan High School
Forest Park High School
Gainesville High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School

Prerequisites

[Art 2](#)

Notes

Recommend completion of Portfolio Prep prior to AP Art

AP Studio Art 3D Design

The Advanced Placement studio courses are intended for highly motivated students committed to serious study in art. To enroll, students must have completed Art 1 and 2. The Studio Art 3D Design course addresses a broad range of sculptural media, skills, and techniques and is comprised of two sections: Sustained Investigation (15 digital images) and Selected Works (Images of 5 works, 2 views each, for a total of 10 images). The digital images are submitted for AP Examination review.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Weighted (1.0W),

Advanced Placement (AP)

Schools

Colgan High School

Forest Park High School

Gainesville High School

Hylton High School

Osborn Park High School

Potomac High School

Prerequisites

[Art 2](#)

Notes

Recommend completion of Portfolio Prep prior to AP Art

AP Studio Art Drawing

The Advanced Placement studio courses are intended for the highly motivated students committed to serious study in art. To enroll, students must have completed Art 1 and 2. The Studio Art Drawing Portfolio addresses a broad range of drawing media, skills, and techniques and is comprised of two sections: Sustained Investigation (15 digital images) and Selected Works (5 digital images of 5 original artworks). The digital images are submitted for AP Examination review.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Weighted (1.0W),

Advanced Placement (AP)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Gainesville High School

Hylton High School

Osborn Park High School

Potomac High School

Woodbridge High School

Prerequisites

[Art 2](#)

Notes

Recommend completion of Portfolio Prep prior to AP Art

Visual Arts - Electives

Art 1 - Basic Foundations

First-year art students are enrolled in this introductory course. Art 1 includes both 2D and 3D art production as well as visual literacy experiences. The course content focuses on the elements of art and an introduction to the principles of design. Students will use creative processes to communicate ideas and personal life experiences. The curriculum for Advanced Middle Years Programme (MYP) Art 1 will incorporate MYP global contexts, strategies, and assessment criteria.

Credits 1

Grades

9, 10

Schools

Battlefield High School
Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

None

Notes

IB is at Gar-Field High School and Unity Reed High School.

Art 2

Students will focus on the principles of design with reinforcement of the elements of art. In this course, students examine the importance of process, content, concepts, and skills involved in the development of original works of art and design. Students will demonstrate proficiency and craftsmanship in a variety of media.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School
Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

[Art 1 - Basic Foundations](#)

Art 3

Art 3 emphasizes critical thinking skills that enable students to organize, investigate, and analyze visual arts content and concepts. Students increasingly focus on historical and cultural studies, critical evaluation, and creative problem solving through art production. Students will provide evidence of original ideas while demonstrating accomplished skill and technique with a variety of traditional and contemporary tools and media.

Credits 1

Grades

11, 12

Schools

Battlefield High School
Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Woodbridge High School

Prerequisites

[Art 2](#)

Art Portfolio Preparation

The Art Portfolio Preparation studio is intended for students committed to serious study in visual art. The studio component focuses on the student's individual artistic talents. The portfolio, compiled by the student, will demonstrate a variety of experiences in formal, technical, and expressive means. This course is highly recommended for juniors considering AP Art their senior year.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School

Colgan High School

Forest Park High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Woodbridge High School

Prerequisites

[Art 2](#)

Computer Art Graphics 1

This course places emphasis on the production of artistic digital imagery, rather than commercial/web graphics. Students will use photographic software to examine and alter images for computer graphic and fine art applications. The study of aesthetics and the history of art will be included in the course. Students will use a variety of media within this course such as natural art media, scanned images and digital photography. Students will be required to produce digital portfolios.

Credits 1

Grades

10, 11, 12

Schools

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Art 1 - Basic Foundations](#)

Photography 1

Student must provide a 35mm SLR film camera (for schools with darkrooms) or a digital camera. A fee may be charged for consumable materials needed to complement the provided materials.

The course is an introduction to photography as an art medium. Light, design, lens, camera, film, and darkroom techniques are explored. The history of photography and related career opportunities provide a broad overview of the continually growing technical and artistic field of photography. Student self-expression as a means of creative communication is emphasized throughout the course. A student portfolio is maintained for assessment and exhibition.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Art 1 - Basic Foundations](#)

Photography 2

Student must provide a 35mm SLR film camera (for schools with darkrooms) or a digital camera. A fee may be charged for consumable materials needed to complement the provided materials.

Students will expand on their photography skills through the use of 35mm cameras. Emphasis will be placed on the study of personal expression and development of creativity. Advanced camera skills and darkroom techniques will be studied through a variety of assignments. The history of photography will be offered through the study of major photographers, photographic imagery, the use of photography for artistic communication, and the major themes used by photographers. Ethical issues concerning photographic imagery will be explored. Students will produce a portfolio containing both 35mm and digital photographs reflecting a series of works organized around a compelling visual concept or concentration.

Credits 1

Grades

11, 12

Schools

Battlefield High School
Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

[Photography 1](#)

Visual Arts - Instructional Technology (IT)

IT Computer Graphics 1

This course prepares students for upper-level computer graphics and multimedia as well as entry-level career opportunities in the computer graphics industry. The course of study includes learning the foundations of computer graphics, photo design, and production as well as taking images from concept to completion in print and on the web. Tools such as digital cameras and scanners are used to import art and graphics into electronic formats. The students' artistic abilities will be enhanced as they master Adobe Photoshop software to complete the design and production process.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School
Forest Park High School

Prerequisites

[IT Graphic Design](#)

IT Computer Graphics 2

IT Computer Graphics 2 is a continuation of IT Computer Graphics 1. The course of study will include applications for image creation and manipulation. The emphasis will be on the study of aesthetics and on the production of original computer imagery. This course will enable modeling for print reproduction rather than web production. Students will work on individual as well as team projects. Students will be required to produce professional portfolios.

Credits 1

Grades

11, 12

Schools

Battlefield High School
Forest Park High School

Prerequisites

[IT Computer Graphics 1](#)

IT Graphic Design

IT Graphic Design is designed to train students to become visual communicators. Students will apply the knowledge and understanding of the elements and principles of art through various media, techniques, and processes to solve problems in visual communications. A variety of 2D and 3D media will be used. Students will explore technical aspects of layout, typography, illustration, design, and color psychology using traditional graphic tools. Students will learn about the ethical issues in the commercial field, management of time to meet deadlines, working in a team, and expressing and defending their ideas. Also, students will study the history and cultural impact of visual communications. Works generated will be the basis for beginning a Graphics Art Portfolio.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Forest Park High School

Requirements

Acceptance into the IT Program

IT Multimedia Software Design and Development 1

Multimedia prepares students for the challenging world of information design, multimedia development, web-based development and learning management. The processes and tools that address these aims will be explored. Computer-based multimedia combines all the facets of communication into an interactive product. The ethical issues of copyright laws and fair use issues will be emphasized.

Credits 1

Grades

11, 12

Schools

Battlefield High School

Forest Park High School

Prerequisites

[IT Computer Graphics 1](#)

IT Multimedia Software Design and Development 2

Multimedia 2 continues the student's study of the challenging world of information design, multimedia web-based development and learning management. Students will use informational design and multimedia software to study Advanced applications in this field. Video and computer-based multimedia will be combined into an interactive product. The ethical issues of copyright laws and fair use issues will be reviewed. Students will work individually and in teams to complete projects. Students will produce a digital portfolio.

Credits 1

Grades

12

Schools

Forest Park High School

Prerequisites

[IT Multimedia Software Design and Development 1](#)

IT Photography

Students must provide a 35mm SLR camera.

The study of 35mm print photography focusing on darkroom development will be introduced. Advanced studies of digital photography using cameras, scanners, and photo editing software will be explored. Through the camera lens, students will examine how the elements of art and principles of design contribute to effective compositions that communicate a clear message. Students will compare/contrast the history of photography and digital photography. Ethical issues concerning photographic imagery will be explored. Students will produce a portfolio containing both 35mm and digital photographs to be used in multimedia classes. This course is designed for interactive media students seeking an Advanced IT certificate.

Credits 1

Grades

11, 12

Schools

Forest Park High School

Prerequisites

[IT Computer Graphics 1](#)

General Cross-Curricular

Leadership Development 1, 2, & 3

Students will learn about the aspects of leadership by looking at historical and modern examples. Planning and implementing school activities will allow the students the practical application of leadership theory. Through the practice of planning, coordinating, and implementing school wide activities, students will be exposed to a wide variety of leadership experiences. Each student enrolled in the course is assigned a position in which they are responsible for specific tasks that support the student body.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Requirements

Application and interview

Prerequisites

None

Physical Education Electives

Personal Fitness

Personal Fitness places emphasis on why exercise and fitness are important, what one's own fitness needs are, and how to attain and maintain personal fitness for a lifetime. Additional emphasis is placed on the five health-related components of fitness including cardiorespiratory fitness, muscular strength and endurance, flexibility, and body composition control. Individual student fitness levels are assessed. Instruction includes emphasis on health risk factors related to lifestyles and how nutrition affects wellness. The course may include classroom instruction as well as individual and team activity. This course may be taken more than once for credit.

Credits 1

Grades

11, 12

Schools

Brentsville District High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Osborn Park High School

Patriot High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Health and Physical Education 1](#)

[Health, Physical Education, and Classroom Driver Education 2](#)

Principles of Weight Training and Conditioning

This Physical Education section places emphasis on the principles of weight training and conditioning. The student will understand how and why weight training and conditioning benefits the student's ability to build muscle, strengthen core muscles, prevent injuries, and perform athletically. The student will learn to assess one's own fitness needs and how to attain and maintain personal fitness for a lifetime. Additional emphasis is placed on the five health-related components of fitness including cardiorespiratory fitness, muscular strength and endurance, flexibility, and body composition control. Individual student fitness levels will be assessed, and the students will formulate personal goals and develop individual fitness programs. Instruction includes emphasis on health risk factors related to lifestyles and how nutrition affects wellness. **This course may be taken more than once for credit.**

Credits 1

Grades

11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Health and Physical Education 1](#)

[Health, Physical Education, and Classroom Driver Education 2](#)

Unified Physical Education Recreational Activities

Unified Physical Education Recreational Activities places emphasis on the opportunity for students of all abilities to participate together through ongoing educational and physical activities. Additionally, the course supports the development of student leadership skills and empowers students to foster an inclusive environment in a variety of recreational movement activities. Student learning outcomes emphasize motor skills, anatomical basis of movement, fitness planning, social and emotional development, and energy balance to support healthy living. This course may be taken more than once for credit.

Credits 1

Grades

11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Health and Physical Education 1](#) **and** [Health and Physical Education 2](#) **and/or** recommendation from the department chairperson **or** the supervising teacher

Health and Physical Education Required Courses

Health, Physical Education, and Classroom Driver Education 2

Students continue to participate in classroom instruction and in individual and team activities designed to develop knowledge, skills, and habits necessary to maintain personal fitness for a lifetime. Fifty percent of the course focuses on classroom instruction in family life education, healthy decision making, health concepts and promotion, and classroom driver education. Classroom driver education consists of a minimum of 36 periods of structured learning experiences aimed at developing safe and efficient drivers. Completion of driver education through private instruction does not exempt the student from completing all course objectives.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osbourn Park High School

Patriot High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Health and Physical Education 1](#)

Notes

Juvenile licensing requires a parent/guardian and student to attend a 90-minute teen-traffic safety presentation. This requirement must be met for the student to successfully meet all of the classroom driver education certification requirements.

Health and Physical Education 1

Students will participate in classroom instruction and in individual and team activities designed to develop knowledge, skills, and habits necessary to maintain personal fitness for a lifetime. Fifty percent of the course focuses on classroom instruction in fitness, nutrition, body systems, physical health, mental wellness/social emotional skills, First Aid, CPR and use of AED, violence prevention, community and environmental health, disease prevention and health promotion, substance abuse prevention, and family life education.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Independence Nontraditional

Osbourn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Math

Advanced Algebra 2

Advanced Algebra 2 is an accelerated course that integrates select Pre-Calculus concepts to prepare students for Pre-Calculus for BC. Students are expected to master Algebraic mechanics and understand the underlying theory and apply the concepts to real-world situations. Examples of extended topics include graphing, solving equations, and solving practical problems with exponential, logarithmic, rational, composite, and inverse functions, conic sections, and sum of finite convergent series. The study of the trigonometric circular functions will continue from Advanced Geometry and prepare students for further study of this topic in the Pre-Calculus courses for both AP Calculus AB and AP Calculus BC. This course has an associated Standards of Learning (SOL) test. Students will participate in these tests only when they have not yet earned sufficient credit for graduation and/or satisfied federal testing requirements. Algebra 2 is required for the Advanced Studies Diploma.

Credits 1

Grades

9, 10, 11

Course Designation

Weighted (0.5W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Gainesville High School

Hylton High School

Patriot High School

Woodbridge High School

Requirements

Teacher recommendation and completion of bridge coursework

Prerequisites

[Advanced Algebra 1](#) or [Algebra 1](#) (with teacher recommendation and completion of bridge coursework)

Advanced Geometry

This course includes emphasis on two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. In addition, students begin the study of the Unit Circle. Students will use a variety of applications and problem-solving techniques including Algebraic skills. The intent of this course is to provide students with many opportunities to explore, conjecture, reason logically, formulate and solve problems, and communicate mathematically. Graphing utilities, computers, dynamic geometry software, and other appropriate technology tools will be used to assist in teaching and learning. Students taking this course are expected to continue their studies with an Advanced Algebra II course. This course has an associated Standards of Learning (SOL) test. Students will participate in these tests only when they have not yet earned sufficient credit for graduation and/or satisfied federal testing requirements.

Credits 1

Grades

8, 9, 10

Course Designation

Weighted (0.5W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Woodbridge High School

Prerequisites

[Advanced Algebra 1](#) or [Algebra 1](#) (with teacher recommendation)

Pre-Calculus with Trigonometry for AB

Pre-Calculus with Trigonometry for AB is a one year preparatory course for AP Calculus AB. The course content is comprised of the Algebra of real numbers and complex numbers, polynomial, piecewise, step, exponential, and logarithmic functions, applications of composition and inverse functions, limits and continuity of functions, matrices, discrete mathematics, and trigonometry, including the unit circle.

Credits 1

Grades

10, 11, 12

Course Designation

Virtual Prince William (VPW),

Weighted (1.0W)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Potomac High School

Woodbridge High School

Requirements

Teacher recommendation

Prerequisites

[Algebra 2](#)

Pre-Calculus with Trigonometry for BC

Pre-Calculus with Trigonometry for BC is a one year preparatory course for AP Calculus BC. The course content is comprised of the algebra of real numbers and complex numbers, limits and the continuity of functions, analytic geometry including vectors, polar and parametric equations, matrices, and trigonometry

Credits 1

Grades

10, 11, 12

Course Designation

Weighted (1.0W)

Schools

Colgan High School

Forest Park High School

Freedom High School

Hylton High School

Osborn Park High School

Woodbridge High School

Requirements

Teacher recommendation

Prerequisites

[Advanced Algebra 2](#)

Math - Advanced Placement

AP Calculus AB

AP Calculus AB explores the topics of limits/ continuity, derivatives, and integrals. These ideas are examined using a multi-layered approach including the verbal, numerical, analytical, and graphical analysis of polynomial, rational, trigonometric, exponential, and logarithmic functions and their inverses. The student will be expected to relate the connections among these approaches. Students will also be required to synthesize knowledge of the topics of the course to solve applications that model physical, social and/or economic situations. These applications emphasize derivatives as rates of change, local linear approximations, optimizations and curve analysis, and integrals as Riemann sums, area of regions, volume of solids with known cross sections, average value of functions, and rectilinear motions. As mandated by the College Board, graphing calculators will be required. Students are required to take the AP Calculus AB examination which is administered in May. College credit and/or Advanced placement in college is available to students receiving a qualifying score on the AP Examination.

Credits 1

Grades

11, 12

Course Designation

Weighted (1.0W),

Advanced Placement (AP)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Woodbridge High School

Requirements

Teacher recommendation

Prerequisites

[Pre-Calculus with Trigonometry for AB](#), [Pre-Calculus with Trigonometry for BC](#), **or** [AP Pre-Calculus](#)

AP Calculus BC

AP Calculus BC is intended for students who have a thorough knowledge of analytic geometry and elementary functions. Although all of the elements of the AP Calculus AB course are included, this course provides a more rigorous treatment of these introductory calculus topics. The course also includes the development of the additional topics required by the College Entrance Examination Board in its syllabus for AP Calculus BC. Among these are parametric, polar, and vector functions; the rigorous definition of limit; Advanced integration techniques; Simpson's Rule; length of curves; improper integrals; Hooke's Law; and the study of sequences and series. The use of the graphing calculator will be fully integrated into instruction and students will be called upon to confirm and interpret results of problem situations that are solved using available technology. Students are required to take the AP Calculus BC examination which is administered in May. College credit and/or Advanced placement in college is available to those students receiving a qualifying score on the AP Examination.

Credits 1

Grades

11, 12

Course Designation

Weighted (1.0W),

Advanced Placement (AP)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Woodbridge High School

Requirements

Teacher recommendation

Prerequisites

[Pre-Calculus with Trigonometry for BC](#) **or** [AP Pre-Calculus](#)

AP Pre-Calculus

Taking AP Pre-Calculus prepares you for other college-level mathematics and science courses. During the course, you'll explore everyday situations using mathematical tools and lenses. You'll also develop an understanding of modeling and functions, and examine scenarios through multiple representations. The course framework outlines content and skills needed for careers in mathematics, physics, biology, health science, social science, and data science.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School

Colgan High School

Forest Park High School

Gainesville High School

Gar-Field High School

Osborn Park High School

Patriot High School

Woodbridge High School

Prerequisites

[Algebra 2](#)

AP Statistics

The Advanced Placement Statistics 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: Students are required to take the AP Statistics examination which is administered in May. Students who successfully complete the course and the AP Statistics examination may receive credit for a one semester introductory college statistics course.

Credits 1

Grades

11, 12

Course Designation

Weighted (1.0W),

Advanced Placement (AP)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Algebra 2](#)

Math - Computer Electives

Advanced Computer Mathematics

Advanced Computer Mathematics has a focus to provide the student with a conceptual background in computer science. Topics include computer architecture, data representation, operating systems, computing systems in society, and software development. Students will implement the major stages of software development using a high-level language. Topics will include loops, selections, and arrays. This Advanced course covers all topics in the regular Computer Mathematics class as well as others. In some schools this course is the first year of a three-year curriculum in Computer Science.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Weighted (0.5W)

Schools

Battlefield High School

Forest Park High School

Gar-Field High School

Patriot High School

Potomac High School

Woodbridge High School

Prerequisites

[Algebra 1](#)

Notes

Advanced Computer Math may count as the third math course for graduation in addition to Algebra and Geometry, only if the student also completes a career and technical concentration.

Advanced Computer Studies

This course is an introduction to high performance computational concepts utilizing telecommunication and informational technologies. This course will provide mechanisms for learner-centered, collaborative environments where the students and teacher will engage in dynamic modeling processes in a variety of areas ranging from the sciences to the humanities. The course emphasizes real-world problems, hands-on activities, and discovery learning that will facilitate an environment for constructive learning. The students will be expected to complete a year-long research project.

Credits 1

Grades

11, 12

Course Designation

Weighted (1.0W)

Schools

Battlefield High School

Forest Park High School

Prerequisites

Completed **or** concurrently enrolled in [AP Computer Science A](#)

Data Structures and Algorithms

The course extends the topics of AP Computer Science A and provides a more formal and more in-depth study of algorithms, data structures, and data abstraction. Binary trees, recursive data structures and dynamically allocated structures are fundamental to the course.

Credits 1

Grades

11, 12

Course Designation

Weighted (1.0W)

Schools

Battlefield High School

Forest Park High School

Prerequisites

[Algebra 2](#)

[AP Computer Science A](#)

Math - Dual Enrollment

Calculus (DE)

Dual Enrollment Calculus presents concepts of limits, derivatives, differentiation of various types of functions and use of differentiation rules, application of differentiation, antiderivatives, integrals and applications of integration.

Credits 1

Grades

11, 12

Course Designation

Dual Enrollment (DE),

Weighted (1.0W)

Schools

Forest Park High School

Patriot High School

Prerequisites

[Pre-Calculus with Trigonometry for AB \(DE\)](#)

Pre-Calculus with Trigonometry for AB (DE)

This course is a one-year dual enrollment preparatory course for AP Calculus AB. Basic course content is comprised of the Algebra of real numbers, complex numbers and polynomials; exponential, polynomial and logarithmic functions; circular functions; conics, and trigonometry. Additional topics include polynomial and rational inequalities, and expansion of logarithmic expressions.

Credits 1

Grades

10, 11, 12

Course Designation

Dual Enrollment (DE),

Weighted (1.0W)

Schools

Battlefield High School

Forest Park High School

Patriot High School

Prerequisites

[Advanced Algebra 2](#) or a grade of C or better in [Algebra 2](#)

Notes

Students will complete both MTH 161 and MTH 162.

Math - Electives

AP Computer Science A

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. This course prepares a student for Advanced placement in computer science by means of the Advanced Placement Examination Level A in Computer Science of the College Entrance Board. Students are required to take the AP Computer Science A examination which is administered in May.

Credits 1

Grades

10, 11, 12

Course Designation

Advanced Placement (AP),

Weighted (1.0W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Woodbridge High School

Requirements

Teacher recommendation

Prerequisites

[Geometry](#)

Notes

AP Computer Science A may be used for a math, science, or CTE standard credit to satisfy graduation. For a CTE standard credit, a student must (i) successfully complete a CTE program sequence in programming or related programming sequence and earn a score of three or higher on the AP Computer Science A examination.

AP Computer Science Principles

The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and world. This course may not be used for a math credit. This course is equivalent to the Software Engineering (PLTW) course. Therefore, students who have taken the Software Engineering (PLTW) course should not enroll in this AP Computer Science course as additional credit will not be granted.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Advanced Placement (AP),

Weighted (1.0W)

Schools

Brentsville District High School

Colgan High School

Forest Park High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Prerequisites

[Algebra 1](#)

Discrete Mathematics

This elective mathematics course provides students with the opportunity to combine previously learned mathematics with selected concepts of recent mathematics to solve problems created by modern society. In this course, the main focus is problem solving in a discrete setting. Techniques that are not considered in the current traditional courses of algebra, geometry, and calculus will be utilized. As students solve problems, they will analyze and determine whether or not a solution exists (existence problems), investigate how many solutions exist (counting problems), and focus on finding the best solution (optimization problems).

Credits 0.5

Grades

11, 12

Schools

Forest Park High School

Prerequisites

[Algebra 2](#)

Statistics

This full-year course is an introduction to statistics that emphasizes working with data, graphs, and statistical ideas. Students are expected to develop and present professional quality statistical analyses. Course content includes theory of probability, description of statistical measurements including linear regressions and correlations, sampling and experimental design, probability distributions including binomial and geometric distributions, and statistical inference. Graphing utilities and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships.

Credits 1

Grades

10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Algebra 2](#)

Trigonometry

This elective semester course provides a thorough treatment of trigonometry through the study of trigonometric definitions, applications, graphing, and solving trigonometric equations and inequalities. Emphasis is placed on using connections between right triangle ratios, trigonometric functions, and circular functions. Applications and modeling are included throughout the course of study. Students enrolled in trigonometry are assumed to have mastered those concepts outlined in the Algebra 2 standards.

Credits 0.5

Grades

11, 12

Schools

Forest Park High School

Prerequisites

[Algebra 2](#)

Math - Standard

Algebra, Functions, and Data Analysis

This course is designed for students who have completed Algebra 1 but need time to further develop algebraic concepts to ensure success in Algebra 2. Within the context of mathematical modeling and data analysis, students will study functions and their behaviors, inequalities, probability, experimental design, and analysis of data. Data will be generated by practical applications arising from science, business, and finance. Students will solve problems that require the formulation of linear, quadratic, or exponential equations or a system of equations.

Credits 1

Grades

10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Algebra 1](#)

Notes

A student may not receive credit for this course after receiving credit for Algebra 2.

Algebra 1

Algebra provides a systematic way to represent mathematical relationships and analyze change which will include the use of the data cycle. Students will make connections and build relationships between Algebra and arithmetic, geometry, and probability and statistics. Connections will also be made to other subject areas through practical applications. Students are required to use Algebra as a tool for representing and solving a variety of practical problems. Tables and graphs will be used to interpret Algebraic expressions, equations, and inequalities and to analyze behaviors of functions. Graphing utilities, computers, and other appropriate technology tools will be used to assist in teaching and learning. This course has an associated Standards of Learning (SOL) test. Students will participate in these tests only when they have not yet earned sufficient credit for graduation and/or satisfied federal testing requirements.

Credits 1

Grades

9

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

Math 7 Extended or Math 8 (Pre-Algebra)

Algebra 1, Parts 1 and 2

Algebra 1, in two parts, is offered for students who need additional time to complete the Algebra 1 curriculum. These two courses employ an interactive, hands-on approach to teaching Algebra concepts. This two-part course uses graphing utilities, the data cycle, and real-world and workplace applications as the platform for learning Algebra. Emphasis is placed on making connections in Algebra to arithmetic, geometry, and statistics. Algebra 1, Part 1 and Algebra 1, Part 2 are each year-long classes. Schools may double block the courses so that they meet every day for a full block of time over the full year. This gives students the chance to earn the first math credit by the end of the 9th grade year in addition to an elective credit for Part 1. Schools may allow students to take Part 1 in the 9th grade year and Part 2 in the 10th grade. This course has an associated Standards of Learning (SOL) test to be taken at the conclusion of Algebra 1, Part 2. Students will participate in these tests only when they have not yet earned sufficient credit for graduation and/or satisfied federal testing requirements.

Credits 1

Elective Credit for Part 1 and 1 Math Credit for Part 2 when student has passed both parts

Grades

9, 10

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gar-Field High School

Hylton High School

Independence Nontraditional

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

Math 8 (Pre-Algebra)

Notes

Students with disabilities eligible for credit accommodations receive two math credits for completing both courses.

Algebra 2

All students preparing for postsecondary and Advanced technical studies are expected to achieve the Algebra 2 standards. A thorough treatment of Advanced Algebraic concepts will be provided through the study of functions, "families of functions," equations, inequalities, systems of equations and inequalities, polynomials, rational and radical equations, complex numbers, and sequences and series which will include the use of the data cycle.

Emphasis will be placed on practical applications and modeling throughout the course of study. Graphing utilities, computers, spreadsheets, and other appropriate technology tools will be used to assist in teaching and learning. This course has an associated Standards of Learning (SOL) test. Students will participate in these tests only when they have not yet earned sufficient credit for graduation and/or satisfied federal testing requirements. Algebra 2 is required for Advanced Studies Diploma.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Algebra 1](#)

Algebra 3 with Trigonometry

Algebra 3 with Trigonometry extends both Algebra and Trigonometry topics. Emphasis is on functions and their inverses, equations and inequalities, graph theory, matrices, sequences and series, conic sections, and logarithms. Trigonometry topics include triangular and circular definitions of the trig functions, trig identities, and solutions of trig equations. This course does not meet the prerequisite for Calculus AB or BC.

Credits 1

Grades

11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Algebra 2](#)

Geometry

All students are expected to successfully complete Geometry. This course includes emphasis on two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. A variety of real-world applications and general problem-solving techniques, including Algebra skills, are used to implement these standards. Graphing utilities, computers, dynamic geometry software, and other appropriate technology tools will be used. This course has an associated Standards of Learning (SOL) test. Students will participate in these tests only when they have not yet earned sufficient credit for graduation and/or satisfied federal testing requirements.

Credits 1

Grades

9, 10, 11

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osbourn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Algebra 1](#) or [Algebra 1, Parts 1 and 2](#)

Science - Advanced Placement

AP Biology

AP Biology is designed to be the equivalent of a first-year introduction college biology course. AP Biology is designed for students who have successfully completed foundation courses in biology and chemistry. This course aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. At least 25% of instructional time is dedicated to hands-on laboratory investigations. Students are expected to take the AP Biology examination in May. With a satisfactory score, students may be eligible to receive some credit for college-level biology.

Credits 1

Grades

11, 12

Course Designation

Advanced Placement (AP),

Weighted (1.0W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osbourn Park High School

Patriot High School

Woodbridge High School

Prerequisites

[Biology 1](#)

[Chemistry 1](#)

[Algebra 1](#)

[Geometry](#)

Successful completion of at least two laboratory sciences

Corequisites

[Algebra 2](#)

AP Chemistry

AP Chemistry is intended to provide a second level of chemistry comparable to the general chemistry course usually taken during the first year of college. Topics include atomic structure and theory, chemical bonding, states of matter, chemical reactions, stoichiometry, equilibrium, kinetics, thermodynamics, and descriptive chemistry. At least 25% of instructional time is dedicated to hands-on laboratory investigations. Students enrolled in this course are encouraged to pursue an Advanced mathematics sequence. Students are expected to take the AP Chemistry examination in May. With a satisfactory score, students may be eligible to receive some credit for college-level chemistry.

Credits 1

Grades

11, 12

Course Designation

Advanced Placement (AP),
Weighted (1.0W)

Schools

Battlefield High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Hylton High School
Osborn Park High School
Patriot High School
Potomac High School
Woodbridge High School

Prerequisites

[Chemistry 1](#)
[Algebra 2](#)

AP Environmental Science

AP Environmental Science utilizes students' mathematics and scientific skills in a systems approach to the environment. Major systems include aquatic and terrestrial ecosystems, the atmosphere, and resource allocation/distribution. In addition to laboratory work, some fieldwork is required. Students will take the Earth Science I Standards of Learning (SOL) assessment at the end of this course only if they have not yet earned a verified science credit for graduation. Students are expected to take the AP Environmental Science examination in May. With a satisfactory score, students may be eligible to receive some credit for college-level environmental science.

Credits 1

Grades

11, 12

Course Designation

Weighted (1.0W),
Advanced Placement (AP)

Schools

Battlefield High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Hylton High School
Osborn Park High School
Patriot High School
Woodbridge High School

Prerequisites

[Biology 1](#)
[Chemistry 1](#)
[Algebra 2](#)

AP Physics C: Mechanics

AP Physics C: Mechanics ordinarily forms the first part of a college sequence that serves as the foundation in physics for students interested in the physical sciences or engineering. Strong emphasis is placed on solving a variety of challenging problems, requiring some calculus that is presented to students during instruction. At least 25% of instructional time is dedicated to hands-on laboratory investigations. Schools could offer this course as a single or a double block class, with extended time for lab inquiry activities. Students are expected to take the Advanced Placement Physics C examination in May. With a satisfactory score, students may be eligible to receive some credit for college-level physics.

Credits 1

Grades

11, 12

Course Designation

Advanced Placement (AP),
Weighted (1.0W)

Schools

Battlefield High School
Forest Park High School
Gainesville High School
Hylton High School
Osborn Park High School
Patriot High School
Woodbridge High School

Prerequisites

[Calculus \(DE\)](#)

(or concurrent enrollment in Calculus)

Science - Dual Enrollment

Biology 2: Survey of Advanced Topics in Biology (DE)

Biology 2: Survey of Advanced Topics in Biology (BIO 101) is an academically rigorous, in-depth, second-year study of selected areas of biology that allows highly motivated students to delve more deeply into life systems and processes. Extensive laboratory work is part of this course. Emphasis is placed on research skills and techniques. Students may only take AP Biology or Biology 2: Survey of Advanced Topics in Biology (DE) for credit.

Credits 1

Grades

11, 12

Course Designation

Dual Enrollment (DE),
Weighted (1.0W)

Schools

Battlefield High School
Brentsville District High School
Forest Park High School
Freedom High School

Prerequisites

[Biology 1](#)

[Chemistry 1](#)

Notes

This course utilizes animal dissection techniques as a major instructional strategy. Students who conscientiously object to these exercises will participate in division-approved activities that provide comparable learning experiences.

Environmental Science (DE)

The rigorous curriculum of this class covers two college courses of environmental science (ENV 121/122). The first semester provides students with an opportunity to acquire fundamental knowledge of the principles of biological systems and their interactions with the non-living components of the environment. The second semester offers students an opportunity to acquire fundamental knowledge of human's relationship to the environment and the science behind the causes, effects, and possible mitigation of major environmental issues. Lab or field work is required in both semesters. Students are required to take a final exam at the end of this course. Upon a successful completion, students will be eligible to receive eight college credits. Students may take only AP Environmental Science or Environmental Science (DE) for high school credit.

Credits 1

Grades

11, 12

Course Designation

Dual Enrollment (DE),

Weighted (1.0W)

Schools

Forest Park High School

Freedom High School

Prerequisites

[Biology 1](#)

[Chemistry 1](#)

[Algebra 2](#)

Science - Electives

Advanced Biology 1

Advanced Biology 1 is designed to give students a foundation in biological concepts as well as the opportunity to apply principles of experimental design in laboratory settings and on a required student project. Advanced Biology includes the same major areas of study as Biology 1 but with enrichments and extensions to each curriculum objective and associated specialty program.

This course has an associated Standards of Learning (SOL) test. Students will participate in this test to satisfy federal testing requirements.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Weighted (0.5W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osbourn Park High School

Patriot High School

Woodbridge High School

Prerequisites

None

Notes

This course may utilize animal dissection techniques as an instructional strategy. Students who conscientiously object to these exercises will participate in division-approved activities that provide comparable learning experiences.

Advanced Chemistry 1

Advanced Chemistry 1 is designed to give students a foundation in chemical concepts as well as the opportunity to apply principles of experimental design in laboratory settings and on a required student project. Advanced Chemistry includes the same major areas of study as Chemistry 1 I but with enrichment and extensions to each curriculum objective.

This course has an associated Standards of Learning (SOL) test. Students will participate in this test only if they have not yet earned a verified science credit for graduation.

Credits 1

Grades

10, 11, 12

Course Designation

Weighted (0.5W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Woodbridge High School

Prerequisites

[Algebra 1](#)

One laboratory science

Biology 2: Anatomy and Physiology

Biology 2: Anatomy and Physiology is an academically rigorous second-level laboratory biology course. While suitable for any high school student, it is designed specifically for those who are interested in pursuing careers in biological studies and medical fields.

Participants will investigate and understand cell histology and cellular processes, the purpose and the organization of various body systems, the biochemical processes essential for life, and common human health issues.

Credits 1

Grades

11, 12

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Osborn Park High School

Patriot High School

Woodbridge High School

Prerequisites

[Biology 1](#) or [Advanced Biology 1](#)

Notes

Course work in [Chemistry 1](#) is recommended.

This course utilizes animal dissection techniques as a major instructional strategy. Students who conscientiously object to these exercises will participate in division-approved activities that provide comparable learning experiences.

Biology 2: Ecology

Ecology is an academically rigorous, in-depth, second-year study of biological and ecological principles governing higher levels of organization (populations, communities, ecosystems). Concepts that will be covered include adaptation and natural selection; the physical environment and climate; population ecology, growth models, and life history patterns; communities, competition, parasitism, mutualism, and human interactions; ecosystem productivity, energy flow, nutrient cycling, and biogeochemical cycles; and biogeography, biodiversity, and global environmental change. The science of ecology is dedicated to an understanding of the relationships between organisms and their environment and is often at the center of public policy disputes related to the environment; therefore, students will learn how ecological research is becoming increasingly important and prominent throughout the world. Student participation in outdoor field activities is expected.

Credits 1

Grades

11, 12

Schools

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Potomac High School

Unity Reed High School

Prerequisites

[Biology 1](#)

[Earth Science 1](#) or [Chemistry 1](#) (advanced level courses are acceptable alternatives.)

Biology 2: Survey of Advanced Topics in Biology

Biology 2: Survey of Advanced Topics in Biology is an academically rigorous, in-depth, second-year study of selected areas of biology that allows highly motivated students to delve more deeply into life systems and processes. Extensive laboratory work is part of this course. Emphasis is placed on research skills and techniques.

Credits 1

Grades

11, 12

Schools

Forest Park High School

Freedom High School

Gar-Field High School

Hylton High School

Patriot High School

Woodbridge High School

Prerequisites

[Biology 1](#) or [Advanced Biology 1](#)

Notes

Course work in [Chemistry 1](#) is recommended.

This course utilizes animal dissection techniques as a major instructional strategy. Students who conscientiously object to these exercises will participate in division-approved activities that provide comparable learning experiences.

Earth Science 2: Astronomy

Astronomy is a second level Earth Science course designed to be a more in-depth, mathematical treatment of the astronomical concepts presented in the introductory Earth Science 1 course. Topics such as the universe, universal laws, galaxies, stellar evolution, the solar system and its motion, and the exploration of space will be discussed.

Credits 1

Grades

11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Environmental Science](#) or [Earth Science 1](#) and [Biology 1](#)

Notes

Course work in [Chemistry 1](#) is recommended.

Earth Science 2: Oceanography

Oceanography is a second level Earth Science course designed to be a more in-depth treatment of the oceanography concepts presented in the introductory Earth Science 1 course. It is a broad survey course dealing mainly with physical oceanography and covering such topics as the geology and geography of ocean basins; physical properties of sea water; marine chemistry; salinity and density; circulation of the oceans, waves and tides; and oceanographic instruments, tools, and methods. Emphasis is also placed on ocean policy and ocean ecology.

Credits 1

Grades

11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Environmental Science](#) or [Earth Science 1](#) and [Biology 1](#)

Notes

Course work in [Chemistry 1](#) is recommended.

Science - Standard

Biology 1

Biology 1 is a laboratory-based course that includes the study of ecology, taxonomy, cellular chemistry, genetics, microbiology, and physiology. These areas are developed within a framework of principal biological theories with an emphasis on critical thinking. This course has an associated Standards of Learning test. Students will participate in this test to satisfy federal testing requirements.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Independence Nontraditional

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Notes

The Virginia Standards of Learning (SOL) for Biology 1 do not require animal dissections. If a teacher uses this technique as an instructional strategy, students who object to these exercises will be provided with comparable alternative learning experiences.

Chemistry 1

Chemistry 1 emphasizes the qualitative and quantitative study of substances and the changes that occur in them. Students will investigate using various lab techniques and develop mathematical and problem-solving skills. A survey of concepts includes atomic structure, chemical bonding, formulas and equations, stoichiometry and other nomenclature based on molar relationships, phases of matter and the kinetic molecular theory, and the acid-base theory through Science and Engineering Practices (SEP). This course is intended for college preparatory and general education purposes. This course has an associated Standards of Learning (SOL) test. Students will participate in this test only if they have not yet earned a verified science credit for graduation.

Credits 1

Grades

10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Algebra 1](#)

One year of laboratory science

Earth Science 1

Earth Science 1 is a laboratory-based course that provides students with an opportunity to explore the various physical phenomena that affect the earth. This course, which helps students become more aware of their surroundings through the study of astronomy, meteorology, oceanography, physical geology, and environmental resources. This course has an associated Standards of Learning (SOL) test. Students will participate in this test only if they have not yet earned a verified science credit for graduation.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Independence Nontraditional

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Environmental Science

This course is a laboratory-based course that provides students with an opportunity to build knowledge in Earth Science and Biology through the lens of environmental literacy and citizenship. This course develops skills through Scientific and Engineering Practices while addressing socio-scientific issues related to humans' impact on the environment, resource conservation, and legal and civic responsibility. This course may be counted toward high school graduation as either an Earth Science 1, Biology 1, or an elective science discipline credit. The Environmental Science course does not have an associated Standards of Learning (SOL) test.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Independence Nontraditional

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Physics 1

Physics 1 is a standard first-year course that covers all topics required by the Virginia Standards of Learning (SOL) for physics. This course is lab-based. Students will engage with Scientific and Engineering Practices (SEP) to investigate Newtonian mechanics; wave phenomena; electricity and magnetism; thermodynamics; optical systems; and selected topics in modern physics. Students who desire to continue their study of physics upon completion of this course could enroll in AP Physics 1, AP Physics 2, or AP Physics C: Mechanics.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Geometry](#)

Corequisites

[Algebra 2](#) or higher

Social Studies

Advanced World History and Geography to 1500

This pre-collegiate course emphasizes basic historical research skills using primary and secondary sources to understand multiple causes and perspectives for significant historical events. The course prepares students for future AP history examinations. Course topics include those found in the standard World History and Geography to 1500 course but emphasis is placed on interregional studies, themes, and global historical patterns and processes. This course has an associated Standards of Learning (SOL) test. Students will participate in these tests only when they have not yet earned sufficient credit for graduation and/or satisfied federal testing requirements.

Credits 1

Grades

9

Course Designation

Weighted (0.5W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Prerequisites

None

Notes

This course is an integral component of the Biotechnology Center (BIOTECH), Center for Environmental and Natural Sciences (CENS), Center for the Fine and Performing Arts (CFPA), Center for International Studies and Languages (CISL), and Centers for Information Technology (IT). For additional information, refer to the description of these programs in the specialty program section.

Social Studies - Advanced Placement

AP Government and Politics: Comparative

This college-level political science course includes topics such as: introduction to comparative politics; sovereignty, authority, and power; political institutions; citizens, society, and the State; political and economic change; and public policy. Case studies in the governments of Great Britain, China, Iran, Mexico, Russia, and Nigeria provide context for exploring the topics of the course. Analytical writing will be required, both in essays developed within the framework of the class and in papers developed as a result of research assignments. In May, the students will take an Advanced Placement Government Examination to qualify for Advanced standing and/or credit in college.

Credits 1

Grades

11, 12

Course Designation

Weighted (1.0W),

Advanced Placement (AP)

Schools

Colgan High School

Forest Park High School

Hylton High School

Patriot High School

Woodbridge High School

Prerequisites

[U.S. and Virginia History](#), [AP U.S. History](#), or concurrent enrollment

AP Government and Politics: U.S.

This college-level course in U.S. political science includes topics such as: Constitutional underpinnings of U.S. government, political beliefs and behaviors, political parties, interest groups, and mass media, institutions of national government, public policy, and civil rights and liberties. Analytical writing will be required, both in essays developed within the framework of the class and in papers developed as a result of research assignments. In May, the students will take an Advanced Placement Government Examination to qualify for Advanced standing and/or credit in college.

Credits 1

Grades

12

Course Designation

Weighted (1.0W),

Advanced Placement (AP)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Woodbridge High School

Prerequisites

None

Notes

Prior completion of [AP U.S. History](#) is recommended.

AP Human Geography

This introductory college course in human geography introduces students to the systematic study of patterns, and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice, including Geographic Information Systems. In May, the students will take an AP Human Geography Examination to qualify for Advanced standing and/or credit in college. This course has an associated Standards of Learning (SOL) test. Students will participate in these tests only when they have not yet earned sufficient credit for graduation and/or satisfied federal testing requirements.

Credits 1

Grades

10, 11, 12

Course Designation

Weighted (1.0W),

Advanced Placement (AP)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Woodbridge High School

Prerequisites

None

AP U.S. History

AP U.S. History is a course designed for the student who accepts the challenge of an Advanced class in American History. Students will be expected to master all of the SOL objectives for Virginia and U.S. History. In addition, analytical writing will be required, both in essays developed within the framework of the class and in papers developed as a result of research assignments. In May, the students will take an Advanced Placement U.S. History Examination to qualify for Advanced standing and/or credit in college. This course has an associated Standards of Learning (SOL) test. Students will participate in these tests only when they have not yet earned sufficient credit for graduation and/or satisfied federal testing requirements.

Credits 1

Grades

11

Course Designation

Weighted (1.0W),

Advanced Placement (AP)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Woodbridge High School

Prerequisites

None

Notes

Prior completion of [AP World History](#) is recommended.

AP World History

This college-level course uses the College Board's AP syllabus to develop greater understanding of the evolution of global processes and contacts in different types of human societies. The course highlights the nature of changes in global frameworks and their causes and consequences, as well as comparisons among major societies. It emphasizes relevant factual knowledge, leading interpretive issues, and skills in analyzing types of historical evidence. The course is organized around five time periods. The first two are explored in detail in the Advanced World History and Geography to 1500 course and reviewed briefly in the beginning of this course. The last 500 years are the primary focus of this second year of the study. Specific themes provide further organization to the course, along with consistent attention to contacts among societies that form the core of world history as a field of study. In May, the students will take an AP World History Examination to qualify for Advanced standing and/or credit in college. This course has an associated Standards of Learning (SOL) test. Students will participate in these tests only when they have not yet earned sufficient credit for graduation and/or satisfied federal testing requirements.

Credits 1

Grades

10

Course Designation

Weighted (1.0W),
Advanced Placement (AP)

Schools

Battlefield High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Hylton High School
Osborn Park High School
Patriot High School
Woodbridge High School

Prerequisites

None

Notes

Prior completion of [World History and Geography to 1500](#) or [Advanced World History and Geography to 1500](#) is recommended.

Social Studies - Dual Enrollment

U.S./VA Government (DE)

This course teaches an in depth understanding of the American political system. Topics include the founding principles of the United States, democracy and republican principles of government, the Constitution, federalism, political behavior, civil liberties, the three branches of government in the U.S. and Virginia, domestic and foreign policy, civil rights, and the role of the U.S. in global affairs. Students will use social science skills to gain a deeper understanding of the function of federal, state and local government, and the responsibilities and duties of citizenship.

Credits 1

Grades

12

Course Designation

Dual Enrollment (DE),
Weighted (1.0W)

Schools

Battlefield High School
Colgan High School
Forest Park High School
Freedom High School
Patriot High School
Woodbridge High School

Prerequisites

[U.S. and Virginia History](#)

Notes

Both PLS 211 and PLS 212 must be taken to earn credit for US/VA Government.

U.S./VA History (DE)

The study of the nation's history provides the intellectual foundations for responsible citizenship. The origins of American ideals and institutions are examined. A study of major events, issues, and personalities of the past provides a perspective for understanding contemporary issues and problems. The role of Virginia in the development of the United States is included with special emphases on George Washington, Thomas Jefferson, James Madison, and George Mason. Topics included for study: Exploration and Colonization, European Economic Influences and Slavery in the Americas, the American Revolution, the Constitution and Early National Period, sectional tensions, Civil War and Reconstruction, the Progressive Era, U.S. as Emerging World Power, the Great War, World War 2, the Cold War, Civil Rights Movements and the Contemporary U.S. As a result of this course students will have a better understanding the history of the United States and Virginia. Also, as the course focuses on critical, creative and collaborative thinking skills students will be better prepared for the rigors of collegiate study and/or the workforce. Historical thinking skills will be practiced and assessed include synthesizing evidence from artifacts and primary and secondary sources, judging the reliability of sources based on evidence through using sourcing, contextualization, corroborating and close reading skills, an understanding of historiography, constructing arguments using evidence from multiple sources, comparing and contrasting historical, cultural, economic, and political perspectives, using geographic information to determine patterns and trends in Virginia and United States history analyzing multiple connections across time and place, using a decision-making model to analyze and explain the incentives for and consequences of a specific choice made in a historical context, constructing historical arguments based on evidence and evaluated in the proper context of time and place, and investigating and researching to develop products orally and in writing. This course will offer an opportunity for students to apply their knowledge and skills from all their previous course work in history and social science. This course has an associated Standards of Learning (SOL) test. Students will participate in these tests only when they have not yet earned sufficient credit for graduation and/or satisfied federal testing requirements.

Credits 1

Grades

11

Course Designation

Dual Enrollment (DE),

Weighted (1.0W)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Patriot High School

Woodbridge High School

Prerequisites

[World History and Geography from 1500](#)

Notes

Both History 121 and History 122 must be taken to earn credit for US/VA History.

Social Studies - Electives

AP African American Studies

AP African American Studies is an interdisciplinary course that examines the diversity of African American experiences through direct encounters with authentic and varied sources. Students explore key topics that extend from early African kingdoms to the ongoing challenges and achievements of the contemporary moment. Given the interdisciplinary character of African American studies, students in the course will develop skills across multiple fields, with an emphasis on developing historical, literary, visual, and data analysis skills. This course foregrounds a study of the diversity of Black communities in the United States within the broader context of Africa and the African Diaspora.

Credits 1

Grades

12

Course Designation

Advanced Placement (AP)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Woodbridge High School

Prerequisites

[U.S. and Virginia History](#)

AP Economics

Advanced Placement Economics will provide students a thorough understanding of basic economic concepts; the nature and functions of product and factor markets. Students will study the role of the government, as well as the concepts of efficiency and equity. Topics also include: measures of economic performance; national income and price determination; economic growth; international finance, exchange rates and balance of payments. In May, the students will take one or both AP Economics Examinations (Microeconomics or Macroeconomics) to qualify for Advanced standing and/or credit in college.

Credits 1

Grades

11, 12

Course Designation

Weighted (1.0W),

Advanced Placement (AP)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Woodbridge High School

Requirements

Teacher recommendation

Prerequisites

None

Notes

This course fulfills the Economics and Personal Finance graduation requirement.

AP Psychology

The AP Psychology course is designed to introduce students to the systematic 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 the major subfields within psychology. Students will also learn about the ethics and methods psychologists use in their science and practice. In May, the students will take an AP Psychology Examination to qualify for Advanced standing and/or credit in college.

Credits 1

Grades

12

Course Designation

Advanced Placement (AP),

Weighted (1.0W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Woodbridge High School

Requirements

Teacher recommendation

Notes

Check with your counselor to see if this course is offered in grade 11 at your school.

African American History

The African American History course is designed to provide students with a broad overview of the African American experience and explore ancient Africa moving through modern times. The course, supported by a local division curriculum and five online modules, address the introduction of Africans to the Americas and the African American experience between 1619 and the present. In addition, the course will highlight the social, cultural and political contributions of African Americans to American society.

Credits 1

Grades

11, 12

Schools

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[World History and Geography from 1500](#)

Psychology 1

Psychology will introduce the students to the study of individual human behavior. Students explore subjects studied by behavioral scientists and apply psychological concepts to everyday human problems and life. Topics will include the scientific methods used in psychology, human growth and development, the study of personality, and mental health and behavioral disorders.

Credits 1

Grades

12

Schools

Battlefield High School

Brentsville District High School

Forest Park High School

Freedom High School

Hylton High School

Patriot High School

Potomac High School

Woodbridge High School

Prerequisites

None

Sociology

Problems and issues about social behavior, organizations, and institutions of people are examined. The study includes an examination of the structure and the function of groups, the variations in the social order and the dynamics of change in a social environment.

There is focus upon the development of skills for participating more effectively in contemporary society by examining issues and seeking solutions to problems involving the interactions of people.

Credits 1

Grades

12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Woodbridge High School

Prerequisites

None

Social Studies - Standard

U.S. and Virginia Government

The American system of national, state, and local government, including the role of the United States in global affairs, is analyzed. Basic constitutional principles, rights and responsibilities of citizenship, political beliefs and ideologies, as well as free market economic principles, and the organization and operation of our political institutions are studied. Democratic beliefs and the importance of participation in the democratic process are emphasized.

Credits 1

Grades

12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osbourn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

U.S. and Virginia History

The study of the nation's history provides the intellectual foundations for responsible citizenship. The origins of American ideals and institutions are examined. A study of major events, issues, and personalities of the past provides a perspective for understanding contemporary issues and problems. The role of Virginia in the development of the United States is included. Topics included for study: Exploration and Colonization, European Economic Influences and Slavery in the Americas, the American Revolution, the Constitution and Early National Period, Civil War and Reconstruction, the Progressive Era, U.S. as Emerging World Power, World War 2, the Cold War, Civil Rights Movement, and the Contemporary U.S. This course has an associated Standards of Learning (SOL) test. Students will participate in these tests only when they have not yet earned sufficient credit for graduation and/or satisfied federal testing requirements.

Credits 1

Grades

11

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osbourn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

World History and Geography from 1500

This is a survey of world history from 1500 to the present with a concentration on modern developments in western civilization. Course topics include: the Reformation, the Age of Discovery, Absolutism, the Scientific and Industrial Revolutions, the Enlightenment, the development of nation-states, nationalism, and the Age of Imperialism, 20th Century conflicts, independence movements, world religions, and the contemporary world. This course has an associated Standards of Learning (SOL) test. Students will participate in these tests only when they have not yet earned sufficient credit for graduation and/or satisfied federal testing requirements.

Credits 1

Grades

10

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

World History and Geography to 1500

This is a survey of world history to 1500 with a concentration on developing historical thinking skills and geographical analysis. Course topics include: early development of humankind from the Paleolithic Era to the agricultural revolution, ancient river valley civilizations, early civilizations in Persia, India, and China, influence of Greece and Rome in the development of Western civilization, the Byzantine Empire and Russia, early Islamic civilization, Western Europe in the Middle Ages, Empires of the Eastern Hemisphere, major civilizations of the Western Hemisphere (Mayan, Aztec, Incan), late medieval developments, and the Renaissance in Europe. This course has an associated Standards of Learning (SOL) test. Students will participate in these tests only when they have not yet earned sufficient credit for graduation and/or satisfied federal testing requirements.

Credits 1

Grades

9

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

English Language Development and EL Support

Algebra Readiness

This course is designed for English Learners at English proficiency level 1 and 2 who require support with the development of content and academic language in mathematics. The WIDA ELD Standard for the language of mathematics supports the VA Standards of Learning for mathematics. Students will focus on number, number sense, computation, estimation, patterns, functions, and algebraic concepts. Students enrolled in this course must be concurrently enrolled in Algebra 1. An elective credit is earned for successful completion of the course. The course may not be taken more than one time during high school.

Credits 1

Grades

9

Schools

Battlefield High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Independence Nontraditional
Osborn Park High School
Potomac High School

Prerequisites

None

English Language Development for English 9

This course is designed for English Learners at English proficiency levels 1-4 and is aligned to the WIDA ELD Standard of language for language arts and the VA English 9 Standards of Learning. The course content aligns to the units of instruction for English 9. Students examine various literary genres with linguistically appropriate texts and engage in narrative, expository, and persuasive writing. Accelerating English development with increased fluency is emphasized as students read and respond in English for academic purposes. Students enrolled in this course must be concurrently enrolled in an English 9 course that does not carry the SI designation. An elective credit is earned for successful completion of the course. This course may not be taken more than one time.

Credits 1

Grades

9, 10

Schools

Battlefield High School
Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Independence Nontraditional
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

None

English Language Development for English 10

This course is designed for English Learners at English proficiency levels 1-4 and is aligned to the WIDA ELD Standard of language for language arts and the VA English 10 Standards of Learning. The course content aligns to the units of instruction for English 10. Students read and analyze literary and nonfiction texts, exploring the characteristics of different forms and techniques authors use to achieve their intended purpose. Students also engage in the writing process (pre-write, draft, revise, publish). Students enrolled in this course must be concurrently enrolled in an English 10 course that does not carry the SI designation. An elective credit is earned for successful completion of the course. This course may not be taken more than one time.

Credits 1

Grades

9, 10, 11

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Independence Nontraditional

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

English Language Development for English 11

This course is designed for English Learners at English proficiency levels 1-4 and is aligned to the WIDA ELD Standard of language for language arts and the VA English 11 Standards of Learning. The course content aligns to the units of instruction for English 11. Students refine reading, writing, research, and linguistic skills while engaging with a variety of genres, and styles. Students increase academic literacies and expressive academic responses reflecting skill in oracy and writing as a form of art. Students enrolled in this course must be concurrently enrolled in an English 11 course that does not carry the SI designation. An elective credit is earned for successful completion of the course. This course may not be taken more than one time.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Independence Nontraditional

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

English Language Development for English 12

This course is designed for English Learners at English proficiency levels 1-4 and is aligned to the WIDA ELD Standard of language for language arts and the VA English 12 Standards of Learning. The course content aligns to the units of instruction for English 12. Students refine reading, writing, research, and linguistic skills while engaging with a variety of genres, and styles. Students increase academic literacies and expressive academic responses reflecting skill in oracy and writing as a form of art. Students enrolled in this course must be concurrently enrolled in an English 12 course that does not carry the SI designation. An elective credit is earned for successful completion of the course. This course may not be taken more than one time.

**Check with your counselor to see if this course is offered at your school.

Credits 1

Grades

12

Schools

Battlefield High School
Brentsville District High School
Colgan High School
Forest Park High School
Freedom High School
Gainesville High School
Gar-Field High School
Hylton High School
Independence Nontraditional
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

None

General Science

This course is designed for English Learners at English language proficiency level 1 and 2 who require support with the content and the development of academic literacy in the sciences. One semester of study is devoted to Earth Science topics and one semester is devoted to Biology topics. The WIDA ELD Standard for the language of science is aligned to the VA Standards of Learning for the sciences. The course includes nonfiction reading and scientific writing. Students enrolled in this course must be concurrently enrolled in Environmental Science, Biology, or Earth Science. An elective credit is earned for successful completion of the course. This course may not be taken more than one time during high school.

Credits 1

Grades

9

Schools

Battlefield High School
Forest Park High School
Freedom High School
Gainesville High School
Hylton High School
Osborn Park High School
Potomac High School

Prerequisites

None

Survey of World History

This course is designed for English Learners at English language proficiency level 1 and 2 who require support with the development of content and academic literacy in world history. The WIDA ELD Standard for the language of social studies supports the VA Standards of Learning for history and social sciences. Students read authentic non-fiction texts and share understandings both orally and in written forms which include long answer and paragraph responses. Students enrolled in this course must be concurrently enrolled in World History and Geography to 1500. An elective credit is earned for successful completion of the course. This course may not be taken more than one time during high school.

Credits 1

Grades

9

Schools

Battlefield High School

Brentsville District High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Osborn Park High School

Potomac High School

Prerequisites

None

Gifted Education

Gifted Seminar: Philosophy (1 credit)

The multi-disciplinary seminar course may replace the seminar program for identified gifted students in grade twelve. Students will develop their conceptual, creative, critical, collaborative, and communication skills by exploring topics such as philosophy, metaphysics, and ethics. The class will also examine the epistemological structures of each academic discipline and employ critical thinking skills to evaluate the reliability and nature of knowledge. The course includes a research component.

Credits 1

Grades

11, 12

Schools

Battlefield High School

Colgan High School

Forest Park High School

Patriot High School

Woodbridge High School

Requirements

Placement in the Prince William County Public Schools Gifted Education Program.

Prerequisites

None

Notes

In schools offering the IB Programme, the Theory of Knowledge (TOK) course can serve as the junior or senior gifted education seminar services for identified students enrolled in one of those classes. In schools offering the Cambridge Programme, AICE Thinking Skills or AICE Global Perspectives can serve as the junior or senior gifted education seminar services for identified students enrolled in one of those classes. In schools offering AP curriculum, GEMS or AP Seminar or AP Research can serve as the junior or senior gifted education seminar services for identified students enrolled in one of those classes.

World Language

Advanced French Language 4

Advanced Language 4 is a course designed to develop proficiency in the language for highly motivated students. Students will be expected to master all the objectives of the Level 4 course in a more rigorous and accelerated manner. This course seeks to develop all skills emphasizing language for communication using authentic materials in preparation for further Advanced Placement study.

Credits 1

Grades

10, 11, 12

Course Designation

Weighted (0.5W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Woodbridge High School

Prerequisites

[Advanced French Language 3](#)

Advanced German Language 4

Advanced Language 4 is a course designed to develop proficiency in the language for highly motivated students. Students will be expected to master all the objectives of the Level 4 course in a more rigorous and accelerated manner. This course seeks to develop all skills emphasizing language for communication using authentic materials in preparation for further Advanced Placement study.

Credits 1

Grades

10, 11, 12

Course Designation

Weighted (0.5W)

Schools

Forest Park High School

Prerequisites

[Advanced German Language 3](#)

Advanced Spanish Language 4

Advanced Language 4 is a course designed to develop proficiency in the language for highly motivated students. Students will be expected to master all the objectives of the Level 4 course in a more rigorous and accelerated manner. This course seeks to develop all skills emphasizing language for communication using authentic materials in preparation for further Advanced Placement study.

Credits 1

Grades

10, 11, 12

Course Designation

Weighted (0.5W)

Schools

Battlefield High School

Colgan High School

Forest Park High School

Gainesville High School

Hylton High School

Osborn Park High School

Patriot High School

Woodbridge High School

Prerequisites

[Advanced Spanish Language 3](#)

World Language - Advanced Placement

AP French Language

AP Language is a course designed to develop proficiency in the language for highly motivated students. Students will be expected to master the Advanced curriculum course objectives in a more rigorous and accelerated manner. The course is comparable to the fifth and sixth semester or third-year college or university language course and emphasizes language for communication using authentic materials in preparation for the AP Language Exam. Students are required to take the AP Language Examination which is administered in May.

Credits 1

Grades

10, 11, 12

Course Designation

Advanced Placement (AP),
Weighted (1.0W)

Schools

Battlefield High School
Colgan High School
Forest Park High School
Gainesville High School
Hylton High School
Osborn Park High School
Patriot High School
Woodbridge High School

Prerequisites

[Advanced French Language 4](#), [French 4](#), or [French 5](#)

AP Spanish Language

AP Language is a course designed to develop proficiency in the language for highly motivated students. Students will be expected to master the Advanced curriculum course objectives in a more rigorous and accelerated manner. The course is comparable to the fifth and sixth semester or third-year college or university language course and emphasizes language for communication using authentic materials in preparation for the AP Language Exam. Students are required to take the AP Language Examination which is administered in May.

Credits 1

Grades

10, 11, 12

Course Designation

Weighted (1.0W),
Advanced Placement (AP)

Schools

Battlefield High School
Colgan High School
Forest Park High School
Gainesville High School
Hylton High School
Osborn Park High School
Patriot High School
Woodbridge High School

Prerequisites

[Advanced Spanish Language 4](#), [Spanish 4](#), [Spanish 5](#), or [Spanish for Fluent Speakers 3](#)

World Language - Modern Non-Roman Alphabet

Russian 1

Russian 1 students will examine the Cyrillic alphabet and essential elements of pronunciation. Speaking and listening skills will be developed through personal interaction and access to authentic material. Basic grammar and vocabulary are introduced. The course will be infused with the culture and customs of the Russian people.

Credits 1

Grades

9, 10, 11, 12

Schools

Forest Park High School

Prerequisites

None

Russian 2

Russian 2 will provide students additional tools to improve conversational skills, listening comprehension, and proficiency in reading and writing. Emphasis will be placed on the acquisition of more complex grammatical structures. Exposure to authentic materials and situations will increase. The study of culture will enhance students' understanding of the language.

Credits 1

Grades

10, 11, 12

Schools

Forest Park High School

Prerequisites

[Russian 1](#)

Russian 3

Russian 3 will continue to provide students additional tools to improve conversational skills, listening comprehension, and proficiency in reading and writing. Emphasis will be placed on the acquisition of more complex grammatical structures as found in extended reading passages and writing prompts. Exposure to authentic materials such as video series and situations will increase. The study of culture will enhance students' understanding of the language and help dispel stereotypes of the Russian people.

Credits 1

Grades

10, 11, 12

Schools

Forest Park High School

Prerequisites

[Russian 2](#)

Russian 4

Russian 4 focuses on expanding on the language skills of reading, writing, listening, and speaking, all in cultural context. It reinforces grammar and vocabulary in an intermediate-high language level through constant review and expands to challenge students as their skills develop to be able to read some literature and cultural readings. Students in this course take the American Councils' NEWL exam that produces AP®-style score reports, which can be used to apply for college credit and/or placement.

Credits 1

Grades

11, 12

Course Designation

Weighted (1.0W)

Schools

Forest Park High School

Prerequisites

[Russian 3](#)

World Language - Modern Roman Alphabet

French 1

Students use the language authentically, communicating in real-life situations from the beginning of the course. They learn the sound system and basic grammar and vocabulary, primarily through use of the language in meaningful contexts. All basic skills of the language are learned: understanding, speaking, reading, and writing. Emphasis is on communication in interpersonal situations. Culture is an integral part of the course.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

French 2

Students continue to learn the language through its use in realistic contexts with more complex grammatical structures. Additional listening, speaking, writing, and reading skills are acquired through practice with authentic materials and in real-life situations. The study of customs and culture is an integral part of the course.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Woodbridge High School

Prerequisites

[French 1](#)

French 3

The emphasis for study continues all four skills of communication: listening, speaking, reading, and writing. Students continue to work toward the mastery of the essential elements of grammar and the development of a sufficient vocabulary to use the language proficiently in most situations. Reading skills continue development through use of more challenging authentic materials. Students' writing skills are expected to be increasingly complex and sophisticated. Students continue to develop a global awareness.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Woodbridge High School

Prerequisites

[French 2](#)

German 1

Students use the language authentically, communicating in real-life situations from the beginning of the course. They learn the sound system and basic grammar and vocabulary, primarily through use of the language in meaningful contexts. All basic skills of the language are learned: understanding, speaking, reading, and writing. Emphasis is on communication in interpersonal situations. Culture is an integral part of the course.

Credits 1

Grades

9, 10, 11, 12

Schools

Forest Park High School

Woodbridge High School

Prerequisites

None

German 2

Students continue to learn the language through its use in realistic contexts with more complex grammatical structures. Additional listening, speaking, writing, and reading skills are acquired through practice with authentic materials and in real-life situations. The study of customs and culture is an integral part of the course.

Credits 1

Grades

9, 10, 11, 12

Schools

Forest Park High School

Woodbridge High School

Prerequisites

[German 1](#)

German 3

The emphasis for study continues all four skills of communication: listening, speaking, reading, and writing. Students continue to work toward the mastery of the essential elements of grammar and the development of a sufficient vocabulary to use the language proficiently in most situations. Reading skills continue development through use of more challenging authentic materials. Students' writing skills are expected to be increasingly complex and sophisticated. Students continue to develop a global awareness.

Credits 1

Grades

9, 10, 11, 12

Schools

Forest Park High School

Woodbridge High School

Prerequisites

[German 2](#)

Spanish 1

Students use the language authentically, communicating in real-life situations from the beginning of the course. They learn the sound system and basic grammar and vocabulary, primarily through use of the language in meaningful contexts. All basic skills of the language are learned: understanding, speaking, reading, and writing. Emphasis is on communication in interpersonal situations. Culture is an integral part of the course.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Spanish 2

Students continue to learn the language through its use in realistic contexts with more complex grammatical structures. Additional listening, speaking, writing, and reading skills are acquired through practice with authentic materials and in real-life situations. The study of customs and culture is an integral part of the course.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Independence Nontraditional

Osborn Park High School

Patriot High School

Potomac High School

Woodbridge High School

Prerequisites

[Spanish 1](#)

Spanish 3

The emphasis for study continues all four skills of communication: listening, speaking, reading, and writing. Students continue to work toward the mastery of the essential elements of grammar and the development of a sufficient vocabulary to use the language proficiently in most situations. Reading skills continue development through use of more challenging authentic materials. Students' writing skills are expected to be increasingly complex and sophisticated. Students continue to develop a global awareness.

Credits 1

Grades

9, 10, 11, 12

Course Designation

Virtual Prince William (VPW)

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Independence Nontraditional

Osborn Park High School

Patriot High School

Potomac High School

Woodbridge High School

Prerequisites

[Spanish 2](#)

World Language - Spanish for Fluent Speakers

Spanish for Fluent Speakers (SFS) Courses allow native or heritage speakers of Spanish to continue to develop all skills of Spanish in an accelerated manner commensurate with their skills in reading, writing, speaking, and listening. It recognizes the natural skill of both native/heritage speakers who were born in the U.S. and never had formal education in a Spanish-speaking country, or students who may have come from a Spanish-speaking country and due to many circumstances may not have had the opportunity to receive formal education, or who had interrupted formal education, yet are proficient in their understanding and speaking of Spanish for interpersonal purposes. Specific written identification procedures ensure appropriate identification of native/heritage speakers based on objective criteria such as a student's Home Language Survey, transcript analysis, and/or a common student interview/questionnaire as is applicable. A PWCS pre-assessment allows teachers to

determine each student's skill level and appropriate placement, or a Placement Test should be administered to all students prior to being put into a course. Students entering the fluent speakers sequence having started the traditional Spanish courses for non-native/heritage speakers, should also be assessed prior to placement. Even if a student were in regular/traditional Spanish 1 and 2, it is recommended to place them in SFS 1.

Students may earn a world language credit for this course as allowed by the Virginia Department of Education. The goal is for both native/heritage and non-native speakers of Spanish to learn together in the Advanced courses beyond Level 3 in high school. Research studies show a direct correlation with the higher skills in a student's first language and their facility to learn English faster and to a higher level. Traditional language courses are created for non-native/heritage speakers of the language.

Spanish for Fluent Speakers 1 - Beginning Level

This course is designed for Spanish-speaking students at the high school level. It recognizes the natural skill of native/heritage speakers who were born in the U.S. and never had formal education in a Spanish-speaking country, or students who may have come from a Spanish-speaking country and due to many circumstances may not have had the opportunity to receive formal education, yet are proficient in their understanding and speaking of Spanish for interpersonal purposes. The course will build on these existing listening and speaking skills, and develop basic reading and writing skills, with an emphasis on grammatical concepts. The course will try to tap the natural potential of native/heritage speakers to focus on enhancement of skill acquisition in general, especially emerging literacy, instill pride in a rich heritage, and allow students to succeed to their full potential.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Potomac High School

Unity Reed High School

Woodbridge High School

Requirements

Native or heritage speaker of Spanish with teacher recommendation based on assessment of student's skills

Prerequisites

None

Spanish for Fluent Speakers 2 - Intermediate Level

This course is designed for Spanish-speaking students at the high school level. This level is for Spanish-speaking native/heritage speakers who have some proficiency in all skills, to include listening, speaking, reading, and writing, but at a level commensurate with students who have had interrupted or limited formal schooling in a Spanish-speaking school. It also recognizes the natural skill of native/heritage speakers and emphasizes expansion and not replacement of the student's existing language skills. The course will continue to tap the natural potential of native/heritage speakers to focus on enhancement of skill acquisition, instill pride in a rich heritage, and allow students to succeed to their full potential. The course will also continue to build on existing listening and speaking skills, and especially continue to develop reading and writing skills.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Osborn Park High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Spanish for Fluent Speakers 1](#) or Native or heritage speaker of Spanish (with teacher recommendation based on assessment of student's skills)

Spanish for Fluent Speakers 3 - Advanced Level

This course is designed for Spanish-speaking students at the high school level who have had formal study of Spanish in a school setting in their native countries or have an Advanced level of literacy. The course continues to recognize the natural skill of native/heritage speakers and emphasizes expansion and not replacement of the student's existing language. The course will continue to tap the natural potential of native/heritage speakers to focus on enhancement of skill acquisition, instill pride in a rich heritage, and allow students to succeed to their full potential. The course will build on existing reading and writing skills and expand authentic readings by authors of the Spanish-speaking world and require Advanced compositions and projects.

Credits 1

Grades

11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gar-Field High School

Hylton High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Spanish for Fluent Speakers 2](#) or Native or heritage speaker of Spanish (with teacher recommendation based on assessment of student's skills)