



HIGH SCHOOL COURSE CATALOG 2025-26

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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 postsecondary 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 2025-26 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 2025-26 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 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 2025-26 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. Visual 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 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.

Grade Placement

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

- **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 classes in English language arts, history and social science, mathematics, physical education, science, 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, astronomy, fine and performing arts, geography, journalism, international relations, theatre, 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, history and social science, math, science, 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.

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.

	Course	Credits	Verified Credits	Notes
<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 completed to satisfy this requirement shall include course selection from at least two different Science disciplines: Earth Sciences, Biology, Chemistry, or Physics, or completion of the sequence of Science courses required for the International Baccalaureate Diploma and shall include interdisciplinary courses that incorporate Standards of Learning (SOL) content from multiple academic areas.
<input type="checkbox"/>	History and Social Science	3	1	Courses shall include U.S. and Virginia History, U.S. and Virginia Government, and one of the following: World History to 1500 and World History from 1500.
<input type="checkbox"/>	Health and Physical Education	2		Courses shall include Health and Physical Education 1 and 2. First Aid, CPR, and AED Training *Students will meet the First Aid, CPR, and AED Training requirement while enrolled in Health and Physical Education 1 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 Prince William County Public Schools.
<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 CTE/Visual and Performing Arts/World Language requirement by taking any of the following combinations: <ul style="list-style-type: none"> • One CTE credit and one Visual and Performing Arts credit. • One CTE credit and one World Language credit. • One Visual and Performing Arts credit and one World Language credit. • Two CTE credits. • Two Visual and Performing Arts credits.
<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. Or Participate in a High-Quality Work-Based Learning experience as defined by the Virginia Department of Education.

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 completed to satisfy this requirement shall include course selections from at least three different Science disciplines from among: Earth Sciences, Biology, Chemistry, or Physics or completion of the sequence of Science courses required for the International Baccalaureate Diploma and shall include interdisciplinary courses that incorporate Standards of Learning (SOL) content from multiple academic areas.
<input type="checkbox"/>	History and Social Science	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.

	Course	Credits	Verified Credits	Notes
<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		Courses shall include Health and Physical Education 1 and 2. First Aid, CPR, and AED Training *Students will meet the First Aid, CPR, and AED Training requirement while enrolled in Health and Physical Education 1 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 Prince William County Public Schools.
<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 . Or Participate in a High-Quality Work-Based Learning experience as defined by the Virginia Department of Education.

Sequential Elective Information

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 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)

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 postsecondary 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 postsecondary 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 IEPs of students should include a post school vision statement as well as identify the transition services necessary to support the vision. IDEA 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 postsecondary 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 Prince William County Public Schools 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 Prince William County Public Schools 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:

Students entering 9th grade for the first time during 2018-19 and beyond, Standard or Advanced Studies Diploma.

Year Entering	Verified Credits Required
<input type="checkbox"/> Beginning of or during 9th grade	Student must obtain all five required verified units of credit
<input type="checkbox"/> Beginning of or during 10th grade	Student must obtain all five required verified units of credit
<input type="checkbox"/> Beginning of 11th grade	Student must obtain all five required verified units of credit

Year Entering	Verified Credits Required
<input type="checkbox"/> During 11th grade	<p>Student must obtain two verified units</p> <ul style="list-style-type: none"> • One in English • One student selected* <p>*One must be earned in mathematics if participation in mathematics testing is required by federal law.</p>
<input type="checkbox"/> Beginning of 12th grade	<p>Student must obtain two verified units</p> <ul style="list-style-type: none"> • One in English • One student selected* <p>*One must be earned in mathematics if participation in mathematics testing is required by federal law.</p>
<input type="checkbox"/> During 12th grade	<p>Student may apply for a waiver of verified units with the Virginia Board of Education.</p>

Students transferring with weighted credits from other school districts 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 Compact on Educational Opportunity for Military Children. Information for transfer students is available in each school counseling office.

Diploma Warranty

Prince William County Public Schools provides a two-year warranty for diploma recipients. The diploma warranty guarantees minimum competencies in mathematics, reading, and writing. 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

Students meeting specific requirements for graduation and demonstrating exemplary performance may receive diploma seals for recognition. Section 8VAC20-131-51 of the Standards of Accreditation establishes the requirements for diploma seals. The Virginia Department of Education provides the following seals to local school divisions.

Board of Education Seal

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

Career and Technical Education Seal

The Board of Education's Career & Technical Education Seal is awarded to students who:

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

the Commonwealth of Virginia. The Board of Education shall approve all professional licenses and examinations used to satisfy these requirements. Visit The Path to Industry Certification for the current approved licenses and examinations.

Governor's Seal

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

Science, Technology, Engineering, and Mathematics (STEM) Seal

The STEM Seal shall be awarded to students who earn either a Standard Diploma or an Advanced Studies Diploma and satisfy all math and science requirements for the Advanced Studies diploma with a "B" average or better in all course work, and successfully complete a 50 hour or more work-based learning opportunity in a STEM area, and satisfy all requirements for a 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), and 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.

Seal for Excellence in Civics Education

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

- Complete U.S. and Virginia History and U.S. and Virginia Government with a grade of "B" or higher; Complete Virginia & United States History and Virginia & United States Government courses with a grade of "B" or higher.
- Have good attendance and no disciplinary infractions as determined by local school board policies.
- Complete 50 hours of voluntary participation in community service or extracurricular activities, such as volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate; participating in Boy Scouts, Girl Scouts or similar youth organizations; participating in Junior Reserve 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. Any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement.

Seal for Excellence in Science and the Environment

The Board of Education's Seal for Excellence in Science and the Environment is awarded to students who entered 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.

Seal of Biliteracy

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

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

American Sign Language qualifies as a language other than English. Please visit the Seal of Biliteracy webpage for more information, including the list of assessment options for meeting the foreign language proficiency requirement.

Expand Your Academic Vocabulary

Advanced Placement, Cambridge AICE, IB Diploma, and Courses

Certain courses have been designated as AP, Cambridge (AICE), and IB courses. 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 weighted credit.

Career and Technical Education Industry Credentialing

A Career and Technical Education (CTE) credential is a Virginia Board of Education approved competency assessment or industry certification that validates a student's academic and technical knowledge and skills. CTE industry credentials may include occupational competency assessments, industry certification exams from a recognized industry, trade, or professional organization (e.g., CompTIA, ServSafe), stackable industry certifications and entry-level exams (e.g., Automotive Service Excellence, Microsoft Office Specialist), a State-Issued Professional License required for entry into a specific occupation (Licensed Practical Nurse (LPN), Cosmetology), and/or the Workplace Readiness Skills for the Commonwealth assessment, which is most valuable when given in addition to appropriate course specific credentials that demonstrate mastery of valuable CTE Skills. High school students who are enrolled in a second-, third-, or fourth-year CTE course in a state-approved sequence are eligible for the industry credential aligned with the content of the course. These credentialing opportunities are provided to all students enrolled in the course at no cost to the student or family. Students who earn a credential by passing a certification or licensure examination **may** earn verified credits to meet graduation requirements. Earning one or more CTE industry credentials may be required for graduation if the student has not successfully complete an Advanced Placement (AP), International Baccalaureate (IB), or Dual Enrollment (DE) course, or a High-Quality Work-Based Learning (HQWBL) experience.

Dual Enrolled

Students taking courses from a community college, trade school program, college, or university for a credit, while simultaneously enrolled in Prince William County Public Schools 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.

Visual and Performing Arts or Career and Technical Education

- Visual 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 visual 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.

First Aid, CPR, 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 and Physical Education 1.

Sequential Electives

According to the Virginia Department of Education's Standards of Quality, 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, Career and Technical Education, Visual and Performing Arts, or the World Language 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 Visual 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, driver education, health and physical education, history and social science, mathematics, science, technology, visual and performing arts, and world language and 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 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 they pass the course but fail 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
- Cambridge courses
- Certain career and technical education courses
- Designated prerequisite courses
- Dual enrollment courses
- IB courses
- Qualifying college 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-to-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, 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

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.*

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](#).

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 Hearings 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 (ISAE) 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 ISAE 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 Prince William County, 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

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.

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

Grade	Percentage	Point Value for Courses	Point Value for Designated Advanced Placement, Cambridge, International Baccalaureate, 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

Grade	Percentage	Point Value for Courses	Point Value for Designated Advanced Placement, Cambridge, International Baccalaureate, and Dual Enrollment Courses	Point Value for Designated Prerequisite Courses
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

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

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.

The Regulations Establishing Standards of Accrediting Public Schools in Virginia provide families with the option of requesting that grades be expunged 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 division website to the appropriate principal before the deadline 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.

Learn more on the [Request to Expunge High School Courses Taken in Middle School](#) webpage.

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 (e.g., 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 instruction 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 instructed) and the sponsoring college/university.

Who Can Take a Dual Enrollment Course?

High school juniors and seniors, who meet all eligibility requirements established by 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 and Shenandoah University are taken in a PWCS school. There is no charge for tuition. Students 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 the 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 a sponsoring college/university 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, students can earn college credit through no tuition cost [Early Online College](#) opportunities available in partnership with NOVA.

In all cases, students must meet all eligibility 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?

Type of Course	How Students Earn College Credit
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.
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.

Type of Course	How Students Earn College Credit
	<ul style="list-style-type: none"> 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.
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.

Learn more about [receiving college credit for passing AP, Cambridge, and IB 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, Cambridge, and International Baccalaureate 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, Cambridge AICE, IB) 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
English	English 9	English 10	English 11	English 12
Math	Algebra 1 or higher	Geometry or higher	Algebra Functions and Data Analysis, Algebra 2, or higher	Algebra 2 or higher *Four years of math recommended for college-bound students (Algebra 2 or higher)
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.)
History and Social Science	World History 1	World History 2	U.S. and Virginia History	U.S. and Virginia Government
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
Health and Physical Education	Health and Physical Education 1	Health and Physical Education 2		
Electives	Visual 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)			
Additional Graduation Requirements	<ul style="list-style-type: none"> • CTE Credentialing Exam or one Advanced Course or High-Quality Work-Based Learning experience, as established by VDOE Board guidance on work-based learning • Economics and Personal Finance • First Aid, CPR, and AED Training • Virtual Course 			

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 are available on the [College and Career Readiness](#) website.

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

The Academic and Career Plan Portfolio (ACPP) begins in the elementary school years. Students explore different occupations associated with career clusters based on selected areas aligning with personal interests, values such as

dependability & respect, and skills supporting decision making about future goals and interest. Learn more about [Virginia Education Wizard](#). 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)

The Student Vision Profile is a document that contains valuable information about planning for life after high school and making the most of their PWCS experience. The Student Vision Profile is designed to help both students and families engage in the postsecondary planning process. It is a useful guide to support student college and career readiness by including self-discovery, career exploration, and post-high school planning. 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. Learn more at [Student Vision Profile](#).

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. [Learn more about accreditation from the U.S. Department of Education](#).

Trade and Technical Schools

A trade school (also known as a technical school) is a postsecondary educational institution designed to train students for a specific job in a skilled trade career. Most importantly, a trade school offers hands-on training to prepare students for actual work in their chosen field. Trade school programs are concentrated entirely on relevant job and skills training. "Skilled" means that special skills need to be developed in order to do the job—not just anyone can do it. A trade school gives students the knowledge needed in order to start a career in a field that requires technical expertise and hands-on experience. In some cases, the job may require certifications or licensing.

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.](#)

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 student self-reported acceptance information reported on the class of 2024 senior survey for Prince William County Public Schools.

Type of College	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	1-5%	4.4	1387	30
Highly Selective - VA <i>Examples:</i> University of Virginia, College of William & Mary, University of Richmond, Virginia Tech	8-27%	4.3	1282	34
Very Selective - VA <i>Examples:</i> George Mason University, Marymount University, James Madison University, Shenandoah University, Christopher Newport University, Old Dominion University	49-63%	3.8	1075	29
Moderately Selective - VA <i>Examples:</i> Virginia Commonwealth University, Liberty University, Radford University, Longwood University	46-62%	3.6	1038	24

PWCS Student Acceptance Rates at Popular Colleges

The class of 2024 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	39%
Boston University	8%
Bridgewater College	58%
Christopher Newport University	62%
Clemson University	31%
Columbia University in the City of New York	1%
Cornell University	5%
Duke University	2%
East Carolina University	59%
Florida State University	18%
George Mason University	58%
Georgia Institute of Technology-Main Campus	4%
Hampton University	45%
Harvard University	2%
Howard University	29%

College	Percentage
James Madison University	50%
Johns Hopkins University	1%
Liberty University	47%
Longwood University	60%
Mary Baldwin University	45%
Marymount University	49%
Morgan State University	45%
New York University	3%
Norfolk State University	42%
North Carolina A & T State University	37%
North Carolina State University at Raleigh	27%
Northern Virginia Community College	48%
Northern Virginia Community College - Manassas	59%
Northern Virginia Community College - Woodbridge	56%
Old Dominion University	57%
Pennsylvania State University-Penn State Main Campus	53%
Princeton University	2%
Radford University	59%
Roanoke College	53%
Shenandoah University	63%
The George Washington University	28%
The University of Tennessee-Knoxville	15%
University of Lynchburg	65%
University of Mary Washington	52%
University of Maryland-College Park	21%
University of Miami	13%
University of Michigan-Ann Arbor	11%
University of North Carolina at Chapel Hill	4%
University of Pennsylvania	4%
University of Pittsburgh-Pittsburgh Campus	48%
University of Richmond	8%
University of South Carolina-Columbia	40%
University of Virginia-Main Campus	17%
Virginia Commonwealth University	62%
Virginia State University	64%
Virginia Tech	27%
West Virginia University	67%
William & Mary	19%
Yale University	5%

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 Advanced Placement test or International Baccalaureate exam.

*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 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);
 - History and Social Science (4 units);
 - Mathematics (3-4 units, at least up to Algebra 2);
 - Science (3-4 units);
 - World Language (3-4 units); and
 - Fine/Practical Arts Electives (with a focus).
- The cost of postsecondary education.
- AP, Cambridge AICE, IB, 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, Cambridge AICE, IB, and dual enrollment course offerings.

Action

- Continue to take challenging courses to include AP, Cambridge AICE, IB, and dual enrollment.
- 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.
- 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](https://www.khanacademy.org/sat).
- 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 and/or 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, Cambridge AICE, and IB 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, Cambridge AICE, and IB 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, marching band, and drill team.

- A student must pass five subjects for new credit 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.)

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, and any academic or athletic activities involved in the competition between/among schools, a student must have passed five subjects for new credit 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 counselor know if a student plans to seek an athletic scholarship to ensure the course selection process matches NCAA requirements. It is also important to track grade point average as it impacts NCAA athletic scholarship opportunities. 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)

Architecture & Construction

Degree Type

Career Pathways

Architecture & Construction Career Cluster

The Architecture & Construction Career Cluster is focused on careers in designing, planning, managing, building and maintaining the built environment.

Schools

Brentsville District High School,
Colgan 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

Construction Pathway

Construction Pathway: Employees in construction literally build our future! These are the people who build and remodel houses, apartments, industrial buildings, warehouses, office buildings, churches, schools and recreational facilities. This pathway also includes the builders of highways, streets, bridges, tunnels and airports as well as power plants, chemical plants, refineries and mills.

Title	Credits
Production Systems	1
Construction Technology	1

Design / Pre-Construction Pathway

Design/Pre-Construction Pathway: People with careers in design/pre-construction create our future! They turn a concept into a set of plans. Their plans guide other construction professionals as they continue the building process.

Title	Credits
Technical Drawing and Design	1
Architectural Drawing and Design	1

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,
Osbourn 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

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,
Osbourn 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,
Osbourn 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,
Osbourn 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
Travel and Tourism Marketing	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 High School,
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 High School,
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
Accounting	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
PLTW Capstone (formerly Engineering Design and Development)	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 (STEM) 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 2	1

Engineering PLTW Sequence

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

Architecture & Construction - Electricity

Degree Type

Specialty Programs

Electricity Pathway

Students develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems. They also study electrical theory, navigate the National Electrical Code Book, select and install conductors, and work with panelboards, switchboards, and generators.

Program Type

Transfer
Schools
Unity Reed High School

Electricity Program Sequencing

Grade 9

Title	Credits
Introduction to Engineering Design (PLTW)	1

Grade 10

Title	Credits
Digital Electronics (PLTW)	1

Grade 11

Title	Credits
Electricity 1	1

Grade 12

Title	Credits
Electricity 2	2
Total Credits	5

Human Services - Cosmetology

Degree Type
Specialty Programs

Cosmetology Pathway

Cosmetology students develop the skills and knowledge necessary to pass the Virginia Board of Registered Professional Hairdressers licensing examination for entry-level jobs such as a manicurist, salon receptionist, shampoo technician, and licensed cosmetologist. Cosmetology is a two-year program of study that begins in the 11th grade. Courses are scheduled in a three-period/triple block each year.

Program Type
Transport
Schools
Unity Reed High School,
Woodbridge High School

Cosmetology Program Sequencing

Grade 11

Title	Credits
Cosmetology 1	3

Grade 12

Title	Credits
Cosmetology 2	3
Total Credits	6

Law, Public Safety, Corrections and Security - Firefighting

Degree Type
Specialty Programs

Emergency and Fire Management Services Pathway

Emergency and Fire Management Services Pathway: Every year, fires and other emergencies take thousands of lives and destroy property worth billions of dollars. Firefighters and emergency services workers help protect the public against these dangers by rapidly responding to a variety of emergencies. They are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be called upon to put out a fire, treat injuries or perform other vital functions.

Firefighting requires discipline and attention to academic and professional standards to successfully fight live fires, address hazardous-materials (HAZMAT) incidents, and conduct search-and-rescue operations. Students will become familiar with the procedures, equipment, and technologies used by fire departments. This course challenges students academically, mentally, and physically and meets the standards of National Fire Protection Association (NFPA) 1001-2013 leading to the opportunity to obtain a Firefighter I certification. This program is a one-year transport program for grade 11 or grade 12 students and is a total of three credits.

Program Type

Transport

Schools

Unity Reed High School

Program Sequencing

Grade 11-12

Title	Credits
Firefighting 1 (Semester)	2
Total Credits	2

Transportation, Distribution and Logistics - Aviation Maintenance

Degree Type

Specialty Programs

Aviation Maintenance Pathway

The Aviation Maintenance program of study introduces students to the occupations and education opportunities related to inspecting aircraft, maintenance procedures, air navigational aids, air traffic controls, and communications equipment to ensure conformance with federal safety regulations.

Students will work with airframe and control surfaces, power plants, and basic aviation electricity, and perform ground operations and servicing procedures, as specified by Federal Aviation Administration (FAA) requirements. Students will also practice lab and tool safety, apply science and mathematics principles to aviation maintenance tasks, and research and use maintenance publications, forms, and records.

Program Type

Transfer

Schools

Unity Reed High School,
Woodbridge High School

Aviation Maintenance Program Sequencing

Grade 9

Title	Credits
Introduction to Engineering Design (PLTW)	1

Grade 10

Title	Credits
Digital Electronics (PLTW)	1

Grade 11

Title	Credits
Aviation Maintenance Technology 1	2

Grade 12

Title	Credits
Aviation Maintenance Technology 2	2
Total Credits	6

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, 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,
Forest Park High School,
Freedom High School,
Gar-Field High School,
Hylton High School,
Osborn Park 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

Courses

Career and Technical Education (CTE)

Air Force JROTC 1

Students are introduced to the Air Force JROTC program with instruction focusing on aerospace science, including aviation history, principles of aircraft flight and navigation, development of aerospace power, aerospace vehicles, rocketry, space and technology programs, and the aerospace industry. Students explore Air Force traditions, customs and courtesies, character, and the foundations of U.S citizenship. Leadership education develops leadership skills, acquaints students with the practical applications of life skills, and includes a drill and ceremonies component. Instruction in personal wellness and health and fitness encourages cadets to lead healthy, active lifestyles into adulthood.

Students electing to use JROTC 1 in 9th grade as a substitution for their physical education graduation requirement must enroll in the full-year health course in tenth grade. The health course will include ninth and tenth grade health, CPR, and Family Life Education. In-person courses will include Driver Education; however, if a school does not have the minimum enrollment to support an in-person health course, students will be enrolled in a virtual course. The virtual course will not include Driver Education and students will need to enroll in classroom driver education outside of Prince William County Public Schools.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Freedom High School

Hylton High School

Unity Reed High School

Requirements

Student must be able to participate in physical education program, dress in regulation uniform, and meet and maintain the personal grooming standards.

Air Force JROTC 2

Students explore the Air Force JROTC program with instruction focusing on aerospace science including flight conditions affecting flight, flight's effects on the human body, analyses of flight navigation, and purposes of aerial navigation aids. The course focuses on Air Force traditions, customs and courtesies, effective communication skills, and the influences of varying global cultures, religions, and ethnicities in the development of nations. Leadership education develops leadership skills, acquaints students with the practical applications of life skills, and includes a drill and ceremonies component. Personal wellness studies encourage cadets to lead healthy, active lifestyles into adulthood.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School

Freedom High School

Hylton High School

Unity Reed High School

Requirements

Student must be able to participate in physical education program, dress in regulation uniform, and meet and maintain the personal grooming standards.

Prerequisites

[Air Force JROTC 1](#)

Air Force JROTC 3

Students explore the Air Force JROTC program, with instruction focusing on aerospace science, including astronomy, space exploration, the history and development of aerospace vehicles and rocketry.

Aerospace science acquaints students with the elements of aerospace and the aerospace environment and introduces them to the history and development of air power. Leadership education develops leadership skills, acquaints students with the practical applications of life skills, and includes a drill and ceremonies component. Instruction on effective communication and management techniques, human relations skills, and postsecondary education and career opportunities is also included. Personal wellness studies encourage cadets to lead healthy, active lifestyles into adulthood.

Credits 1

Grades

11, 12

Schools

Battlefield High School

Freedom High School

Hylton High School

Unity Reed High School

Requirements

Student must be able to participate in physical education program, dress in regulation uniform, and meet and maintain the personal grooming standards.

Prerequisites

[Air Force JROTC 2](#)

Air Force JROTC 4

Students explore the Air Force JROTC program, focusing on aerospace science, the fundamentals of management, and personal wellness. Aerospace science acquaints students with the elements of aerospace, the aerospace environment, and introduces them to the history and development of air power. Leadership education develops leadership skills, acquaints students with the practical applications of life skills, and includes a drill and ceremonies component. Personal wellness studies encourage cadets to lead healthy, active lifestyles into adulthood.

Credits 1

Grades

11, 12

Schools

Battlefield High School

Freedom High School

Hylton High School

Unity Reed High School

Requirements

Student must be able to participate in physical education program, dress in regulation uniform, and meet and maintain the personal grooming standards.

Prerequisites

[Air Force JROTC 3](#)

High School Career and Technical Education

Cybersecurity Fundamentals

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

This course connects to the following career pathways:

[Information Technology - Cybersecurity](#)

Credits 1

Length

Year

Grades

9, 10, 11

Schools

Colgan High School

Patriot High School

Unity Reed High School

Prerequisites

None

Cybersecurity Operations

Cybersecurity Operations is designed to teach computer and network administration and security. Students learn cybersecurity concepts, including the practice of protecting systems, networks, and programs from digital attacks. Cybersecurity is defined as the steps and processes taken to protect networks, devices, programs, and data from unauthorized access that can result in theft or damage. Students learn to establish, implement, and maintain security networks.

This course connects to the following career pathways:

[Information Technology - Cybersecurity](#)

Credits 1

Length

Year

Grades

10, 11, 12

Schools

Potomac High School

Unity Reed High School

Prerequisites

[Cybersecurity Fundamentals](#) OR

[Information Technology \(IT\) Fundamentals](#)

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.

This course connects to the following career pathways:

[Finance - Accounting](#)

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

[Principles of Business and Marketing](#), recommended

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.

This course connects to the following career pathways:

[Finance - Accounting](#)

Credits 1

Grades

11, 12

Course Designation

Weighted (0.5W)

Schools

Colgan High School

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.

This course connects to the following career pathways:

[Information Technology](#)

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.

This course connects to the following career pathways:

[Information Technology](#)

[Arts, A/V Technology & Communications](#)

Credits 1

Grades

11, 12

Course Designation

Weighted (0.5W)

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 Design, Multimedia, and Web Technologies DE

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.

This course connects to the following career pathways:

[Information Technology](#)

[Arts, A/V Technology & Communications](#)

Credits 1

Grades

11, 12

Course Designation

Dual Enrollment (DE),

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 DE](#)

Notes

To enroll in this course, students must meet all eligibility requirements established by NOVA.

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.

This course connects to the following career pathways:

[Information Technology](#)

[Information Technology - Cybersecurity](#)

Credits 1

Grades

11, 12

Course Designation

Weighted (0.5W)

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](#)

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.

This course connects to the following career pathways:

[Business Management & Administration](#)

[Law, Public Safety, Corrections & Security - Criminal](#)

[Justice](#)

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School

Colgan High School

Forest Park High School

Gainesville High School

Hylton High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Principles of Business and Marketing](#), recommended

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.

This course connects to the following career pathways:

[Information Technology](#)

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

Osbourn 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.

This course connects to the following career pathways:

[Information Technology](#)

[Arts, A/V Technology & Communications](#)

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

Osbourn Park High School

Potomac High School

Unity Reed High School

Prerequisites

None

Notes

[Information Technology \(IT\) Fundamentals](#), recommended

Digital Applications

Students develop real-life, outcome-driven approach skills for digital citizenship, basic computer operations, keyboarding, application software (word processing, spreadsheets, multimedia applications, databases), and career exploration. Digital Applications promotes skills that can be applied across the curriculum and offers preparation relevant to 21st century skills and postsecondary education. Students who successfully complete this course may be eligible for a rigorous and relevant industry certification examination.

This course connects to the following career pathways:

- [Information Technology](#)

Credits 1

Grades

9, 10, 11

Schools

Brentsville District 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

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.

This course connects to the following career pathways:

[Business Management & Administration](#)

[Finance - Accounting](#)

[Hospitality & Tourism](#)

[Law, Public Safety, Corrections & Security - Criminal](#)

[Justice](#)

[Marketing](#)

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

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.

This course connects to the following career pathways:

[Information Technology](#)

[Information Technology - Cybersecurity](#)

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

Career Connections

Career Strategies

Career Strategies consists of an in-depth study of career clusters through a variety of investigative activities. Students observe, analyze, and report on the demand for workers, worker qualifications, organizational structures, quality control measures, selected policies and regulations, ethical issues, and rewards of work. Students analyze career assessment results, compare various educational options, and develop or revise a plan related to their academic and career-related goals.

Credits 1

Grades

11, 12

Schools

Brentsville District High School

Colgan High School

Patriot High School

Potomac High School

Unity Reed High School

Prerequisites

This course is designed for students who have previously completed a two-year Career and Technical Education (CTE) sequence of courses.

Entrepreneurship

This course introduces students to the dynamic world of creating, owning, and launching their own ventures. Students will learn concepts and techniques for planning an entrepreneurial venture, using design thinking and business model development. Students will learn about financial statements, marketing principles, sales and customer service, and basic economic principles required for successful business operation.

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

This course connects to the following career pathways:

[Business Management & Administration](#)

Credits 1

Grades

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

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.

This course is included in the following career pathways:

[Education & Training](#)

[Human Services](#)

Credits 1

Grades

9, 10, 11

Schools

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Independence Nontraditional High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Early Childhood, Education, and Services 1

Early Childhood, Education, and Services 1 students prepare to be primary providers of child care services. Students plan, organize, and conduct learning experiences that provide safe and healthy learning environments; promote physical, cognitive, language, social, and emotional development; utilize curricula responsive to children's needs; and promote family engagement. Students examine local, state, and federal regulations for early childhood education and services environments and professional expectations for early childhood education and services professionals. Coursework prepares students for balancing work and family, identifying education and training requirements, and entering careers in the education and training and human services career clusters.

This is a **double-blocked** course.

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

This course connects to the following career pathways:

[Education & Training](#)

Credits 2

Grades

11, 12

Schools

Freedom High School

Osborn Park High School

Patriot High School

Unity Reed High School

Prerequisites

[Introduction to Early Childhood Education](#),

recommended

Early Childhood, Education, and Services 1 DE

Early Childhood, Education, and Services 1 students prepare to be primary providers of child care services. Students plan, organize, and conduct learning experiences that provide safe and healthy learning environments; promote physical, cognitive, language, social, and emotional development; utilize curricula responsive to children's needs; and promote family engagement. Students examine local, state, and federal regulations for early childhood education and services environments and professional expectations for early childhood education and services professionals. Coursework prepares students for balancing work and family, identifying education and training requirements, and entering careers in the education and training and human services career clusters.

This is a **double-blocked** course.

This course connects to the following career pathways:

[Education & Training](#)

Credits 2

Grades

11, 12

Course Designation

Dual Enrollment (DE),

Weighted (1.0W)

Schools

Patriot High School

Unity Reed High School

Prerequisites

[Introduction to Early Childhood Education](#),

recommended

Notes

To enroll in this course, students must meet all eligibility requirements established by NOVA.

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.

This course connects to the following career pathways:

[Human Services](#)

Credits 1

Grades

9, 10, 11

Schools

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gainesville High School

Hylton High School

Independence Nontraditional High School

Osborn Park High School

Patriot High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Individual Development

Individual Development students focus on cultivating positive future orientation; developing skills to build healthy relationships with family, peers, and community members; managing stress and conflict; and preparing to become college- and career-ready.

This course connects to the following career pathways:

[Human Services](#)

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School

Freedom High School

Gar-Field High School

Independence Nontraditional High School

Unity Reed High School

Woodbridge High School

Notes

[Independent Living](#), recommended

Introduction to Culinary Arts

In Introduction to Culinary Arts, students investigate food safety and sanitation, culinary preparation foundations, basic culinary skills, diverse cuisines, service styles, basic nutrition, and the economics of food. Students also explore postsecondary education options and career opportunities within the food service industry.

This course connects to the following career pathways:

[Hospitality & Tourism](#)

Credits 1

Grades

10, 11, 12

Schools

Brentsville District High School

Colgan High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Independence Nontraditional High School

Patriot High School

Potomac High School

Unity Reed High School

Prerequisites

[Nutrition and Wellness](#), recommended

Introduction to Early Childhood Education

Introduction to Early Childhood Education students explore different types of early childhood education programs and delivery models, develop safe and healthy learning environments for children, and identify the ages and stages of child development and developmentally appropriate practices that support child development from birth through age 12. Students explore balancing work and family, professionalism, and education and training requirements for multiple early childhood education career pathways during the course.

This course is included in the following career pathway(s):

[Education & Training](#)

Credits 1

Grades

10, 11, 12

Schools

Independence Nontraditional High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Prerequisites

[Child Development and Parenting](#), recommended

Life Planning

Life Planning equips students with life skills. Creating and maintaining healthy work and family relationships, planning for a meaningful career, practicing responsible citizenship, exploring personal health and wellness, and developing a life-management plan are emphasized through relevant life applications.

This course is included in the following career pathway(s):

- [Human Services](#)

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School

Colgan High School

Freedom High School

Gar-Field High School

Independence Nontraditional High School

Osborn Park High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Independent Living](#), recommended

Nutrition and Wellness

Students investigate the principles of nutrition and wellness, use science and technology in food management, ensure food safety, plan menus, prepare food, and explore careers. Students prepare for careers by using critical thinking and practical problem-solving skills as well as other workplace readiness skills.

This course is included in the following career pathway(s):

[Human Services](#)

[Hospitality & Tourism](#)

Credits 1

Grades

9, 10, 11

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 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 1

Virginia Teachers for Tomorrow (VTfT) 1 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.

This course connects to the following career pathways:

[Education & Training](#)

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

[Child Development and Parenting](#) AND/OR [Introduction to Early Childhood Education](#), recommended

Virginia Teachers for Tomorrow 1 DE

Virginia Teachers for Tomorrow (VTfT) 1 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.

This course is included in the following career pathway(s):

[Education & Training](#)

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

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

[Child Development and Parenting](#) and/or [Introduction to Early Childhood Education](#), recommended

Notes

To enroll in this course, high school juniors and seniors must meet all eligibility requirements established by NOVA.

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. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality, work-based learning will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.

This course is included in the following career pathway(s):

[Education & Training](#)

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
Osborn Park High School
Patriot High School
Unity Reed High School
Woodbridge High School

Prerequisites

[Virginia Teachers for Tomorrow 1](#)

Virginia Teachers for Tomorrow 2 DE

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. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality, work-based learning will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations. Dual enrollment credit may be available.

This course is included in the following career pathway(s):

[Education & Training](#)

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
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

[Virginia Teachers for Tomorrow 1 DE](#)

Notes

To enroll in this course, students must meet all eligibility requirements established by NOVA.

CTE - IB Programme

IB Personal and Professional Skills (SL)

This course is designed to introduce students to life skills. In this model, the learner uses a range of skills to make sense of the world and develops skills with an emphasis on thinking critically and ethically and communicating effectively.

Credits 1

Grades

11, 12

Course Designation

International Baccalaureate (IB),
Standard Level (SL),
Weighted (1.0W)

Schools

Gar-Field High School
Unity Reed High School

Requirements

Enrollment in IB Programme

Prerequisites

None

Marketing

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.

This course connects to the following career pathways:

[Hospitality & Tourism](#)

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
Unity Reed High School
Woodbridge High School

Prerequisites

[Sports and Entertainment Marketing](#), recommended

Travel and Tourism Marketing

This course examines the components of the hospitality and tourism industry, including attractions, lodging, transportation, and food and beverage. Other topics include the history, political, social, and cultural impacts hospitality and tourism have had on local, state, and global environments. Students will develop competencies in the areas of communication, customer service, marketing, industry technology, economics, and management functions, and will be provided with opportunities for hands-on, real-world applications.

This course connects to the following career pathways:

[Hospitality & Tourism](#)

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School

Osborn Park High School

Unity Reed High School

Prerequisites

[Principles of Business and Marketing](#), recommended

Technology and Engineering Education

Civil Engineering and Architecture (PLTW)

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

This course connects to the following career pathways:

[Science, Technology, Engineering & Mathematics \(STEM\)](#)

Credits 1

Grades

11, 12

Course Designation

Weighted (1.0W)

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

Unity Reed High School

Woodbridge High School

Prerequisites

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

Construction Technology

Students explore commercial, industrial, residential, public works, and institutional technologies to help them understand construction careers. Through hands-on projects, students learn proper safety procedures for tools and machinery, while exploring preconstruction and construction processes and investigating evolving technologies. Students apply mathematics concepts and principles used in construction.

This course connects to the following career pathways:

[Architecture & Construction](#)

Credits 1

Grades

10, 11, 12

Schools

Brentsville District High School

Colgan High School

Freedom High School

Gainesville High School

Gar-Field High School

Hylton High School

Independence Nontraditional High School

Osborn Park High School

Patriot High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Production Systems](#), recommended

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.

This course connects to the following career pathways:
[Science, Technology, Engineering & Mathematics \(STEM\)](#)

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 \(PLTW\)](#)

Environmental Sustainability (PLTW)

Environmental Sustainability (ES) is a specialization course in PLTW Engineering. Students investigate and design solutions to solve real-world challenges related to clean drinking water, a stable food supply, and renewable energy. Students are introduced to environmental issues and use the engineering design process to research and design potential solutions.

Credits 1

Grades

10, 11, 12

Course Designation

Weighted (1.0W)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

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

Introduction to Engineering Design (PLTW)

In this introductory Project Lead the Way (PLTW) Engineering course, 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.

This course connects to the following career pathways:

[Manufacturing](#)

[Science, Technology, Engineering & Mathematics \(STEM\)](#)

Credits 1

Grades

9, 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

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

PLTW Capstone (formerly Engineering Design and Development)

In the Project Lead the Way (PLTW) Capstone course, formerly Engineering Design and Development, 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.

This course connects to the following career pathways:
[Manufacturing](#)

Credits 1

Length

Year

Grades

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

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

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

Principles of Engineering (PLTW)

In this foundational PLTW Engineering course, 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.

This course connects to the following career pathways:

[Manufacturing](#)

[Science, Technology, Engineering & Mathematics \(STEM\)](#)

Credits 1

Grades

10, 11, 12

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 \(PLTW\)](#)

Production Systems

Students assess the relationship between production and society as they compose design portfolios, construct production prototypes, and apply automation to evaluate their solutions to technological problems.

This course connects to the following career pathways:

[Architecture & Construction](#)

Credits 1

Grades

9, 10, 11

Schools

Brentsville District High School

Colgan High School

Freedom High School

Gainesville High School

Independence Nontraditional High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Technical Drawing and Design

In this foundational course, students design, sketch, and make technical drawings, models, or prototypes of real design problems while learning the language of technical drawing and design. The course introduces the language of graphic communication to all science, technology, engineering, and mathematics (STEM) students and is especially recommended for those planning a future in engineering and architecture.

This course connects to the following career pathways:

- [Architecture & Construction](#)
- [Science, Technology, Engineering & Mathematics \(STEM\)](#)
- [Manufacturing - Welding](#)

Credits 1

Grades

9, 10, 11

Schools

Gainesville High School

Hylton High School

Patriot High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Trade and Industrial Education

Aviation Maintenance Technology 1

Students will work with airframe and control surfaces, power plants, and basic aviation electricity, and perform ground operations and servicing procedures, as specified by Federal Aviation Administration (FAA) requirements. Students will also practice lab and tool safety, apply science and mathematics principles to aviation maintenance tasks, and research and use maintenance publications, forms, and records. **This is a double-blocked course.**

This course connects to the following career pathways:

[Transportation, Distribution and Logistics - Aviation Maintenance](#)

Credits 2

Grades

10, 11

Schools

Unity Reed High School

Woodbridge High School

Prerequisites

None

Aviation Maintenance Technology 2

Students will explore design features of aircraft through drawings and blueprints. Students will investigate aircraft materials and processes, weight and balance procedures, and fluid lines and fittings. Additionally, students will learn care and maintenance techniques, practice lab and tool safety, and apply academic principles while working with aircraft. **This is a double-blocked course.**

This course connects to the following career pathways:

[Transportation, Distribution and Logistics - Aviation Maintenance](#)

Credits 2

Grades

11, 12

Schools

Unity Reed High School

Woodbridge High School

Prerequisites

[Aviation Maintenance Technology 1](#)

Cosmetology 1

In this introductory course, students study hair, skin, and nails and their related care. Students are grounded in theory as they prepare to practice procedures in a clinical lab setting and classroom, using manikins for manipulative skill practice. The first-year course emphasizes personal safety, professionalism, and sanitation and disinfection of equipment and facilities. Students develop skills in shampooing and conditioning hair, as well as styling and cutting hair. They are introduced to hair coloring and chemical texture services and develop skills in manicure and pedicure procedures. **This is a triple-blocked course.**

This course connects to the following career pathways:
[Human Services - Cosmetology](#)

Credits 3

Grades

11

Schools

Unity Reed High School

Woodbridge High School

Notes

This is the first course in a two-year program.

Cosmetology 2

In this continuing course, students build on their theoretical foundation of general sciences and practices in cosmetology to increase proficiency in hair cutting and styling on live models, with attention to professionalism, client consultation, safety, and infection control. Students are trained in safe chemical processes related to permanent waves, relaxers, lightening, and coloring hair. In addition, students learn to care for skin, hands, and feet, developing experience in providing facials, manicures, pedicures, and nail enhancements. Students will be introduced to a business management unit with a focus on managing the salon. **This is a triple-blocked course.**

This course connects to the following career pathways:
[Human Services - Cosmetology](#)

Credits 3

Grades

12

Schools

Unity Reed High School

Woodbridge High School

Prerequisites

[Cosmetology 1](#)

Notes

This is the second course in a two-year program.

Electricity 1

Electricity 1 students develop fundamental electrical skills to help them prepare for a career in the installation, operation, maintenance, and repair of residential, commercial, and industrial systems. Students will engage in hands-on activities in a lab setting. They will be introduced to residential wiring of houses and apartments; commercial wiring of retailers, schools, businesses, and hospitals; and industrial wiring of factories.

This course connects to the following career pathways:
[Architecture & Construction - Electricity](#)

Credits 1

Grades

10, 11

Schools

Unity Reed High School

Prerequisites

None

Electricity 2

Electricity 2 students will continue to develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems. Students will also study electrical theory and mathematical problems related to electricity; apply requirements of the National Electrical Code (NEC); select and install conductors; examine lighting, communication, and power systems; and work with conduits and raceways, panelboards, switchboards, grounding systems, and generators. **This is a double-blocked course.**

This course connects to the following career pathways:
[Architecture & Construction - Electricity](#)

Credits 2

Grades

11, 12

Schools

Unity Reed High School

Prerequisites

[Electricity 1](#)

Firefighting 1 (Semester)

Firefighting requires discipline and attention to academic and professional standards to successfully fight live fires, address hazardous-materials (HAZMAT) incidents, and conduct search-and-rescue operations. Students will become familiar with the procedures, equipment, and technologies used by fire departments. This course challenges students academically, mentally, and physically and meets the standards of National Fire Protection Association (NFPA) 1001-2013 leading to the opportunity to obtain a Firefighter 1 certification.

This course connects to the following career pathways:

[Law, Public Safety, Corrections and Security - Firefighting](#)

Credits 2

Length

Semester

Grades

11, 12

Schools

Unity Reed High School

Requirements

Must be at least 16 years old by the first day of the course offering. Must pass a Medical Physical (NFPA 1582) and Physical Agility Test (CPAT)

Notes

This course is paired with **Firefighting 2 (Semester)** in the same school year.

Semester

I

Firefighting 2 (Semester)

The Firefighting 2 course builds on the professional knowledge and skills gained in Firefighting 1. Students respond to situations caused by simulated terrorism, accidents, and natural disasters by managing resources such as medevac helicopters, emergency medical personnel, technical rescue teams, and community-based organizations. Students will become familiar with the procedures, equipment, and technologies used by current fire departments. This course challenges students academically, mentally, and physically and meets the standards of National Fire Protection Association (NFPA) leading to the opportunity to obtain Firefighter 2 certification.

This course connects to the following career pathways:

[Law, Public Safety, Corrections and Security - Firefighting](#)

Credits 1

Length

Semester

Grades

11, 12

Schools

Unity Reed High School

Requirements

Must be at least 16 years old by the first day of the course offering. Must pass a Medical Physical (NFPA 1582) and Physical Agility Test (CPAT)

Prerequisites

[Firefighting 1 \(Semester\)](#)

Notes

This course is paired with **Firefighting 1 (Semester)** in the same school year.

Semester

II

Air Force JROTC

Air Force JROTC 1

Students are introduced to the Air Force JROTC program with instruction focusing on aerospace science, including aviation history, principles of aircraft flight and navigation, development of aerospace power, aerospace vehicles, rocketry, space and technology programs, and the aerospace industry. Students explore Air Force traditions, customs and courtesies, character, and the foundations of U.S citizenship. Leadership education develops leadership skills, acquaints students with the practical applications of life skills, and includes a drill and ceremonies component. Instruction in personal wellness and health and fitness encourages cadets to lead healthy, active lifestyles into adulthood.

Students electing to use JROTC 1 in 9th grade as a substitution for their physical education graduation requirement must enroll in the full-year health course in tenth grade. The health course will include ninth and tenth grade health, CPR, and Family Life Education. In-person courses will include Driver Education; however, if a school does not have the minimum enrollment to support an in-person health course, students will be enrolled in a virtual course. The virtual course will not include Driver Education and students will need to enroll in classroom driver education outside of Prince William County Public Schools.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Freedom High School

Hylton High School

Unity Reed High School

Requirements

Student must be able to participate in physical education program, dress in regulation uniform, and meet and maintain the personal grooming standards.

Air Force JROTC 2

Students explore the Air Force JROTC program with instruction focusing on aerospace science including flight conditions affecting flight, flight's effects on the human body, analyses of flight navigation, and purposes of aerial navigation aids. The course focuses on Air Force traditions, customs and courtesies, effective communication skills, and the influences of varying global cultures, religions, and ethnicities in the development of nations. Leadership education develops leadership skills, acquaints students with the practical applications of life skills, and includes a drill and ceremonies component. Personal wellness studies encourage cadets to lead healthy, active lifestyles into adulthood.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School

Freedom High School

Hylton High School

Unity Reed High School

Requirements

Student must be able to participate in physical education program, dress in regulation uniform, and meet and maintain the personal grooming standards.

Prerequisites

[Air Force JROTC 1](#)

Air Force JROTC 3

Students explore the Air Force JROTC program, with instruction focusing on aerospace science, including astronomy, space exploration, the history and development of aerospace vehicles and rocketry.

Aerospace science acquaints students with the elements of aerospace and the aerospace environment and introduces them to the history and development of air power. Leadership education develops leadership skills, acquaints students with the practical applications of life skills, and includes a drill and ceremonies component. Instruction on effective communication and management techniques, human relations skills, and postsecondary education and career opportunities is also included. Personal wellness studies encourage cadets to lead healthy, active lifestyles into adulthood.

Credits 1

Grades

11, 12

Schools

Battlefield High School

Freedom High School

Hylton High School

Unity Reed High School

Requirements

Student must be able to participate in physical education program, dress in regulation uniform, and meet and maintain the personal grooming standards.

Prerequisites

[Air Force JROTC 2](#)

Air Force JROTC 4

Students explore the Air Force JROTC program, focusing on aerospace science, the fundamentals of management, and personal wellness. Aerospace science acquaints students with the elements of aerospace, the aerospace environment, and introduces them to the history and development of air power. Leadership education develops leadership skills, acquaints students with the practical applications of life skills, and includes a drill and ceremonies component. Personal wellness studies encourage cadets to lead healthy, active lifestyles into adulthood.

Credits 1

Grades

11, 12

Schools

Battlefield High School

Freedom High School

Hylton High School

Unity Reed High School

Requirements

Student must be able to participate in physical education program, dress in regulation uniform, and meet and maintain the personal grooming standards.

Prerequisites

[Air Force JROTC 3](#)

Student Assistant

Lab Assistant / Science Seminar

Lab Assistant/Science Seminar offers the student the opportunity to learn more science while assisting a science teacher. The instructional objectives vary according to the course in which the student is assisting and according to the program, interests, and ability of the student. This course may be taken more than once for credit with prior approval of the science department chairperson. To earn credit instructional objectives and evaluative criteria must be delineated as per Regulation 681-3, Section III.C.

Credits 0.5

Length

Year

Grades

10, 11, 12

Schools

Battlefield High School

Freedom High School

Hylton High School

Patriot High School

Potomac High School

Unity Reed High School

Requirements

Approval of supervising teacher

Prerequisites

Successful completion of subject in which assisting.

Library Assistant

Students are trained to assist the library staff in maintaining the library program. Students are under the supervision of the librarian(s) but must be able to work independently to perform duties and carry out responsibilities as assigned. Basic duties may include shelving books in alpha or numeric order, assisting patrons in various capacities; circulation of books; knowledge of the computer databases; ability to evaluate websites; use of A/V equipment and duties as assigned by the librarian. This course may be taken more than once for credit

Credits 0.5

Length

Year

Grades

10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Hylton High School

Patriot High School

Potomac High School

Unity Reed High School

Semester

36 weeks

Student Assistant for Special Education

The Student Assistant for Special Education course offers the student the opportunity to learn about the field of special education while assisting a special education teacher. Students will be introduced to a professional and practical experience in working with students with disabilities who require special education. The course may be taken more than once for credit with prior approval of the special education department chairperson.

Credits 0.5

Length

Year

Grades

9, 10, 11, 12

Schools

Brentsville District High School

Colgan High School

Freedom High School

Gar-Field High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Requirements

Teacher recommendation

Prerequisites

None

Semester

36 weeks

High School Special Education

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

Length

Year

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

Length

Year

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

Osbourn 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 2

Length

Year

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

Osbourn 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

Length

Year

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

Osbourn 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

Length

Year

Grade: 12 Postgraduate

Schools

Battlefield High School

Brentsville District High School

Gainesville High School

Potomac High School

Unity Reed 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.

Learning Strategies 1-2

Learning Strategies 1 and 2 are designed to provide students with direct and explicit instruction on how to acquire new information, how to study, and how to express their thoughts. Students may begin to explore a variety of research-based strategies and programs and/or informal strategies that will enable the student to experience success in high school.

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 Learning Strategies course offerings.

Life Skills

The focus of Life Skills is to prepare students who access the adapted curriculum to participate in the community and grow independence. Students will develop and enhance communication skills, organizational/study techniques, and social intervention skills. Students learn to care for their personal needs, clothing, the household, and to prepare nutritious meals. 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. This course builds student independence and prepares them for post-secondary life.

Credits 1

Length

Year

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) indicates the appropriateness of the Life Skills course offering.

Prerequisites

None

Methods of Study 1-4

Methods of Study 1-4 are elective courses designed to provide general skill development in organization and study skills in addition to providing specialized instruction in a small group for each student's specific areas of need as outlined through the eligibility and IEP processes. Students may also receive remediation and support of content coursework and may be provided necessary time to complete assignments and assessments.

Credits 1

Length

Year

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

Independence Nontraditional 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 Methods of Study each year up to four years.

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

Length

Year

elective credit for Standard or Advanced Studies

Diplomas

Grades

10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Forest Park 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

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

Project SEARCH

The Prince William Project SEARCH is a collaborative effort between PWCS, DARS, and Didlake Inc. The Project SEARCH Transition-to-Work Program is a unique, business-led, one-year employment preparation program that takes place entirely at the workplace. Total workplace immersion facilitates a seamless combination of classroom instruction, career exploration, and hands-on training through worksite internships. Students participate in three 10-12-week unpaid internships at the Novant UVA Health Systems, Prince William Medical Center.

Credits 1

Length

Year

Grades

12

Postgraduate (applied studies)

Schools

Battlefield High School

Brentsville District High School

Colgan 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 with a disability, aged 18-21, who has completed the requirements for an Applied Studies Diploma, has an open case with the Virginia Department of Aging and Rehabilitative Services, and meets the eligibility requirements for state and local developmental disabilities follow along services may be eligible. Course participation is not determined by an IEP team decision; there is an application and selection process.

Prerequisites

None

Reading Strategies 1 - 4

Reading Strategies 1-4 are cumulative elective courses that use research-based strategies and curricula to directly address reading areas of need as identified in student IEP goals. Areas addressed include phonics/decoding, fluency, vocabulary, and comprehension.

Credits 1

Length

Year

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 Educational Program (IEP) indicates the appropriateness of the Reading Improvement 1 -4 course offerings.

Prerequisites

None

Social Skills 1 - 4

Social Skills I - IV are elective courses that provide students with specialized instruction in the social skills they need to effectively participate in the school environment and in the community. Specific skills are identified through IEP goals and are addressed through research-based strategies and curricula.

Credits 1

Length

Year

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

Osbourn 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 Educational Program (IEP) indicates the appropriateness of the Social Skills 1 -4 course offerings.

Prerequisites

None

English

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 High School

Osbourn 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 High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[English 9](#)

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 High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[English 11](#)

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

10, 11, 12

9 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

Journalism 1

To develop basic skills in journalism, students study and write news, feature, sports, editorial, and other forms of journalistic articles. They study interviewing, various types of research, legal rights and responsibilities, page design, photography, desktop publishing and advertising. They produce articles for publication in the mass media.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Freedom High School

Gainesville High School

Hylton High School

Patriot High School

Unity Reed High School

Woodbridge High School

Requirements

Successful completion of previous English courses and teacher recommendation

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

Reading Support and Development

This course is designed to support students who need specific instruction in reading and writing secondary content material. It aims to strengthen literacy skills and strategies, particularly for those reading one year or more below expected grade level according to appropriate literacy screeners. The course provides direct instruction in content area reading skills

Additionally, the course provides differentiated instruction specific to student needs through the application of evidence-based literacy strategies such as questioning, visualizing, connecting, predicting, summarizing, and monitoring one's understanding. Through these focused areas, students will develop the necessary skills to navigate and comprehend complex secondary content material.

Credits 1

Length

Year

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

Potomac High School

Unity Reed High School

Requirements

Students reading two to four years below grade level

English - IB Programme

Advanced Middle Years Programme English 9

Advanced Middle Years Programme (MYP) English 9 prepares students planning to enroll in the IB Sequence of English classes. Students will complete all objectives of English 9 in an accelerated program. Students expand speaking skills by creating presentations from group and individual research. In class studies, emphasis is placed on the reading and analysis of complex texts, and independent reading is expected. Students develop both grammar and vocabulary skills in conjunction with frequent writing in all expository modes. Development of critical analysis and support in thinking and writing are emphasized. This course will incorporate the MYP global contexts, strategies, and assessments.

Credits 1

Grades

9

Course Designation

International Baccalaureate (IB),

Weighted (0.5W)

Schools

Gar-Field High School

Unity Reed High School

Requirements

Successful completion of Grade 8 and interest in Advanced study

Prerequisites

None

Advanced Middle Years Programme English 10

Advanced Middle Years Programme (MYP) English 10 prepares students planning to enroll in IB English courses in Grades 11 and 12. Students will complete all English 10 objectives through an accelerated program using challenging in-depth readings. Grammar and vocabulary studies are structured to support reading and writing levels. Oral skills are honed in group and individual presentations and discussions. Formal writings are evaluated for close analysis, elaboration of details, and fluid articulation of ideas. This course will incorporate the MYP global contexts, strategies, and assessments.

Credits 1

Grades

10

Course Designation

International Baccalaureate (IB),
Weighted (0.5W)

Schools

Gar-Field High School
Unity Reed High School

Requirements

Student interest in Advanced study and teacher recommendation

Prerequisites

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

IB English Language and Literature 1 (HL)

In this course, students study a wide range of literary and nonliterary texts in a variety of media. By examining communicative acts across literary form and textual type alongside appropriate secondary readings, students will investigate the nature of language itself and the ways in which it shapes and is influenced by identity and culture. Approaches to study in the course are meant to be wide-ranging and can include literary theory, sociolinguistics, media studies, and critical discourse analysis among others. Students study six works from a representative selection of literary forms, periods, and places.

Credits 1

Grades

11

Course Designation

Higher Level (HL),
International Baccalaureate (IB),
Weighted (1.0W)

Schools

Unity Reed High School

Requirements

Student interest in Advanced study and teacher recommendation

Prerequisites

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

IB English Language and Literature 1 (SL)

In this course, students study a wide range of literary and nonliterary texts in a variety of media. By examining communicative acts across literary form and textual type alongside appropriate secondary readings, students will investigate the nature of language itself and the ways in which it shapes and is influenced by identity and culture. Approaches to study in the course are meant to be wide-ranging and can include literary theory, sociolinguistics, media studies, and critical discourse analysis among others. Students study four works from a representative selection of literary forms, periods, and places.

Credits 1

Grades

11

Schools

Unity Reed High School

Prerequisites

[Advanced Middle Years Programme English 10](#)

IB English Language and Literature 2 (HL)

In this course, students study a wide range of literary and nonliterary texts in a variety of media. By examining communicative acts across literary form and textual type alongside appropriate secondary readings, students will investigate the nature of language itself and the ways in which it shapes and is influenced by identity and culture. Approaches to study in the course are meant to be wide-ranging and can include literary theory, sociolinguistics, media studies, and critical discourse analysis among others. Students study six works from a representative selection of literary forms, periods, and places. Students submit a 1200-1500 word essay on one of the works or bodies of works studied.

Credits 1

Grades

12

Course Designation

Higher Level (HL),

International Baccalaureate (IB),

Weighted (1.0W)

Schools

Unity Reed High School

Requirements

Student interest in Advanced study and teacher recommendation

Prerequisites

[IB English Language and Literature 1 \(HL\)](#)

IB English Language and Literature 2 (SL)

In this course, students study a wide range of literary and nonliterary texts in a variety of media. By examining communicative acts across literary form and textual type alongside appropriate secondary readings, students will investigate the nature of language itself and the ways in which it shapes and is influenced by identity and culture. Approaches to study in the course are meant to be wide-ranging and can include literary theory, sociolinguistics, media studies, and critical discourse analysis among others. Students study four works from a representative selection of literary forms, periods, and places.

Credits 1

Grades

12

Schools

Unity Reed High School

Prerequisites

[IB English Language and Literature 1 \(SL\)](#)

General Cross-Curricular

IB Theory of Knowledge

IB Theory of Knowledge is a course required for IB Diploma candidates. It is designed to foster in students a habit of mind that reflects on human ways and limits of knowing as well as on the human ability to communicate these ways of knowing. Students will explore fundamental questions of epistemology by reflecting and questioning the basis of knowledge and experience, examining cultural and ideological bias, and by formulating rational arguments and value judgments of their own. Academic disciplines examined include language, history, logic, science, mathematics, ethics, and aesthetics. The course includes an externally assessed paper and an internally assessed oral presentation.

Credits 1

Grades

12

Course Designation

International Baccalaureate (IB),

Weighted (1.0W)

Schools

Gar-Field High School

Unity Reed High School

Requirements

IB diploma candidacy or at least four IB classes taken concurrently

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](#)

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](#)

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

9, 10, 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

Requirements

Students electing to use Unified PE as a substitution for their physical education graduation requirement must enroll in the full-year health course in tenth grade. The health course will include ninth and tenth grade health, CPR, and Family Life Education. In-person courses will include Driver Education, however, if a school does not have the minimum enrollment to support an in-person health course, students will be enrolled in a virtual course. The virtual course will not include Driver Education and students will need to enroll in classroom driver education outside of Prince William County Public Schools.

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 an in-person 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 High School

Osbourn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

Math - Electives

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. 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

Potomac High School

Unity Reed High School

Prerequisites

[Algebra 2](#)

Math - IB Programme

Advanced Middle Years Programme Algebra 1

International Baccalaureate Middle Years Programme (MYP) math courses promote both inquiry and application, helping students to develop problem-solving techniques that transcend the discipline and are useful in the world outside school. Success in Algebra 1 is widely considered to be a determining factor in success in upper level mathematics coursework. The skills in Advanced Algebra 1 build on algebraic thinking which students have experienced in kindergarten through middle school. Algebra 1 content includes arithmetic concepts, proportional reasoning, and functions. Graphing utilities (calculators, computers, and other technology tools) will be used to assist in teaching and learning. Advanced Algebra 1 provides instruction on all the Algebra 1 Standards and the following content from Algebra 2: absolute value equations and inequalities, simplifying and performing operations on radical expressions that include variables, and polynomial expressions with two variables. Students in this course will complete the Algebra 1 Standards of Learning test and are expected to continue their mathematics studies with Advanced Geometry.

Credits 1

Grades

9

Course Designation

International Baccalaureate (IB),

Weighted (0.5W)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

8th grade Pre-Algebra

Advanced Middle Years Programme Algebra 2

Adv-MYP Algebra 2 is the prerequisite for IB Math: Applications and Interpretations SL and IB Math: Analysis and Approaches 1 (SL). The course incorporates and expands the knowledge from both Adv-MYP Algebra and Adv-MYP Geometry. The course includes all objectives from the PWCS Algebra 2 curriculum, including the study of functions, equations, inequalities, systems of equations, polynomials, rational and radical equations, complex numbers, and curves of best fit, with emphasis on and completion of projects and internationalism. Graphing technology is used throughout the 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. Algebra 2 is required for Advanced Studies Diploma.

Credits 1

Grades

9, 10, 11

Course Designation

International Baccalaureate (IB),

Weighted (0.5W)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[Advanced Middle Years Programme Geometry](#)

Advanced Middle Years Programme Algebra 2 - Extended

The course includes all objectives from the PWCS Algebra 2 curriculum, including the study of functions, equations, inequalities, systems of equations, polynomials, rational and radical equations, complex numbers, and curves of best fit. Advanced Middle Years Programme (Adv-MYP) Algebra 2 Extended is an accelerated course that integrates select Pre-Calculus concepts. Students are expected to master algebraic mechanics and understand the underlying theory and apply the concepts to real-world situations. The study of the trigonometric circular functions will continue from Adv-MYP Geometry and prepare students for further study of this topic. 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

10, 11

Course Designation

International Baccalaureate (IB),

Weighted (0.5W)

Schools

Gar-Field High School

Unity Reed High School

Requirements

Teacher recommendation

Prerequisites

[Advanced Middle Years Programme Geometry](#)

Advanced Middle Years Programme Geometry

International Baccalaureate Middle Years Programme (MYP) math courses promote both inquiry and application, helping students to develop problem-solving techniques that transcend the discipline and are useful in the world outside school. This course includes emphasis on two- and three- dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. 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. In Advanced Geometry, students are provided instruction on all the Geometry Standards along with the following content: Truth Tables and Two-Column Proofs, The Unit Circle, and The Law of Sines and the Law of Cosines. 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

Course Designation

International Baccalaureate (IB),
Weighted (0.5W)

Schools

Gar-Field High School
Unity Reed High School

Prerequisites

[Advanced Middle Years Programme Algebra 1](#),
[Advanced Algebra 1](#), or [Algebra 1](#) (with teacher recommendation)

IB Math: Analysis and Approaches 1 (HL)

IB Math: Analysis and Approaches is the first year in a two-year course that has a substantial mathematical element and is designed for students interested in extending their developing of mathematical arguments, problem solving, and exploring real and abstract applications, with and without technology. This course includes the content from Mathematics Analysis SL with additional content and at a faster pace.

Credits 1

Grades

11

Course Designation

Higher Level (HL),
International Baccalaureate (IB),
Weighted (1.0W)

Schools

Gar-Field High School
Unity Reed High School

Requirements

Teacher recommendation

Prerequisites

[Advanced Middle Years Programme Algebra 2 - Extended](#)

IB Math: Analysis and Approaches 1 (SL)

IB Math: Analysis and Approaches 1 (SL) is the first year in a two-year mathematics course that fulfills the Group 5 requirement in the IB Diploma Programme. The course is designed for math students who are preparing for studies in subjects such as chemistry, economics, psychology and business administration. The goal is to provide students with a solid foundation in Pre-Calculus topics such as functions and trigonometry, further extend their studies in probability and statistics, and begin their studies in calculus by exploring derivatives and integrals. Students will use technology as a tool for learning and develop an awareness of global contributions to the field of mathematics sciences. Students wishing to study subjects such as physics, engineering and technology should take the Mathematics HL course.

Credits 1

Grades

10, 11

Course Designation

Standard Level (SL),

Weighted (1.0W),

International Baccalaureate (IB)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[Advanced Middle Years Programme Algebra 2 - Extended](#) or [Advanced Middle Years Programme Algebra 2](#) (with teacher recommendation)

IB Math: Analysis and Approaches 2 (HL)

IB Mathematics: Analysis and Approaches 2 HL is the second year of the two-year sequence in mathematics that meets the requirements of the IB Diploma Programme. This course builds on and extends the knowledge base of IB Mathematics 1 HL. IB Mathematics 2 HL is the study of concepts, techniques, and applications of differential and integral calculus. Students in this course will complete one portfolio project and will take the Analysis & Approaches HL exams.

Credits 1

Grades

12

Course Designation

Higher Level (HL),

International Baccalaureate (IB),

Weighted (1.0W)

Schools

Gar-Field High School

Unity Reed High School

Requirements

Teacher recommendation

Prerequisites

[IB Math: Analysis and Approaches 1 \(HL\)](#)

IB Math: Analysis and Approaches 2 (SL)

This course is the second year of the two-year sequence that meets the requirements of the IB Diploma Programme. This course builds on and extends the knowledge base of IB Math: Analysis and Approaches 1 (SL) to include topics in calculus. Students in this course will complete a portfolio project (mathematics exploration) and take the Analysis & Approaches SL exams.

Credits 1

Grades

11, 12

Course Designation

Standard Level (SL),

Weighted (1.0W),

International Baccalaureate (IB)

Schools

Gar-Field High School

Unity Reed High School

Requirements

Teacher recommendation

Prerequisites

[IB Math: Analysis and Approaches 1 \(SL\)](#)

IB Math: Applications and Interpretations (SL)

This course is a one-year course designed for students with varied backgrounds and abilities who are interested in social sciences, humanities, certain economics, statistics and engineering courses, and the arts. The emphasis of this course is to make explicit the applications of the mathematics being taught using technology, solving practical problems and exploring mathematical models. Students will complete a portfolio project (math exploration) and take the IB Math: Applications and Interpretations SL Exam.

Credits 1

Grades

12

Course Designation

International Baccalaureate (IB),

Standard Level (SL),

Weighted (1.0W)

Schools

Gar-Field High School

Unity Reed High School

Requirements

Teacher recommendation

Prerequisites

[Advanced Middle Years Programme Algebra 2](#)

Math - Standard

Algebra, Functions, and Data Analysis

This course is designed for students who have completed Algebra 1 but would benefit from time to further develop algebraic concepts prior to taking Algebra 2. Students will study functions and their behaviors, data analysis, probability, and experimental design. Data will be generated by practical applications arising from science, business, and finance.

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

Independence Nontraditional 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

Success in Algebra 1 is widely considered to be a determining factor in success in upper-level mathematics coursework. The skills in Advanced Algebra 1 build on algebraic thinking which students have experienced in kindergarten through middle school. Algebra 1 content includes arithmetic concepts, proportional reasoning, and functions. Graphing utilities (calculators, computers, and other technology tools) will be used to assist in teaching and learning. At the end of the year, students will take the Algebra 1 Standards of Learning test.

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 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 technology, the data cycle, and contextual 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.

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 High School

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. Emphasis will be placed on practical applications and modeling throughout the course of study. 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

Independence Nontraditional 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

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. 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

Independence Nontraditional High School

Osborn 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](#)

History and Social Science - 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. Students are expected to take the accompanying AP Exam, which may qualify them for advanced standing in college and/or college credit.

Credits 1

Grades

12

Course Designation

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

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

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

History and Social Science - IB Programme

Advanced Middle Years Programme - AP Government and Politics: Comparative

This college-level course includes topics such as: 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 is required. Students are expected to take the accompanying AP Exam, which may qualify them for advanced standing in college and/or college credit. Students pursuing the IB Diploma take this course as sophomores. IB History certificate candidates take this course during their sophomore or junior year.

Credits 1

Grades

10, 11, 12

Course Designation

Advanced Placement (AP),

International Baccalaureate (IB),

Weighted (1.0W)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[Advanced Middle Years Programme English 9](#)

[Advanced Middle Years Programme - World History and Geography from 1500](#)

Advanced Middle Years Programme - World History and Geography from 1500

Advanced Middle Years Programme World History and Geography from 1500 is a survey of world history from 1500 to present with a concentration on modern developments in western civilization and includes: 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 and independence movements, world religions and the contemporary world. Students are trained in historical analysis by discussion, research, and oral and written presentation. Students analyze documents for their origin, purpose, value and limitations. These skills are the foundation for the four-year IB sequence and are a critical component of IB assessments. 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),

International Baccalaureate (IB)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

None

IB Economics (SL)

This academically rigorous course focuses on the choices that must constantly be made by individuals, firms, and governments, which affect both their own economic well being and that of society as a whole. The questions of "What?" "How?" and "For whom?" are central to the field of economics. Topics will be approached from an international perspective. The course emphasizes the study of economic development as a part of the solution to contemporary real world problems. The course culminates in an external assessment that provides the possibility of college credit.

Credits 1

Grades

12

Course Designation

International Baccalaureate (IB),

Standard Level (SL),

Weighted (1.0W)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[Algebra 2](#)

And one of the following:

[Advanced Middle Years Programme - AP Government and Politics: Comparative](#), [AP Government and Politics: Comparative](#), or [AP Government and Politics: U.S.](#)

Notes

This course fulfills the Economics and Personal Finance graduation requirement.

IB Geography (SL)

In this college-level course, students will develop a global perspective and a sense of world interdependence by understanding the relationship between people, place, and environment. Additional topics include: environmental quality; planning and management of resources for present and future generations; the relevance of geography in analyzing contemporary world issues; issues of social justice, equality and respect for others and an appreciation of diversity. Students will explore a wide range of geographical methodologies and apply appropriate techniques of inquiry including Geographic Information Systems technologies to develop solutions to geographic related issues and problems. The course culminates in an external assessment that provides the possibility of college credit. 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, 12

Course Designation

Standard Level (SL),

Weighted (1.0W),

International Baccalaureate (IB)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[Advanced Middle Years Programme - World History and Geography from 1500](#)
[U.S. and Virginia History](#)

IB History 1: History of the Americas (HL)

This is a survey course of U.S., Canadian, and Latin American history from early European contacts with American Indians and the people of the First Nation through the 20th century including analysis of the U.S. Civil War, industrialization, expansion, and the Latin American dictatorships. The course focuses on the American region's historical experience, and political, economic, and social systems. Students will demonstrate historical analysis by discussion, presentation, and written work including the IB History Internal Assessment. This is the first course in a required two-year sequence of IB diploma level history culminating with a series of external examinations including a full examination on this regional study and may provide college-level credit at many colleges and universities. 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, 12

Course Designation

Higher Level (HL),

International Baccalaureate (IB),

Weighted (1.0W)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[Advanced Middle Years Programme - World History and Geography from 1500](#)

And one of the following:

[Advanced Middle Years Programme - AP Government and Politics: Comparative](#), [AP Government and Politics: Comparative](#), or [AP Government and Politics: U.S.](#)

IB History 2: Topics in Twentieth Century History (HL)

This survey course of 20th century world history includes topics such as: causes, practices, and effects of war; the rise and rule of single-party states; East-West relations after 1945; nationalists and independence movements; decolonization; and the emergence and problems of new nations. This course will continue to stress political, economic, and social systems as well as require students to further develop their skills of interpretation and analysis through historiography. The course culminates in a series of external assessments that include document-based questions, short essay response and research papers which provide the possibility of college credit. This is the second in a two-course sequence for the IB history certificate and is required for the IB diploma.

Credits 1

Grades

12

Course Designation

Higher Level (HL),

International Baccalaureate (IB),

Weighted (1.0W)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[IB History 1: History of the Americas \(HL\)](#)

IB Psychology

This college-level course investigates three psychological perspectives including: biological, cognitive, and learning. Students will also explore an optional subject area and undertake two studies: research and experimental. This elective course of study prepares students for the standard level examination in Psychology and counts toward the IB Diploma. The course culminates in an external assessment that provides the possibility of college credit.

Credits 1

Grades

12

Course Designation

International Baccalaureate (IB),

Standard Level (SL),

Weighted (1.0W)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

None

IB Social and Cultural Anthropology (SL)

IB Social and Cultural Anthropology is a college-level comparative study of human societies and culture. It explores both the universal principles of social and cultural life and characteristics of specific societies and cultures. Topics include small groups, as well as kinship relations, symbolism, exchange, political organizations, social control and gender. The course examines society from the small scale to the complex industrial scale, as well as modern nation states. The course culminates in an external assessment that provides the possibility of college credit.

Credits 1

Grades

11, 12

Course Designation

International Baccalaureate (IB),
Standard Level (SL),
Weighted (1.0W)

Schools

Gar-Field High School
Unity Reed High School

Prerequisites

None

History and Social Science - 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
Independence Nontraditional High School
Osborn 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

Independence Nontraditional 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 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
Independence Nontraditional High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

None

Science - Electives

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
Gar-Field High School
Potomac High School
Unity Reed High School

Prerequisites

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

[Earth Science 1](#) or [Chemistry 1](#)

Chemistry 2: Forensic Sciences and Chemical Analysis

Chemistry 2: Forensic Sciences and Chemical Analysis course includes central concepts concerning the history of forensic sciences, the chemical analysis of forensic evidence, and crime scene management. Students will apply the Locard's Principle in the observation, acquisition, and analysis of forensic evidence. Major focus is placed upon the understanding of science as an active process including the application of instrumental methods of analysis such as ultraviolet, visible, infrared and fluorescence spectrophotometry, gas chromatography, and thin layer chromatography to the classification of physical evidence. In addition, techniques of analytical chemistry are utilized to investigate the chemical composition of blood, latent fingerprints, hair and fiber evidence, toxicology, soil samples, questioned documents, and other types of trace evidence.

Credits 1

Grades

10, 11, 12

Schools

Battlefield High School

Brentsville District High School

Freedom High School

Gar-Field High School

Hylton High School

Patriot High School

Unity Reed High School

Prerequisites

[Biology 1](#)

or [Advanced Biology 1](#)

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

Notes

This is a local elective course. It is not approved as a "laboratory science" credit toward graduation requirements by the Virginia Board of Education.

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

Independence Nontraditional 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](#)

Notes

Course work in [Chemistry 1](#) or [Advanced 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

Independence Nontraditional 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](#) or [Advanced Earth Science 1](#)

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

Notes

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

Science - IB Programme

Advanced Middle Years Programme Biology 1

Advanced Middle Years Programme Biology is a survey of the animal, plant, and protist kingdoms, including consideration of the classification, distribution, and life processes of the major groups of each kingdom. Students will use scientific research methods to investigate scientific principles. Extensive laboratory work will be a part of the course, and students are required to submit written lab reports. Students will explore the skills used by practicing biologists and how biology can help solve environmental problems. 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

International Baccalaureate (IB),

Weighted (0.5W)

Schools

Gar-Field High School

Unity Reed 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.

Advanced Middle Years Programme Earth Science

Advanced Middle Years Programme Earth Science is designed for IB students who wish to concentrate on rigorous earth science principles and processes that will lead to more qualitative sciences. Students will investigate the natural sciences of astronomy, oceanography, meteorology, and geology. The IB internal assessment will serve as a guide as students apply the scientific method. 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 credit for graduation.

Credits 1

Grades

9, 10, 11, 12

Course Designation

International Baccalaureate (IB),

Weighted (0.5W)

Schools

Gar-Field High School

Unity Reed High School

Requirements

Enrollment in the IB Programme

Prerequisites

None

IB Biology 1 (HL)

IB Biology is the first year of an overview of the major principles and processes in the areas of molecular and cellular biology, genetics, ecology, and organisms.

Laboratory work is an integral part of this course and students are required to submit written laboratory reports. Key points of the course are structure and function, universality versus diversity, and equilibrium within systems.

Credits 1

Grades

11

Course Designation

Higher Level (HL),

International Baccalaureate (IB),

Weighted (1.0W)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[IB Chemistry 1 \(SL\)](#)

[Advanced Middle Years Programme Biology 1](#)

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.

IB Biology 2 (HL)

IB Biology 2 is an introduction to Advanced anatomy and physiology and plant biology. A review of IB Biology 1 principles and processes in the areas of molecular and cellular biology, genetics, ecology, and organisms is included. Students are required to take the IB examination at the end of the course. Laboratory work is an integral part of this course and students are required to submit written laboratory reports.

Credits 1

Grades

12

Course Designation

Higher Level (HL),

International Baccalaureate (IB),

Weighted (1.0W)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[IB Biology 1 \(HL\)](#)

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.

IB Chemistry 1 (SL)

This course provides a general introduction to chemistry. The topics of study include atomic structure, ionic and covalent compounds, chemical equations, stoichiometry, gases, solutions, organic chemistry, and acids and bases. Students develop experimental design skills to collect and analyze data using graphical and statistical methods. Students will design and conduct experimental research projects and will have an emphasis on qualitative and quantitative study of substances and the changes they undergo. Laboratory investigations form a major component of the course as well as mathematical applications of stoichiometry in problem solving. All students must maintain a portfolio of laboratory work that is submitted to the IB examiners. IB Chemistry 1 meets the course requirements of Chemistry 1. This course has an associated Standards of Learning (SOL) test. Students will participate in this test 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

International Baccalaureate (IB),

Standard Level (SL),

Weighted (1.0W)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[Algebra 1](#)

or [Advanced Algebra 1](#)

One year of laboratory science

IB Chemistry 2 (SL)

This second-level course provides students with a comprehensive hands-on study of major chemical principles emphasizing laboratory experiences and research. Students study research techniques, Advanced problem solving, and synthesis of prior knowledge to investigate IB option topics. Participation in an interdisciplinary science research (Group 4) project is required. Laboratory investigations form a major component of the course, and all students must maintain a portfolio of laboratory work that is presented to the IB examiners. With a satisfactory IB exam score, students may receive credit for introductory college chemistry. Students are required to take the IB Chemistry Standard Level Exam and complete the required hours and assignments tied to the SL Chemistry Internal Assessment.

Credits 1

Grades

11, 12

Course Designation

International Baccalaureate (IB),

Standard Level (SL),

Weighted (1.0W)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[IB Chemistry 1 \(SL\)](#)

IB Environmental Systems and Societies (SL)

This one-year course provides students with a perspective on the interrelationships between ecosystems and societies. Students will emerge from the class with an understanding of complex environmental issues in which the interaction between ecosystems and societies is central. Sustainability is the integrative theme of this course. Students will develop the capability to formulate an informed personal response to both local and global issues. Students will take the Earth Science 1 Standards of Learning assessment only when they have not yet earned sufficient credit for graduation and/or satisfied federal testing requirements. Environmental Systems and Societies can serve as a requirement for either a Group 3 (Individuals and Societies) course or a Group 4 (Experimental Science) course within the IB diploma program. 40 hours of lab work and participation in the Group 4 Project are required by the IBO.

Credits 1

Grades

11, 12

Course Designation

International Baccalaureate (IB),

Standard Level (SL),

Weighted (1.0W)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[Advanced Middle Years Programme Biology 1](#)

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 High School

Osbourn 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](#)

or [Advanced 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 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 High School
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 High School
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](#)

or [Advanced Geometry](#)

Corequisites

[Algebra 2](#) or higher

Band

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

Concert 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

Freedom High School

Gar-Field High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Requirements

Audition *or* permission of the instructor

Prerequisites

None

Intermediate 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

Freedom High School

Gainesville High School

Gar-Field High School

Patriot High School

Potomac High School

Unity Reed 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

Intermediate Woodwind

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

Freedom High School

Gainesville High School

Gar-Field High School

Patriot High School

Potomac High School

Unity Reed 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 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

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

Class Voice 1

Students enrolled in Class Voice 1 will be taught fundamentals of singing technique. The class will emphasize posture, breathing technique, tone quality, diction, legato singing, and auditioning techniques. Students will be required to learn and sing solos from a variety of vocal literature appropriate to their skill level. All students will learn the skills necessary for solo performance. An emphasis will be placed on preparation for auditions including county, district and state events. Students will be required to purchase songbooks and/or music for class study. This is not an ensemble class.

Credits 1

Grades

9, 10, 11, 12

Schools

Unity Reed High School

Prerequisites

None

Intermediate 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

Brentsville District 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

Requirements

Audition *or* permission of the instructor

Prerequisites

None

Intermediate 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

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

Orchestra

Accelerated 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

Freedom High School

Gainesville High School

Gar-Field 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 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

High School Theatre Arts

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

Theatre Arts 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 Arts 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

Hylton High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Theatre Arts 1: Introduction to Theatre](#)

Theatre Arts 3

Students extensively examine dramatic literature, stage and scene design, costume design, theatre history, and performance.

Credits 1

Grades

11, 12

Schools

Battlefield High School

Brentsville District High School

Colgan High School

Gainesville High School

Gar-Field High School

Osbourn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Theatre Arts 2: An Exploration of Performance in Theatre](#)

Theatre Arts 4: Advanced Theatre

Students refine the concepts learned and skills acquired in Theatre 3 and apply them to writing, performing, and directing while showcasing their collaborative and analytical skills.

Credits 1

Grades

12

Course Designation

Weighted (0.5W)

Schools

Battlefield High School

Brentsville District High School

Gainesville High School

Gar-Field High School

Osbourn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

[Theatre Arts 3](#)

Visual Arts - Electives

3D Sculpture 1

3D Sculpture 1 is a hands-on course that allows students to develop technique and knowledge of three-dimensional processes along with creative problem-solving skills. Through the study of the elements of art and principles of design, students will learn to use and arrange three-dimensional media in an expressive way. Students will explore the history of sculpture from representational to non-objective styles.

Credits 1

Grades

9, 10, 11, 12

Schools

Battlefield High School

Gainesville High School

Hylton High School

Osbourn Park High School

Potomac High School

Unity Reed High School

Woodbridge High School

Prerequisites

None

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](#) or [3D Sculpture 1](#)

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
Patriot 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

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 - IB Programme

IB Visual Arts (SL)

IB Visual Arts (Standard Level) is a one-year program resulting in an IB Certificate or Diploma. The course is intended for students committed to serious study in art. Students will combine persistent research with regular studio work, training, visual, perceptual, and critical awareness of the arts of various cultures, as well as developing creativity, technical skills, and a feeling for the fundamentals of design. Students are required to take part in an IB assessment process.

Credits 1

Grades

11, 12

Course Designation

Standard Level (SL),

Weighted (1.0W),

International Baccalaureate (IB)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

One year of high school art

IB Visual Arts 1 (HL)

IB Visual Arts 1 is the first year of a two-year program resulting in an IB Certificate or Diploma. The course is intended for students committed to serious study in art. The aim of this course is to provide opportunities to develop the aesthetic, imaginative, and creative faculties as well as to train visual, perceptual, and critical awareness of arts of various cultures. The portfolio, compiled by the student, will demonstrate intensive concentration in studio work and/or research in preparation for the required IB assessment at the end of the second year. Credit will be awarded upon the completion of the two-year program.

Credits 1

Grades

11, 12

Course Designation

Higher Level (HL),

Weighted (1.0W),

International Baccalaureate (IB)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

Two years of high school art

IB Visual Arts 2 (HL)

IB Visual Arts 2 is the second year of a two-year program resulting in an IB Certificate or Diploma. The course is intended for students committed to serious study in art. Students will combine research with studio work, developing appreciation, creativity, technical skills, and an understanding of the fundamentals of design. Students are required to take part in the IB assessment process. Credit will be awarded upon the completion of the two-year program.

Credits 1

Grades

12

Course Designation

Higher Level (HL),

Weighted (1.0W),

International Baccalaureate (IB)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[IB Visual Arts 1 \(HL\)](#)

English Language Development and EL Support

English Language Development for English 9

This course is designed for English Learners (EL) students at English Language Proficiency (ELP) levels 1-4 and is aligned to the WIDA ELD Standards and the VA English 9 Standards of Learning. The curriculum is focused on accelerating English language development with increased fluency in the expressive (writing, speaking, representing) and interpretive (listening, reading, viewing) modes of communication. Students engage with various literary genres and media and in performance-based tasks to understand and communicate information, ideas, and concepts for academic and social purposes. Students enrolled in this course must be concurrently enrolled in an English 9 course. An elective credit is earned for successful completion. This course may not be taken more than one time.

Credits 1

Grades

9, 10

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 High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Prerequisites

None

English Language Development for English 10

This course is designed for English Learners (EL) students at English Language Proficiency (ELP) levels 1-4 and is aligned to the WIDA ELD Standards and the VA English 10 Standards of Learning. The curriculum is focused on accelerating English language development with increased fluency in the expressive (writing, speaking, representing) and interpretive (listening, reading, viewing) modes of communication. Students engage with various fiction and non-fiction texts, media, and performance-based tasks to understand and communicate information, ideas, and concepts for academic and social purposes. Students enrolled in this course must be concurrently enrolled in an English 10 course. An elective credit is earned for successful completion. This course may not be taken more than one time.

Credits 1

Grades

9, 10, 11

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 High School

Osborn Park High School

Patriot High School

Potomac High School

Unity Reed High School

Prerequisites

None

English Language Development for English 11

This course is designed for English Learners (EL) students at English Language Proficiency (ELP) levels 1-4 and is aligned to the WIDA ELD Standards and the VA English 11 Standards of Learning. The curriculum is focused on accelerating English language development with increased fluency in the expressive (writing, speaking, representing) and interpretive (listening, reading, viewing) modes of communication. Students engage with a variety of literary genres and media and complete performance-based tasks to understand and communicate information, ideas, and concepts for academic and social purposes. Students enrolled in this course must be concurrently enrolled in an English 11 course. An elective credit is earned for successful completion. This course may not be taken more than one time.

Credits 1

Grades

10, 11, 12

Schools

Brentsville District High School

Colgan High School

Forest Park High School

Freedom High School

Gar-Field High School

Hylton High School

Independence Nontraditional High School

Patriot High School

Potomac High School

Unity Reed High School

Prerequisites

None

English Language Development for English 12

This course is designed for English Learners (EL) students at English Language Proficiency (ELP) levels 1-4 and is aligned to the WIDA ELD Standards and the VA English 12 Standards of Learning. The curriculum is focused on accelerating English language development with increased fluency in the expressive (writing, speaking, representing) and interpretive (listening, reading, viewing) modes of communication. Students engage with various literary genres and media and in performance-based tasks to understand and communicate information, ideas, and concepts for academic and social purposes. Students enrolled in this course must be concurrently enrolled in an English 12 course. An elective credit is earned for successful completion. 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

Brentsville District High School

Colgan High School

Forest Park High School

Patriot High School

Potomac High School

Unity Reed High School

Prerequisites

None

World Language - IB Programme

Advanced Middle Years Programme French 3, Advanced Middle Years Programme Spanish 3

This course is part of the IB sequence to prepare students for completion of the IB Programme and the external exam in level 5. Students will be able to use French or Spanish effectively as a means of practical communication; gain insight into the life and civilization of the communities where the language is spoken, and into the local and standard aspects of language; have positive attitudes towards speakers of other languages and an appreciation of, and empathy for, other cultures; and have a basis of communication skills necessary for future study in the IB World Language strand of courses. The global contexts and Assessment Criteria will be used as a means of broadening student experience on knowledge and skills. This course will prepare students for the IB French or Spanish 4 course.

Credits 1

Grades

9, 10

Course Designation

International Baccalaureate (IB),

Weighted (0.5W)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[French 2](#) for Advanced Middle Years Programme French 3; [Spanish 2](#) for Advanced Middle Years Programme Spanish 3

IB French 4 (SL), IB Spanish 4 (SL)

IB World Language 4 is designed to develop proficiency in highly motivated language students. Students will be expected to master all the objectives of the Level IV curriculum in a more rigorous and accelerated manner. The course seeks to develop all skills emphasizing language for communication, using authentic materials in preparation for the IB Language B Exam. An introduction to the IB Language B Program will be an integral part of this class.

Credits 1

Grades

11, 12

Course Designation

Standard Level (SL),

Weighted (1.0W),

International Baccalaureate (IB)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[Advanced Middle Years Programme French 3](#) for IB French 4 (SL); [Advanced Middle Years Programme Spanish 3](#) for IB Spanish 4 (SL)

Notes

Students may take this course in grade 10 if they started the appropriate language sequence in middle school.

IB French 5 (SL), IB Spanish 5 (SL)

This is an Advanced level course designed to strengthen fluency and proficiency in both oral and written world languages and to prepare students for the IB Language B Exam. The student will be able to speak the language with sufficient accuracy to participate in formal and informal conversations with ease. The student will be able to appreciate, discuss and comment (orally and in writing) on various literary forms. The in-depth study of literary works, contemporary articles and the review of complex linguistic structures will substantiate the course. Compositions will be on literary and issue-oriented themes. Self-expression will be encouraged through individual and group activities, oral presentations, and writing assignments.

Credits 1

Grades

12

Course Designation

Standard Level (SL),

Weighted (1.0W),

International Baccalaureate (IB)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[IB French 4 \(SL\)](#) for IB French 5 (SL); [IB Spanish 4 \(SL\)](#) for IB Spanish 5 (SL)

IB Middle Years Programme French 2, IB Middle Years Programme Spanish 2

This course is part of the IB sequence to prepare students for completion of the IB Programme and the external exam in level 5. Students will be able to: use French or Spanish effectively as a means of practical communication; gain insight into the life and civilization of the communities where the language is spoken, and into the local and standard aspects of language; have positive attitudes towards speakers of other languages and an appreciation of, and empathy for, other cultures; and have a basis of communication skills necessary for future study in the IB World Language strand of courses. The integration of the Advanced Middle Years Programme (Adv-MYP) Global Concepts and Assessment Criteria will be used as a means of broadening student experience and helping students to develop attitudes and values based on knowledge and skills. This course will prepare students for the Adv-MYP French or Spanish 3 course.

Credits 1

Grades

9, 10

Course Designation

International Baccalaureate (IB)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

[French 1](#) for Middle Years Programme French 2; [Spanish 1](#) for Middle Years Programme Spanish 2

IB Spanish 4 (HL)

IB Spanish 4 (HL) is the first segment of a two-year series that prepares students to take the IB Spanish Exam. The development of all language skills-listening, speaking, reading, writing-continues, with emphasis on using the language in realistic contexts with authentic materials, to include films, recordings, newspapers, and magazines. Selected literary works are included. Examples and questions from past IB exams are used as learning tools at appropriate times throughout the course. Students are required to take the higher-level examination.

Credits 1

Grades

11

Course Designation

Higher Level (HL) ,

Weighted (1.0W),

International Baccalaureate (IB)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

Three years of Spanish **or** equivalency test. [Advanced Middle Years Programme Spanish 3](#) is preferred immediately prior to this course.

IB Spanish 5 (HL)

IB Spanish 5 (HL) is the second segment of a two-year series that prepares students to take the IB Spanish Exam. The development of all language skills-listening, speaking, reading, writing-continues, with emphasis on using the language in realistic contexts with authentic materials, to include films, recordings, newspapers, and magazines. Selected literary works are included. Examples and questions from past IB exams are used as learning tools at appropriate times throughout the course. Students are required to take the higher-level examination.

Credits 1

Grades

12

Course Designation

Higher Level (HL) ,

Weighted (1.0W),

International Baccalaureate (IB)

Schools

Gar-Field High School

Unity Reed High School

Prerequisites

Four years of Spanish **or** equivalency test. [IB Spanish 4 \(HL\)](#) is preferred immediately prior to this course.

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

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
Independence Nontraditional High School
Osborn Park High School
Patriot High School
Potomac High School
Unity Reed High School
Woodbridge High School

Prerequisites

None

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
Osbourn 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

Osbourn 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

Course Designation

Weighted (0.5W)

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

Osbourn Park 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)