

WESTFIELD HIGH SCHOOL



**Course Catalog
2021-2022**

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POSTSECONDARY PLANNING

Each high school in Fairfax County Public Schools (FCPS) provides a sequential postsecondary planning program that focuses on the acquisition of knowledge, skills, and self-understanding necessary to achieve postsecondary goals. As part of this planning, students develop an Academic and Career Plan. This plan provides opportunities for students to identify strengths and interests, explore college and career options, and develop postsecondary goals. Students are counseled regarding opportunities for postsecondary education, financial aid, and employment prior to high school graduation. To assist in the process, information and resources are provided through the school counseling program and are available online. Additionally, each high school has a staffed Career Center with current college and career resource materials. All students and parents are encouraged to review the resources available in Naviance. For more information, visit the following link:

<https://www.fcps.edu/resources/college-and-career-planning/college-and-post-secondary-planning/naviance-student>

In high school, students will explore, prepare for, and experience various academic and career opportunities as an important part of developing their own Academic and Career Plan. Participating in Service Learning and Work-Based Learning activities encourages growth of valuable, transferable skills that will contribute to lifelong learning and postsecondary success. These career-connected activities engage students in authentic opportunities for goal setting and continuous reflection on their progress.

Service Learning

Connecting classrooms with the community provides a sense of civic responsibility by encouraging students to assess their impact on the community and their roles as global and ethical citizens. Service Learning promotes career exploration through authentic, career-connected experiences. Students and teachers collaborate with local leaders to address community needs, resulting in service to the community and the development of social, emotional, and academic skills. Opportunities may involve direct service, indirect service, or advocacy.

Work-Based Learning

Work-based learning is a coordinated educational strategy that provides students with a continuum of career-connected experiences to support their postsecondary goals and prepare them for education and employment beyond high school. Students act both independently and collaboratively in engaging learning opportunities that connect classroom learning to the world of work through partnership with local businesses or organizations. Work-based learning experiences reinforce the importance of classroom learning, offer the opportunity to explore potential career pathways, and practice and demonstrate workplace readiness skills that align to FCPS Portrait of a Graduate. Work-based learning can help prepare students in all grade levels for an economy that demands that workers have a strong academic background, career knowledge and skills, are adaptable to change, and are prepared for lifelong learning.

STATE DIPLOMA SEALS

1. The **Governor's Seal** shall be awarded to students who complete the requirements for an Advanced Studies Diploma with an average grade of "B" or better and successfully complete college-level coursework that will earn the student at least nine transferable college credits in Advanced Placement (AP), International Baccalaureate (IB), Cambridge, or dual enrollment courses.
2. Students who complete the requirements for a Standard or Advanced Studies Diploma with an average grade of "A" shall receive a **Board of Education Seal** on the diploma.
3. The **Board of Education's Career and Technical Education Seal** will be awarded to students who earn a Standard or Advanced Studies Diploma and complete a prescribed sequence of courses in a

career and technical education concentration or specialization that they choose and maintain a “B” or better average in those courses, or pass an examination or an occupational competency assessment in a career and technical education concentration or specialization that confers certification or occupational competency credential from a recognized industry, trade or professional association, or acquire a professional license in that career and technical education field from the Commonwealth of Virginia. The Board shall approve all professional licenses and examinations used to satisfy these requirements.

4. The **Board of Education’s Seal of Advanced Mathematics and Technology (available for students entering high school prior to 2018-19)** will be awarded to students who earn a Standard or Advanced Studies Diploma and (i) satisfy all of the mathematics requirements for the Advanced Studies Diploma (four units of credit including Algebra II; two verified units of credit) with a “B” average or better; and (ii) either (a) pass an examination in a career and technical education field that confers certification from a recognized industry, or trade or professional association; (b) acquire a professional license in a career and technical education field from the Commonwealth of Virginia; or (c) pass an examination approved by the Board that confers college-level credit in a technology or computer science area. The Board shall approve all professional licenses and examinations used to satisfy these requirements.

5. The **Board of Education’s Seal for Excellence in Civics Education** will be awarded to students who earn a Standard, Advanced Studies, or Modified Standard Diploma and: (i) complete Virginia and United States History and Virginia and United States Government courses with a grade of “B” or higher; and, (ii) have good attendance and no disciplinary infractions as determined by local school board policies and, (iii) complete 50 hours of voluntary participation in community service or extracurricular activities. Activities that would satisfy the requirements of clause (iii) of this subdivision include: (a) volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate; (b) participating in Boy Scouts, Girl Scouts, or similar youth organizations; (c) participating in JROTC; (d) participating in political campaigns or government internships, or Boys State, Girls State, or Model General Assembly; or (e) 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.

6. The **Seal of Biliteracy** will be awarded to students who earn a Board of Education-approved diploma and (i) pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level; and (ii) be proficient at the intermediate-mid level or higher in one or more languages other than English, as demonstrated through an assessment from a list to be approved by the Superintendent of Public Instruction.

7. The **Board of Education’s Seal for Excellence in Science and the Environment** shall be awarded to students who earn either a Standard Diploma or Advanced Studies Diploma and (i) complete at least three different first-level board-approved laboratory science courses and at least one rigorous advanced-level or postsecondary-level laboratory science course, each with a grade of “B” or higher; (ii) complete laboratory or field-science research and present that research in a formal, juried setting; and (iii) complete at least 50 hours of voluntary participation in community service or extracurricular activities that involve the application of science such as environmental monitoring, protection, management, or restoration.

8. The **Board of Education’s Diploma Seal for Science, Technology, Engineering, and Math (STEM)** shall be awarded to students who earn either a Standard Diploma or an Advanced Studies 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 listing within the [CTE Administrative Planning 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.

GRADING SYSTEM

A	(93-100)	= 4.0	B-	(80-82)	= 2.7	D+	(67-69)	= 1.3
A-	(90-92)	= 3.7	C+	(77-79)	= 2.3	D	(64-66)	= 1.0
B+	(87-89)	= 3.3	C	(73-76)	= 2.0	F	(below 64)	= 0.0
B	(83-86)	= 3.0	C-	(70-72)	= 1.7			

GRADE POINT AVERAGE

Grade point average (GPA) is calculated on the basis of **all courses for which high school credit has been earned or attempted, including repeated courses previously passed**. All classes appearing on the high school transcript including high school classes taken in summer school, middle school, elementary school, or online are included when calculating GPA.

Advanced Placement (AP) courses, specified International Baccalaureate (IB) courses, courses taken in high school for dual enrollment (DE) credit with a postsecondary institution, and other courses approved through the annual course review process receive an additional 1.0 added to the final grade upon successful completion of the course. Successful completion is defined as completing the course with a passing grade. For example, a final grade of “A” in an AP, IB, or DE course shall receive 5.0 quality points for purposes of calculating grade point average.

Honors courses in mathematics, science, English, social studies, designated Thomas Jefferson High School courses, and other courses approved through the annual course review process receive an additional 0.5 weight added to the final grade upon successful completion of the course. Successful completion is defined as completing the course with a passing grade. For example, a final grade of “A” in an honors class shall receive 4.5 quality points.

Courses dropped will not be counted in the grade point average (GPA) except when a final grade of “F” is received: (a) for the fourth grading period of a full-year course, or (b) for the second grading period of a semester course. A student's GPA is determined by dividing the total number of quality points earned by the number of courses included in the transcript. The grade point average is reported to three decimal places (thousandths). Fairfax County Public Schools does not rank its students.

EXPUNGING HIGH SCHOOL COURSES TAKEN IN MIDDLE SCHOOL

In accordance with the Virginia Board of Education regulations, FCPS Regulation 2408 permits parents of students who take a high school credit-bearing course in middle school to request that the grade be omitted from the student's high school transcript and the student not earn high school credit for the course. **Parents must make this request in writing no later than the end of the first nine weeks of the school year following completion of the course.** The form to make this request, along with the process for making the request, is available at: [Request to Expunge High School Courses Taken in Middle School](https://www.fcps.edu/sites/default/files/media/forms/is104.pdf) (<https://www.fcps.edu/sites/default/files/media/forms/is104.pdf>) or through your student's school counselor. Parents are strongly advised to discuss this decision with their student's school

counselor and the impact of expunging a course on desired high school diploma type and standard and verified credit requirements.

WITHDRAWAL POLICY

For the first grading period only, a student has five days after the date on which report cards are sent home in which to drop a course without having a grade recorded. After this period of time and before the fourth quarter, courses dropped are recorded with a WP (withdrawn passing) or WF (withdrawn failing). Courses dropped after the start of the fourth quarter will be recorded as a WP or "F" (failure). Courses dropped are not counted in the grade point average except when an F is received for the course. Middle schools do not calculate grade-point averages; however, if a high school credit course is taken by a middle school student, courses dropped are not counted in the high school grade-point average except when an "F" is received for the course, as outlined above. Unless the principal approves an exception, a student may not withdraw during the final quarter of a course if he or she is passing the course.

If a student drops a course during the:

- 1st quarter: No penalty and nothing is recorded.
- 2nd quarter: WP (withdrawn passing) or WF (withdrawn failing) is recorded. Exception: For semester courses a
WP or F for failure is recorded.
- 3rd quarter: WP or WF is recorded.
- 4th quarter: WP or F for failure is recorded.

PASS-FAIL

The Fairfax County School Board policy permits students to take certain courses on a pass-fail basis.

- With parental/guardian approval, middle and high school students are given the option of taking one high school elective credit per school year on a pass-fail basis. For high school students, this may be applied to required health and physical education credits, world language credits, and to credits other than those required for English, social studies, mathematics, and laboratory science and specialized courses such as Principles of Engineering Technology and Senior Technology Research taught at Thomas Jefferson High School for Science and Technology. For middle school students, this may be applied only to high school world language credits.
- Self-directed courses, (e.g., Economics and Personal Finance Self-Paced) and the Independent Study elective course are automatically graded on a pass-fail basis and do not count towards the one optional course students may elect to take pass-fail during a school year.
- A double or triple-period class taken for two or three credits in the technical fields may be taken on a pass-fail basis as the one pass-fail course per year.
- No student may take more than two single semester electives or one full-year elective per school year on the pass-fail system except as indicated above.
- Any student wishing to take a course as pass-fail shall indicate this by completing a [Request for Pass-Fail Status form](https://www.fcps.edu/sites/default/files/media/forms/se119.pdf) (<https://www.fcps.edu/sites/default/files/media/forms/se119.pdf>) requiring parent and/or guardian approval and returning it to designated school personnel on or before the 22nd school day or by the first half of the first grading period subsequent to entering the course. Students in schools using a semester block schedule must return the parent approval form to the designated school personnel on or before the 11th school day or by the first half of the first grading period subsequent to entering the course. This decision may not be reversed.
- If a student drops a class being taken on a pass-fail basis and transfers to a new class, the student shall have ten school days to make a decision as to whether the new class will be taken on a pass-fail basis. Students in schools using a semester block schedule shall have five school days to make a

decision as to whether the new class will be taken on a pass-fail basis, provided it is an elective course. This decision may not be reversed.

- Grades are determined as follows:
- "P" for an A, A-, B+, B, B-,C+,C, C-, D+, or D which will receive credit but will not count in grade-point average.
- "F" for an F which will receive no credit but will be counted in grade-point average.

AUDIT

In special circumstances, students may be allowed to attend one course without receiving credit for it. The audit application must be completed, submitted, and approved prior to the beginning of the course. Students may audit a course one year and then take it for credit the next year. Students who audit a course must meet all attendance requirements and strive toward completion of Program of Studies (POS) standards, benchmarks, and indicators. The decision may not be reversed with the exception of English language learners placed in a content class who may be changed from audit to credit status at the request of the content teacher and ESOL department chair if the student demonstrates mastery of the course content.

PROMOTION POLICY

Middle School

To qualify for promotion, seventh and eighth grade middle school students must demonstrate knowledge and competency based upon identified standards of achievement in the four core areas of language arts, mathematics, science, and social studies. To guarantee promotion, students must demonstrate proficiency in the foundational knowledge and skills in each of the four core subject areas and earn a passing final grade based on grade level expectations.

Students normally shall progress annually from level to level. Exceptions may be made when, in the judgment of professional staff members, such exceptions are in the best educational interests of the students involved. Retention of students shall be affected only after prior notification and explanation to the student's parents and/or guardians; however, the decision shall rest with the base school principal.

High School

The minimum requirements for placement in high school grades are as follows:

To be placed in grade: The student must:

- 9 Be promoted from 8th grade
- 10 Be promoted from 9th grade and have earned at least 5 standard units of credit.
- 11 Have earned at least 10 standard units of credit.
- 12 Have a planned program providing sufficient credits to ensure graduation the following June or August.

WORLD LANGUAGES PROFICIENCY CREDIT

The Credit Exam for World Languages is typically given each fall to students who wish to demonstrate written proficiency in one of several languages: American Sign Language, Amharic, Arabic, Bengali/Bangla, Chinese/Mandarin, Farsi/Persian, French, German, Greek, Hindi, Hebrew, Italian, Japanese, Korean, Nepali, Pashto, Portuguese, Punjabi, Russian, Sanskrit/Sanskritam, Somali, Spanish, Tagalog/Pilipino, Tamil, Telugu, Tigrinya, Turkish, Twi, Urdu, or Vietnamese. The assessment has been postponed until spring for the 2020-2021 school year. Students who are successful on the exam may earn up to three world languages credits which may be used to fulfill the world languages requirements

and/or electives of the Advanced Studies or Standard Diplomas. In addition, middle school students in grades 7-8 enrolled in ELD courses (5710-5730) may receive elective credits toward high school graduation requirements for a Standard or Advanced Studies Diploma, up to two world languages credits toward high school graduation requirements towards the Advanced Studies Diploma, or a combination of these options. High school students enrolled in ELD 5720 and 5730 courses may be awarded elective credits toward high school graduation requirements for a Standard or Advanced Studies Diploma, up to four world languages credits toward high school graduation requirements for fulfilling the world languages requirements towards the Advanced Studies Diploma, or a combination of these options.

For more information on the exam, go to: [Credit Exam For World Languages](https://www.fcps.edu/academics/high-school-academics-9-12/world-languages/credit-exam-world-languages) (<https://www.fcps.edu/academics/high-school-academics-9-12/world-languages/credit-exam-world-languages>) or contact the World Languages Team at 571-423-4602.

COURSES TAKEN OUTSIDE OF FCPS

Currently enrolled FCPS students who wish to take a course outside of FCPS and transfer back the credit must follow the guidelines provided in the current version of FCPS [Regulation 2408](http://www.boarddocs.com/vsba/fairfax/Board.nsf/files/AMQP9W6396A7/$file/R2408.pdf) ([http://www.boarddocs.com/vsba/fairfax/Board.nsf/files/AMQP9W6396A7/\\$file/R2408.pdf](http://www.boarddocs.com/vsba/fairfax/Board.nsf/files/AMQP9W6396A7/$file/R2408.pdf)). Please note that there are limited options for students to pursue credit outside of FCPS during the September—June school year, with more options available in the summer. Students must have written approval from their school prior to enrolling in the course. The course must meet the requirements outlined in Regulation 2408 and Virginia Board of Education regulations. For additional information about pursuing coursework outside of FCPS for credit, please contact your school counselor.

EARNING COLLEGE CREDITS IN HIGH SCHOOL

FCPS provides a college readiness curriculum to students through standard and honors level courses. In addition, students may take advantage of opportunities to earn college credit while enrolled in high school through Advanced Placement (AP), International Baccalaureate (IB), Concurrent Enrollment and Dual Enrollment Courses. College credit for AP and IB courses may be provided by colleges and universities upon successful completion of the associated AP or IB examination. Concurrent Enrollment courses are taken on a college or university campus for which students can receive both college and high school credit for the course(s). The college course(s) must match a course taught in FCPS and meet the requisite number of seat hours. Individual colleges and universities set the cost for their courses and tuition is paid directly to the college or university. For more information on Concurrent Enrollment and courses at area universities, please visit: [Concurrent Enrollment](https://www.fcps.edu/academics/graduation-requirements-and-course-planning/college-credit-high-school/concurrent) (<https://www.fcps.edu/academics/graduation-requirements-and-course-planning/college-credit-high-school/concurrent>).

Dual Enrollment courses are courses taught at the high school by an FCPS teacher that offer high school and college credit through agreements with a college or university. The number of college credits the student will earn through a dual enrollment course is determined by the college or university. Students enrolled in a dual enrollment course may pay college tuition; however, because FCPS provides the instructor as well as the facility, the tuition may be significantly discounted from what a student would pay if they took the course at the college or university, or may be provided at no cost. Students who wish to take a dual enrollment course must meet criteria set by the college or university for admission into the course. Students enrolling in a dual enrollment course will work directly with their high school to register for the course. With the exception of highly specialized Career and Technical Education (CTE) courses offered only at high school academy sites, individual high schools determine if they will offer dual enrollment courses based on teacher endorsement requirements, existing course offerings, and student interest. For more information on dual enrollment opportunities and the opportunity to earn a General Education Certificate, speak with your school counselor or visit: [Earning College Credit While Enrolled in](#)

[High School](https://www.fcps.edu/academics/graduation-requirements-and-course-planning/college-credit-high-school)

(<https://www.fcps.edu/academics/graduation-requirements-and-course-planning/college-credit-high-school>!).

ADVANCED ACADEMIC PROGRAMS

Advanced Academic Programs (AAP) responds to the requirement from the Virginia Board of Education that each local school division plan and implement an instructional program for gifted and talented students at all levels K-12. Courses designated as Honors, International Baccalaureate (IB), and Advanced Placement (AP) fulfill this requirement.

Advanced Academic Programs at the high school level are comprised of Honors courses in 9th through 12th grades, and the Advanced Placement (AP) program in 10th, 11th, and 12th grades or the IB Middle Years Program (IBMYP) in 9th and 10th grades, and the IB Diploma Program (IBDP) in 11th and 12th grades. AAP courses are open to all students committed to rigorous academic work. Student transfer applications may be submitted for an AP or IBDP program if the base school does not offer the desired program of study. For more information on the program, please visit: [Advanced Academic Programs](https://www.fcps.edu/academics/academic-overview/advanced-academic-programs) (<https://www.fcps.edu/academics/academic-overview/advanced-academic-programs>).

AP and IBDP courses are advanced-level courses with external exams. Students who take AP and IBDP courses are strongly encouraged to complete the corresponding examinations.

Differentiated curricula and teaching strategies which stress critical thinking skills, creativity, problem-solving, and relationship building are integrated into the content of all advanced academic course offerings. The four-year high school sequence of courses in each of the academic disciplines provides a continuous and balanced advanced academic program. There is no screening process to access Honors, AP, or IB courses; however, prerequisites and/or co-requisites must be met. For more information on course sequencing, go to: [High School Course Sequencing](https://www.fcps.edu/academics/graduation-requirements-and-course-planning/high-school-course-sequencing) (<https://www.fcps.edu/academics/graduation-requirements-and-course-planning/high-school-course-sequencing>).

Advanced Placement

Centreville, Chantilly, Fairfax, Falls Church, Hayfield, Herndon, Jefferson, Lake Braddock, Langley, Madison, McLean, Oakton, South County, West Potomac, West Springfield, Westfield, and Woodson High Schools offer the Advanced Placement (AP) program. Individual AP courses are also offered at other high schools. All students enrolled in an AP course are strongly encouraged to complete the end-of-course AP exam. Students may receive college credit and/or placement based upon their exam scores. The AP program is offered in English, social studies, mathematics, science, world languages, fine arts, and Capstone (interdisciplinary). AP courses are offered as open enrollment to all students committed to rigorous academic work. Students taking at least three AP exams, with at least a score of 3 on each, are recognized by the College Board as *AP Scholars*, and students may earn the AP Capstone Diploma or the AP Seminar and Research Certificate with qualifying scores. Further information about the AP program may be obtained by contacting the school counselor or AP coordinator at the participating school.

International Baccalaureate Middle Years Program

In partnership with feeder middle schools, Annandale, Edison, Justice, Lewis, Mount Vernon, Robinson, and South Lakes High Schools implement the IB Middle Years Program (IBMYP) in 9th and 10th grades. Students may choose to work toward the FCPS IBMYP certificate at authorized high schools, which requires enrollment in at least two years of world language courses, the successful completion of a

personal project at the end of 10th grade, completion of service learning requirements and reflections, and success on the IBMYP 10th grade assessments.

International Baccalaureate Diploma Program

Annandale, Edison, Justice, Lewis, Marshall, Mount Vernon, Robinson, and South Lakes High Schools offer the International Baccalaureate Diploma Program (IBDP). Students may enroll as a courses student or an IB Diploma candidate. As a IBDP courses student, students may choose one or more IBDP courses. The IBDP program is offered in English, social studies, mathematics, science, world languages, and fine arts. IBDP courses are offered as open enrollment to all students committed to rigorous academic work.

IB Diploma candidates must select at least one subject from each of six IB subject groups, including English, world languages, mathematics, science, social studies, and arts or an elective. Students take at least three and not more than four of these subjects at higher level (HL); the others at standard level (SL). All students enrolled in an IBDP course are strongly encouraged to complete the end-of-course IBDP exams. IB Diploma candidates must complete 150 hours of extracurricular activities and community service, take the *Theory of Knowledge* course, and write a 4000 word essay on a topic of their choice. Students in IB schools may also take IBDP courses in areas of academic strength and interest. IBDP course students take one or more IBDP courses and the associated exam(s) and receive recognition for each IB exam with a score of “4” or better.

International Baccalaureate Career-related Program

Lewis, Mount Vernon, and South Lakes offer the IB Career-related Program (IBCP). To qualify for the IBCP students must complete a two-year CTE sequence, two IBDP courses, and demonstrate world language development. IBCP candidates must also complete community service, take the *Personal and Professional Skills* course, and complete a reflective project related to their CTE course of study.

Further information about the IB programs may be obtained by contacting the school counselor or IB coordinator at the participating school.

Thomas Jefferson High School For Science And Technology

The Thomas Jefferson High School for Science and Technology (TJHSST) is a unique Fairfax County public school offering a comprehensive college preparatory program emphasizing the sciences, mathematics, and technology. As the Governor’s School for Science and Technology in Northern Virginia, the school serves students selected in a competitive process who intend to pursue college preparation in the sciences, engineering, or related fields. Students may obtain information about application procedures and deadlines from the School Counseling Office of their local schools or by calling the TJHSST Office of Admissions at 571-423-3770 or: [TJHSST Admissions \(https://www.fcps.edu/registration/thomas-jefferson-admissions\)](https://www.fcps.edu/registration/thomas-jefferson-admissions).

CAREER AND TECHNICAL EDUCATION

Course descriptions for Career and Technical Education (CTE) courses can be found under Business and Information Technology, Family and Consumer Sciences, Health and Medical Sciences, Marketing, Technology and Engineering Education, and Trade and Industrial sections of the *Standard and Optional Course Offerings* guides. School counselors can provide further information on specialized courses available at the following locations: Chantilly, Edison, Fairfax, Falls Church, Marshall, and West Potomac High School Academies, as well as at Fair Oaks Shopping Center, Spring Village Residential Construction Site, Fairfax County Fire and Rescue Academy, and the Plum Center for Lifelong Learning.

Please visit the CTE website at [Career and Technical Education](https://www.fcps.edu/academics/academic-overview/career-and-technical-education-cte) (<https://www.fcps.edu/academics/academic-overview/career-and-technical-education-cte>).

FCPS offers students opportunities at four Governor's Academies. Chantilly and Marshall Governor's STEM Academies specialize in engineering and information technology. Falls Church and West Potomac Governor's Health Sciences Academies focus on five pathways in the area of health care.

FCPS has established articulation agreements with a variety of postsecondary organizations that allow students to take certain career and technical education classes in high school and receive college placement credit. In addition, FCPS has dual enrollment agreements with Northern Virginia Community College (NVCC), and Shenandoah University whereby students can earn college credits for select career and technical education classes. A full listing of Articulation and Dual Enrollment Agreements is available at [Dual Enrollment](https://www.fcps.edu/academics/high-school-academics-9-12/advanced-academics/dual-enrollment) (<https://www.fcps.edu/academics/high-school-academics-9-12/advanced-academics/dual-enrollment>) and [Career and Technical Education Articulation Agreements](https://www.fcps.edu/academics/graduation-requirements-and-course-planning/college-credit-high-school/career-and) (<https://www.fcps.edu/academics/graduation-requirements-and-course-planning/college-credit-high-school/career-and>).

STUDENT FEES

Courses that require a student fee for consumable materials have been designated in this catalog. In addition, FCPS covers the cost of up to six AP or IB exams during the time a student is in FCPS. Fees are required for exams taken beyond these six. The schedule of divisionwide student fees to be charged for any elective course can be found in [Notice 5922](http://www.boarddocs.com/vsba/fairfax/Board.nsf/files/AQ9JWQ48FFD5/$file/N5922%202017-18.pdf) ([http://www.boarddocs.com/vsba/fairfax/Board.nsf/files/AQ9JWQ48FFD5/\\$file/N5922%202017-18.pdf](http://www.boarddocs.com/vsba/fairfax/Board.nsf/files/AQ9JWQ48FFD5/$file/N5922%202017-18.pdf)). Students eligible for the federal Free and Reduced Price meals program may have course and test fees reduced or waived. For more information, see your school counselor.

FULL DAY SCHEDULE

Students enrolled in FCPS are expected to maintain a full-day schedule. Students with personal, family, or economic needs may begin the process to request a waiver of full day schedule requirements by speaking with their school counselor. Transportation arrangements for a student on this modified schedule are the responsibility of the family. Students considering this option should discuss possible implications for college admissions and Virginia High School League (VHSL) eligibility with their school counselor prior to reducing their schedule. Schools will attempt to honor all requests; however, scheduling conflicts may prohibit some students from accessing this option. For additional information about full day schedule requirements, visit: [Regulation 2412](http://www.boarddocs.com/vsba/fairfax/Board.nsf/files/AE8G3Y41E78C/$file/R2412.pdf) ([http://www.boarddocs.com/vsba/fairfax/Board.nsf/files/AE8G3Y41E78C/\\$file/R2412.pdf](http://www.boarddocs.com/vsba/fairfax/Board.nsf/files/AE8G3Y41E78C/$file/R2412.pdf)).

FCPS ONLINE COURSES

FCPS Online Campus is a program designed to provide students with an online option for earning credits toward high school graduation. This program supports the Governor’s “Early College Scholars” program by providing advanced courses to students.

Students registered in any Fairfax County Public School or alternative high school are eligible to apply to take up to two courses through the FCPS Online Campus for scheduling conflicts or personal reasons, including health. Tuition will be charged when a student is already scheduled to receive seven credits during the academic year or when a student enrolls in an FCPS online summer course. Students must meet all regular eligibility requirements to enroll in an FCPS online course. Students interested in enrolling in an FCPS Online Campus course should consult their school counselor for information regarding the registration process. Transportation arrangements for a student on this modified schedule are the responsibility of the family. For more information go to: [Online Campus](#)

The following courses are currently available online:

Algebra	AP English Literature	AP Psychology
Algebra 1 HN	Biology 1	AP US History
Geometry	Biology 1 HN	Advanced Accounting
Geometry HN	Chemistry 1	Economics & Pers. Fin
Algebra 2	Chemistry 1 HN	Exploring the Language of Medicine
Algebra 2 HN	Physics 1	Spanish 1
Precalculus w/Trig	Geosystems	Spanish 2
Precalculus w/Trig DE	Oceanography	Spanish 3
Precalculus w/Trig HN	World History & Geography 1	AP Spanish Language
AP Statistics	World History & Geography 1 HN	AP Spanish Literature
Creative Writing 1	World History & Geography 2	Korean 1
Creative Writing 2	World History & Geography 2 HN	Korean 2
English 9	AP World History	Korean 3
English 9 HN	VA & US History	Korean 4
English 10	VA/U.S. History HN	Chinese 1
English 10 HN	VA/U.S. Government	Chinese 2
English 11	VA/U.S. Government HN	Chinese 3
English 11 HN	VA/U.S. Government DE	Chinese 4
English 12	AP US Government	American Sign Language 1
English 12 DE (Composition)	AP Macroeconomics / AP Microeconomics	American Sign Language 2
English 12 DE (Literature)	Psychology	Arabic 1
AP English Language		Arabic 2

CAREER AND TECHNICAL EDUCATION

Career and Technical Education (CTE) is at the forefront of preparing students to be “college- and career-ready” by providing programs through which students acquire core academic skills and knowledge, learn relevant technical applications, and prepare for postsecondary studies and employment opportunities following high school graduation. Career experiences and connections to business through CTE courses allow students to explore multiple career pathways. These courses may lead to industry recognized certifications or state licensure. Students taking certain CTE courses may earn college credit through dual enrollment and articulation agreements with postsecondary institutions. For more information, please visit the [FCPS website](#) and search for CTE.

2021-2022 HIGH SCHOOL CTE COURSE OFFERINGS**Business and Information Technology**

Accounting (also in the Online Campus)
 Business Law
 Business Management
 Cybersecurity Fundamentals
 Design, Multimedia, and Web Technologies
 Digital Applications
 Game Design
 IB Business Management
 Information Systems
 Principles of Business
 Programming
 Web Page Development

Family and Consumer Sciences

Child Development and Parenting
 Culinary Arts
 Early Childhood Careers
 Fashion Careers
 Food and Hospitality Management
 Hospitality
 Introduction to Interior Design
 Life Planning
 Nutrition and Wellness
 Teachers for Tomorrow

Health and Medical Sciences

See Academy Course Offerings

Marketing

Entrepreneurship
 Fashion Marketing

Marketing (continued)

Global Marketing
 Introduction to Marketing
 Marketing
 Marketing Management
 Sports and Entertainment Marketing

Military Sciences

Air Force Junior Reserve Officer Training Corp
 Army Junior Reserve Officer Training Corp
 Marine Junior Reserve Officer Training Corp
 Naval Junior Reserve Officer Training Corp

Technology and Engineering Education

Advanced Drawing
 Aerospace Science
 Architectural Drawing
 Electronics
 Engineering Drawing
 IB Design and Technology
 STEM Advanced Engineering
 STEM Design
 STEM Engineering
 STEM Pre-Engineering
 STEM Robotics

Trade and Industrial

Automotive Technology
 Cosmetology
 Criminal Justice

Work-based Learning

Internship

2021-2022 MIDDLE SCHOOL CTE COURSE OFFERINGS**Business and Information Technology**

Coding and Innovative Technologies
 Computer Exploration
 Computer Solutions

Family and Consumer Sciences

Family and Consumer Sciences 6, 7, and 8

Technology and Engineering Education

Introduction to Technology
 Engineering 1 – Design and Modeling
 Engineering 2 – Simulation and Fabrication
 Engineering 3 – Advanced Drawing and Simulation

No student in Fairfax County Public Schools shall on the basis of race, color, sex (including sexual harassment, Title IX, and pregnancy), marital status, religion, national origin, age, disability, or genetic information be excluded from or denied enrollment in any academic activity or course. The director of the Office of Equity and Compliance has been designated to handle inquiries and complaints regarding nondiscrimination policies to include those covered under Title IX and can be reached at 571-423-3050. For concerns regarding compliance under Section 504 of the Rehabilitation Act of 1973, please contact the coordinator of Due Process and Eligibility at 703-317-3030.

HIGH SCHOOL ACADEMIES AND OTHER SPECIALIZED CTE COURSES

Advanced technical and specialized elective courses are available at High School Academies and other community-based locations. Students enrolling in these courses will be provided with opportunities to participate in shadowing, mentoring, and/or internships with local businesses to further prepare them for college and careers. Transportation may be provided. Refer to course descriptions in the Standard Course Offerings for specific information on these specialized courses or visit Academy Website.

2021-2022 HIGH SCHOOL ACADEMY COURSE OFFERINGS

CHANTILLY ACADEMY – A Governor’s STEM Academy

Air Force JROTC	Cyber: Database Design & Management, Oracle	Exploring the Language of Medicine
Apprenticeship	Cyber: Network Administration	Introduction to Nursing
Automotive Collision Service	Cyber: Routing and Switching	Korean
Automotive Technology	Cyber: Security + Capstone	Medical Assistant
Carpentry	Dental Careers	Pharmacy Technician
Cosmetology	Engineering Math	Physical Therapy/Occupational Therapy
Criminal Justice	Engineering Systems	Robotics Systems
Culinary Arts	English 12 (DE) with Chantilly Academy course	Teachers for Tomorrow
Cyber: Cloud Computing	Entrepreneurship	Veterinary Science
Cyber: Computer Systems Technology A+	Exploring Health Sciences	

EDISON ACADEMY

Apprenticeship	Culinary Arts	Cyber: Security + Capstone
Automotive Collision Service	Cyber: Cloud Computing	Electrical Construction & Engineering
Automotive Technology	Cyber: Computer Systems Technology A+	Heating, Ventilation, AC & Refrigeration
Chinese	Cyber: Database Design & Management, Oracle	Teachers for Tomorrow
Cosmetology	Cyber: Network Administration	Veterinary Science
Criminal Justice	Cyber: Routing and Switching	

FAIRFAX ACADEMY

Academy Dance	Fashion Careers	Professional Musical Theatre & Actor’s Studio
American Sign Language	Hip Hop Dance	Professional Photography Studio
Arabic	Korean	Social Media Marketing
Broadway Dance	Music and Computer Technology	Television and Media Production
Chinese		

FALLS CHURCH ACADEMY – A Governor’s Health Sciences Academy

American Sign Language	Emergency Medical Technician	Medical Assistant
Biotechnology Foundations	Exploring Health Sciences	Medical Billing and Coding
Criminal Justice	Exploring the Language of Medicine	Pharmacy Technician
Dental Careers	Health Informatics	Vietnamese

MARSHALL ACADEMY – A Governor’s STEM Academy

Arabic	Criminal Justice	Cyber: Routing and Switching, Cisco
Apprenticeship	Culinary Arts	Cyber: Security + Capstone
Automotive Technology	Cyber: Cloud Computing	Engineering Systems
Chinese	Cyber: Computer Systems Technology A+	Entrepreneurship
Cosmetology	Cyber: Network Administration	Robotics Systems

WEST POTOMAC ACADEMY – A Governor’s Health Sciences Academy

911 Dispatch	Early Childhood Careers	Medical Assistant
Academy Dance	Emergency Medical Technician	Music and Computer Technology
Biotechnology Foundations	Exploring Health Sciences	Pharmacy Technician
Broadway Dance	Exploring the Language of Medicine	Physical Therapy/Occupational Therapy
Criminal Justice	Hip Hop Dance	Television and Media Production
Dental Careers	Introduction to Nursing	

OTHER SPECIALIZED CTE PROGRAMS

CLASSROOM ON THE MALL at Fair Oaks Mall

Fashion Marketing 2
Marketing Management

FAIRFAX COUNTY FIRE AND RESCUE ACADEMY in Fairfax, Virginia

Firefighting

FAIRFAX COUNTY SCHOOL OF PRACTICAL NURSING Plum Center for Lifelong Learning

Practical Nursing Cohort
Patient Care Technician
Introduction to Nursing

SPRING VILLAGE RESIDENTIAL CONSTRUCTION SITE in Springfield, Virginia

Construction Technologies

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BUSINESS & INFORMATION TECHNOLOGY

CYBER: CLOUD COMPUTING (665128)

Grades: 11, 12

Credit: one

Prerequisite: Network Admin 1 or Cyber: Cisco 1A & 1B
Chantilly HS Academy, Marshall HS Academy, Edison HS Academy,
Edison HS Academy - transportation may be provided

Students focus on cloud infrastructure, deployment, security models, and the key considerations in migrating to cloud computing. This course covers the technologies and processes required to build traditional, virtualized, and cloud data center environments, including computation, storage, networking, desktop and application virtualization, business continuity, security, and management. Internship opportunity is available with this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year. Dual enrollment credits with approved colleges or universities may be available through this course. Please note that the Dual Enrollment option for this course carries an additional weight of 1.0.

Industry certification may be available as part of this course.

ACCOUNTING (632000)

Grades: 9, 10, 11, 12

Credit: one

Accounting is the language of business and beneficial for any student planning on studying business in a postsecondary school. Students study accounting concepts for sole proprietorships, partnerships, and corporations to understand the fundamental accounting equation, the business transaction analysis process, and the elements of financial reporting. Interpretation of accounting information is mastered through decision-making and problem-solving approaches that include source documents, case studies, and simulations. Technology integration and related accounting software applications are used to enhance skills to analyze and evaluate financial situations. Internet learning activities are used to reinforce research, communication, and team building skills. Upon completion of this course, students will be able to complete an accounting cycle from transactions to financial statements. Internship opportunity is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

ADVANCED ACCOUNTING (632100)

Grades: 10, 11, 12

Credit: one

Prerequisite: Accounting (632000)

Students continue to master accounting principles and procedures, adding new topics about managerial accounting, cost accounting, financial analysis, and business ethics. Content areas include property, plant and equipment, corporate investments, bonds, notes payable and receivables, amortizations, cash flow statements, and ratio analysis for the corporate structure. Spreadsheet analysis and accounting software applications provide the opportunity for higher-level thinking skill activities and authentic simulations enhance teamwork, decision making, and communication skills. Upon completion, students should be able to demonstrate an understanding of the principles of decision making, problem solving and critical thinking, and apply them to both business and personal financial situations. Internship is available with this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year. This course is also available through the Online Campus.

Industry certification may be available as part of this course.

ADVANCED INFORMATION SYSTEMS (661300)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Information Systems (661200), or equivalent skill

Advanced Information Systems provides students with the opportunity to develop professional technology skills in a project-oriented and student-centered environment. Working independently or in teams, students apply problem-solving, decision-making, creative-thinking, and communication skills to relevant, real-life situations through a series of software, the Microsoft Imagine Academy, and peripheral applications. Instruction in current and emerging information technology includes operating systems, networking and hardware principles, document preparation, presentation

tools, spreadsheet analysis and charts preparation, relational database management, technical writing, desktop publishing, copyright issues, and basic web page design. Upon completion of this course, students will be able to apply technology to analyze and solve problems and to complete technology tasks efficiently and effectively. Upon successful completion of Advanced Information Systems, students may elect to obtain industry-recognized professional certification by taking the Microsoft Office Specialist (MOS) exams. Internship opportunity is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

ADVANCED PROGRAMMING (664100)

Grades: 10, 11, 12

Credit: one

Prerequisite: Programming, Computer Science, or equivalent skill

Building on a foundation of programming skills, students will use object-oriented programming to develop applications for Windows, database, multimedia, games, mobile, and/or Web environments. Students learn how to use popular game-development software to create engaging, interactive games in a variety of styles. Business Cooperative Internship--679920 is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

BUSINESS LAW (613232)

Business Law - This course must be blocked with Business Management

Grades: 10, 11, 12

Credit: one-half

Business Law provides students with the basic knowledge to become a better informed citizen, employee, and consumer. The course offers students the opportunities to study the nature and function of our legal system, courts, and procedures. Topics include contracts, sales agreements, torts, constitutional law, criminal law, and family law. Students focus on consumer rights and responsibilities, examine legal aspects of employment, research careers in law, and discuss the impact of laws on travelers and those living abroad. Enriched with student projects, debates, mock trials, field trips, guest speakers, and Internet activities, the course helps students understand the laws affecting businesses and consumers.

Industry certification may be available as part of this course.

BUSINESS MANAGEMENT (613632)

Business Management - This course must be blocked with Business Law

Grades: 10, 11, 12

Credit: one-half

Students study basic management concepts and leadership styles as they explore business ownership, planning, economics, international business, and human relations issues such as employee motivation and conflict resolution. Through engaging software simulations, students learn to utilize efficiently and effectively the basic management functions of planning, organizing, staffing, directing, and controlling, and their impact on human and capital resources. Upon completion of this course, students will develop a business plan for a real or simulated business.

Industry certification may be available as part of this course.

CYBER: CLOUD COMPUTING (665128)

Grades: 11, 12

Credit: one

Prerequisite: Network Admin 1 or Cyber: Cisco 1A & 1B
Chantilly HS Academy, Marshall HS Academy, Edison HS Academy,
Edison HS Academy - transportation may be provided

Students focus on cloud infrastructure, deployment, security models, and the key considerations in migrating to cloud computing. This course covers the technologies and processes required to build traditional, virtualized, and cloud data center environments, including computation, storage, networking, desktop and application virtualization, business continuity, security, and management. Internship opportunity is available with this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year. Dual enrollment credits with approved colleges or universities may be available through this course. Please note that the Dual Enrollment option for this course carries an additional weight of 1.0.

Industry certification may be available as part of this course.

CYBER: COMPUTER SYSTEMS TECHNOLOGY 1 (862826)
Grades: 10, 11, 12 **Credit: one**
Prerequisite: Cybersecurity Fundamentals or equivalent skill
Base school optional 862800
Chantilly HS Academy, Edison HS Academy, Marshall HS Academy - transportation may be provided

Students enter the world of computer technology and gain practical experience in assembling a computer system, installing an operating system, troubleshooting computers and peripherals, and using system tools and diagnostic software. They develop skills in computer networking and resource sharing. In addition, students explore the relationships between internal and external computer components. Emphasis is placed on customer service skills and career exploration. Upon successful completion of the course, students may qualify to take the CompTIA IT Fundamentals certification exam. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

CYBER: COMPUTER SYSTEMS TECHNOLOGY 2 A+ (862927)
Grades: 11, 12 **Credit: two**
Prerequisite: Cyber: Computer Systems Technology 1
Chantilly HS Academy, Edison HS Academy, Marshall HS Academy - transportation may be provided

Building on the foundation of Cyber: Computer Systems Technology 1, this advanced course provides students with training in procedures for optimizing and troubleshooting concepts for computer systems and subsystems. Students explore wireless technologies (e.g., Bluetooth, Wi-Fi) and create and configure a network. Emphasis is placed on technical proficiency, skill-building, and workplace readiness. The course prepares students for postsecondary education and training, and a successful career in information technology. Upon successful completion of the course, students may qualify to take the CompTIA A+ Certification exam. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

CYBER: DATABASE DESIGN AND MANAGEMENT 1, ORACLE (666028)
Grades: 10, 11, 12 **Credit: one**
Prerequisite: Cybersecurity Fundamentals, Programming or equivalent skill
Chantilly HS Academy, Edison HS Academy - transportation may be provided

This is an advanced information technology class where students learn database design and Structured Query Language (SQL) programming through hands-on computer training in data modeling and database application software. Students gain the skills and knowledge needed to use features of database software and programming to manage and control access to data. Students taking this course will be preparing to take Oracle's Introduction to SQL programming exam. Preparation for careers is a major component of this class. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

CYBER: DATABASE DESIGN AND MANAGEMENT 2, ORACLE (666228)
Grades: 11, 12 **Credit: one**
Prerequisite: CYBER: DATABASE DESIGN & MANAGEMENT 1, ORACLE
Chantilly HS Academy, Edison HS Academy - transportation may be provided

Web-based technologies used throughout industry, including interactive Web sites, accounting programs, research tools, search engines, e-learning environments, e-mail managers, and numerous other applications, depend upon relational databases. PL/SQL, an extension of the SQL programming language, provides additional database functionality through variables, constants, conditional statements, and iterative controls. Students enhance their relational database design and management skills by learning to write PL/SQL code that includes anonymous blocks, sub programs, built-in functions, control structures, procedures, and triggers, all within a browser-based programming environment. In addition, fully functional Web-based applications are created through the use of HTML DB. Preparation for careers is a major component of this class. Business Cooperative Internship--679920

is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

CYBER: NETWORK ADMINISTRATION I (630426)
Grades: 10, 11, 12 **Credit: one**
Prerequisite: Cybersecurity Fundamentals, Algebra 1, or equivalent skill
Chantilly HS Academy, Marshall HS Academy - transportation may be provided

Cyber: Network Administration I is a comprehensive, hands-on computer course in which students are taught basic networking skills using Windows and Microsoft Server. Topics covered throughout the year include network concepts, installation, configuration, management, and troubleshooting. Cyber: Network Administration I is designed to teach many aspects of computer support and network administration. Students learn networking concepts, from usage to components, and set up peer-to-peer network systems and client server networks. Students install and configure network cards and connect them to networks. Students learn how to install the operating systems, setup and manage accounts, load software, and set up and implement security plans. Upon successful completion of Cyber: Network Administration I, students may elect to obtain industry-recognized professional certification. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

CYBER: NETWORK ADMINISTRATION II (630626)
Grades: 10, 11, 12 **Credit: one**
Prerequisite: Cyber: Network Administration I
Chantilly HS Academy, Edison HS Academy, Marshall HS Academy - transportation may be provided

Cyber: Network Administration II continues to teach aspects of network administration, focusing on the management and support of network users and systems. The topics covered include understanding the responsibilities of computer professionals, training end users, evaluating new technology, developing system policies, troubleshooting workstations, managing network services and protocols, and effectively using email and business communications. Students learn communication protocols, troubleshooting techniques for systems and client-server networks, website management, and other advanced networking topics. Techniques that are used to install operating systems, setup and manage accounts, load software, and create and implement security plans are taught. This course may provide instruction about software-based network operating systems, such as Windows Server or Linux. Instruction will emphasize preparation for industry certification. Upon successful completion of Cyber: Network Administration II, students may elect to obtain industry-recognized professional certification. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

CYBER: ROUTING AND SWITCHING 1A, CISCO (854232)
Grades: 10, 11, 12 **Credit: one-half**
Prerequisite: Cybersecurity Fundamentals or equivalent skill
Corequisite: Cyber: Routing and Switching 1B, Cisco
Chantilly HS Academy, Marshall HS Academy - transportation may be provided

This is part A of a full year course. Part A is taken in the fall semester. Students also register and take Cyber: Routing and Switching 1B, Cisco in the spring semester. This course teaches students the skills needed to obtain entry-level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, computer technicians, cable installers, and help-desk technicians. It provides a hands-on introduction to networking and the Internet, using tools and hardware commonly found in home and small business environments. Labs include PC installation, Internet connectivity, wireless connectivity, file and print sharing, and the installation of game consoles, scanners, and cameras. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

CYBER: ROUTING AND SWITCHING 1B, CISCO (854332)
Grades: 10, 11, 12 **Credit: one-half**
Prerequisite: Cyber: Routing and Switching 1A, Cisco
Chantilly HS Academy, Marshall HS Academy - transportation may be provided

This is part B of a full year course. Part B is taken in the spring semester. Students also register and take Cyber: Routing and Switching 1A, Cisco in the fall semester. This course prepares students for jobs as network technicians and helps them develop additional skills required for computer technicians and help desk technicians. It provides a basic overview of routing and remote access, addressing, and security. It also familiarizes students with servers that provide e-mail services, Web space, and authenticated access. Students learn about the soft skills required for help desk and customer service positions, and the final chapter helps them prepare for the CCENT certification exam. Network monitoring and basic troubleshooting skills are taught in context. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.
Industry certification may be available as part of this course.

CYBER: ROUTING AND SWITCHING 2A, CISCO (854432)
Grades: 11, 12 **Credit: one-half**
Prerequisite: Cyber: Routing and Switching 1A and 1B, Cisco
Corequisite: Cyber: Routing and Switching 2B, Cisco
Chantilly HS Academy, Marshall HS Academy - transportation may be provided

This is part A of a full year course. Part A is taken in the fall semester. Students also register and take Cyber: Routing and Switching 2B, Cisco in the spring semester. This course familiarizes students with the equipment applications and protocols installed in enterprise networks, with a focus on switched networks, IP Telephony requirements, and security. It also introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol. Hands-on exercises, including configuration, installation, and troubleshooting, reinforce student learning. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.
Industry certification may be available as part of this course.

CYBER: ROUTING AND SWITCHING 2B, CISCO (854532)
Grades: 11, 12 **Credit: one-half**
Prerequisite: Cyber: Routing and Switching 1A and 1B, Cisco
Corequisite: Cyber: Routing and Switching 2A, Cisco
Chantilly HS Academy, Marshall HS Academy - transportation may be provided

This is part A of a full year course. Part A is taken in the fall semester. Students also register and take Cyber: Routing and Switching 2B, Cisco in the spring semester. This course familiarizes students with the equipment applications and protocols installed in enterprise networks, with a focus on switched networks, IP Telephony requirements, and security. It also introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol. Hands-on exercises, including configuration, installation, and troubleshooting, reinforce student learning. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.
Industry certification may be available as part of this course.

CYBER: SECURITY + CAPSTONE (863026)
Grades: 11, 12 **Credit: one**
Prerequisite: Cyber: Network Administration and Cyber: Computer Systems Technology
Edison HS Academy, Marshall HS Academy, Chantilly HS Academy - transportation may be provided

This advanced-level course prepares students for postsecondary education and careers in the rapidly growing field of cybersecurity. Students gain competitive skills required to administer, analyze, and secure applications, networks, and devices. Students perform threat analysis and participate in risk mitigation. Concepts include understanding threats, attacks, and vulnerabilities; exploring technology and tools; examining architecture and design; analyzing identity and access management; demonstrating risk management; and examining cryptography and public key management. Upon successful completion of this course, students may qualify for the CompTIA Security+ certification exam. Internship is available for this course. Students

combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year. For more information, visit the CTE web site.
Industry certification may be available as part of this course.

CYBERSECURITY FUNDAMENTALS (630200)
Grades: 9, 10, 11, 12 **Credit: one**

Cybersecurity affects every individual, organization, and nation. This course focuses on the evolving and all-pervasive technological environment with an emphasis on securing personal, organizational, and national information. 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.
Industry certification may be available as part of this course.

DESIGN, MULTIMEDIA, AND WEB TECHNOLOGIES (663000)
Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: Information Systems (661200) or equivalent skill

This product-oriented course introduces the student to multimedia presentations, desktop publications, and web page creation. Hands-on activities are used as students develop advanced skills for creating desktop-published, interactive multimedia, and Web-site projects. Students work with sophisticated hardware and software, applying skills to real-world projects. Internet research and copyright laws are emphasized. Upon successful completion of Design Multimedia Web Technologies, students may elect to obtain industry-recognized professional certification by taking the Microsoft Office Specialist (MOS) or the Adobe Certified Expert (ACE) exams. Internship opportunity is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.
Industry certification may be available as part of this course.

DIGITAL APPLICATIONS (661190)
Grades: 9, 10, 11 **Credit: one**

This elective course is designed to provide support to English Learners new to US schools in the development of correct keyboarding techniques and to gain a basic knowledge of word processing, spreadsheet, database, graphics, and telecommunications applications. Students demonstrate an understanding of computer concepts through application of knowledge. Students learn to use software packages and local and worldwide network communications systems. Grade 8 Computer/Technology Standards of Learning are incorporated and reinforced in this course. Students who successfully complete the course will earn an elective credit. Students successfully completing this course and Information Systems will satisfy the sequential elective requirement for the Standard Diploma.
Industry certification may be available as part of this course.

INFORMATION SYSTEMS (661200)
Grades: 9, 10, 11, 12 **Credit: one**

Using project based learning, students apply problem-solving skills to real-life situations through word processing, spreadsheets, databases and multimedia presentations. Students work individually and in groups utilizing integrated software activities and the use of the Microsoft Imagine Academy to explore computer concepts, operating systems, networks, telecommunications, and emerging technologies. Keyboarding instruction will be a component of this course based on student need. Upon successful completion of Information Systems, students may elect to obtain industry-recognized professional certification by taking the Microsoft Office Specialist (MOS) exams. Internship opportunity is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.
Industry certification may be available as part of this course.

PRINCIPLES OF BUSINESS (611500)
Grades: 9, 10 **Credit: one**

This project-based course develops students understanding and skills in areas such as business law, economics, financial analysis, human resources management, information management, marketing, operations, and strategic management. Students acquire an understanding and appreciation of the business world. In addition to learning about the business world, students discover the roles of business in the free enterprise system and the global

economy. The real-world impact of technology, effective communication, and interpersonal skills is evident throughout the course. This course also supports career development skills and explores career options.

Industry certification may be available as part of this course.

PROGRAMMING (664000)

Grades: 9, 10, 11, 12

Credit: one

The course helps participants understand the processes involved in software development and object-oriented programming. Through real-world projects, students explore computer concepts, apply logic procedures, and implement programming procedures with one or more languages, such as JavaScript, C# and Python. Students create interactive applications by designing the user interface and developing the code to make the application work. In addition, HTML or JavaScript may be employed to create Web pages. This is an introductory course that could lead to careers such as software engineer, developer, or game designer. Internship opportunity is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

ENGLISH

ENGLISH 9 (113000)

Grades: 9

Credit: one

Prerequisite: English 8

Students read and analyze a variety of literary and nonfiction texts, exploring the characteristics of different forms and the techniques authors use to achieve their intended purpose. In addition to a study of print texts, students evaluate, analyze, and create media messages to develop media literacy. Language study extends students' vocabulary through learning about connotations, denotations, word origins, and structures in authentic texts. Students apply their understanding of grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing to varied and frequent writing assignments. Through narrative, expository, and persuasive writings, students build on their understanding of writing as a process of prewriting, drafting, revising, and publishing. In the research process, students find, evaluate, and select appropriate sources to create research products. They also develop communication skills by evaluating presentations and creating and delivering their own, both collaboratively and individually. (This is a Standards of Learning aligned course, which is tested in 11th grade.)

ENGLISH 9 HONORS (113036)

Grades: 9

Credit: one/weighted +.5

Prerequisite: English 8

Students extend their language skills through deep reading and purposeful written and oral communication. Students read, analyze, and compare a variety of literary and nonfiction texts, exploring the characteristics of different forms and the purposeful ways authors use language and techniques to achieve their intended effect. Through the study of authentic texts, students build a sophisticated vocabulary by applying their knowledge of connotations, denotations, word origins, and structures. In addition to a study of print texts, students evaluate, analyze, and create media messages to better understand the impact and role of media in society. Students apply their understanding of language to engage in varied and frequent oral and written assessments including research products. Through these tasks, they engage in personal inquiry to develop their own views on topics and craft writing for specific audiences and purposes. (This is a Standards of Learning aligned course, which is tested in 11th grade.)

ENGLISH 10 (114000)

Grades: 10

Credit: one

Prerequisite: English 9

Students read and analyze a variety of literary and nonfiction texts, comparing and contrasting the techniques authors use in literature of different cultures and eras. In addition to a study of print texts, students examine similarities and differences among a variety of media messages as they develop media literacy. Language study continues to extend students' vocabulary through learning about connotations, denotations, word origins, and structures.

Students apply their understanding of grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing to varied and frequent writing assignments. Students expand their understanding of writing as a process and develop their skills in revising to address a specific audience and purpose, with an emphasis on expository and analytical writing. In the research process, students collect, evaluate, organize, and present accurate and valid information to create research products. They also improve communication and collaboration skills through small and large group discussions and presentations. (This is a Standards of Learning aligned course, which is tested in 11th grade.)

ENGLISH 10 HONORS (114036)

Grades: 10

Credit: one/weighted +.5

Prerequisite: English 9

Students deepen their analysis of literary and nonfiction texts to examine the purposeful ways authors use language and techniques to shape meaning. As they explore a variety of world literature texts, students compare themes among literature, history, and culture. In addition, students explore nonfiction texts to gain insight into topics, themes, and conflicts presented in literature and society. Students also critique media messages, analyzing the strategies used to impact a targeted audience. Through the study of these varied, authentic texts, students build a sophisticated vocabulary by applying their knowledge of connotations, denotations, word origins, and structures. Students apply their understanding of language to the writing process to provide analysis on a variety of topics. They build expertise in collaboration and communication skills as they deepen their understanding of language. They also engage in personal inquiry through the research process and synthesize information from a variety of perspectives to develop research products. (This is a Standards of Learning aligned course, which is tested in 11th grade.)

ENGLISH 11 (115000)

Grades: 11

Credit: one

Prerequisite: English 10

Students read and analyze a variety of literary and nonfiction texts, comparing various works to analyze themes, make inferences, and draw conclusions. To further their media literacy, students evaluate sources to determine author's purpose and intended effect. Language study extends students' vocabulary through applying understanding of connotations, denotations, word origins, and structures. Students apply their understanding of grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing to varied and frequent writing assignments, with an emphasis on persuasive writing. Students apply their skills and adapt content, vocabulary, voice, and tone to a specific audience and purpose. In the research process, students analyze, evaluate, synthesize, and organize information from a variety of sources to produce research products. They also refine their oral communication skills through gathering and organizing evidence to support a position in informative and persuasive presentations.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

ENGLISH 11 HONORS (115036)

Grades: 11

Credit: one/weighted +.5

Prerequisite: English 10

Students build expertise in their analysis of literary and non-literary texts and apply persuasive techniques to craft written and oral communication. Throughout the course, students engage in deep analysis of the ways authors make stylistic choices to create specific effects as they examine the ways literature helps make sense of the American experience. Through the study of nonfiction texts, students analyze patterns of rhetoric and organization to determine how rhetorical devices function to inform and persuade an audience. In addition, students analyze and evaluate media messages to examine how the media strategically influences beliefs and behaviors. Through the study of these varied, authentic texts, students build a sophisticated vocabulary by applying their knowledge of connotations, denotations, word origins, and structures. Students apply their understanding of rhetoric to craft independent arguments in oral presentations and writing that reflect personal communication styles appropriate to the audience and purpose, with an emphasis on persuasion. They also engage in the research process to generate new understandings or solve problems through the synthesis of information on a variety of topics.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

AP ENGLISH LANGUAGE AND COMPOSITION (119605)
Grades: 11 **Credit: one/weighted +1.0**
Prerequisite: English 10

Students study prose analysis and advanced composition at a level equivalent to that of a full-year introductory college course. With an emphasis on nonfiction, students read and analyze texts from a variety of eras and styles to develop skills in recognizing rhetorical context, author's purpose, and the use of the strategies of language. In refining their awareness of language and the writer's craft, students apply purposeful rhetorical strategies to their writing, and compose for a variety of purposes. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved. Completion of this course fulfills the English 11 course requirement.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

ENGLISH 12 (116000)
Grades: 12 **Credit: one**
Prerequisite: English 11

Students read and analyze a variety of literary texts within their historical context. Through the study of nonfiction texts, students further develop their inferential, evaluative, and synthesis skills as they critically evaluate information to solve problems, answer questions, and generate new knowledge. To deepen their media literacy, students evaluate sources to determine author's purpose and intended effect. Language study expands students' general and specialized vocabulary through speaking, listening, reading, and viewing. Writing includes the development of externally supported informational, expository, and persuasive/argumentative essays that demonstrate knowledgeable judgments. In addition, students apply research skills to write documented papers. They also apply oral communication skills to craft formal presentations and further develop their listening skills as they analyze the relationships among purpose, audience, and content of presentations.

ENGLISH 12 HONORS (116036)
Grades: 12 **Credit: one/weighted +.5**

Students analyze the ways authors use language and techniques to shape meaning in literary and nonfiction texts, and they consider how texts provide insight to our complex and changing world. In addition to print texts, students analyze and evaluate how media messages influence beliefs and behaviors across time, place, and culture. Through the study of these varied, authentic texts, students build a sophisticated vocabulary by applying their knowledge of connotations, denotations, word origins, and structures. Students apply their language and communication skills to create texts for authentic audiences and purposes, and they use writing as a tool for personal inquiry and communication. Students also communicate through oral presentations and small-group collaboration specific to authentic situations. Throughout the course, students develop a formal research paper that analyzes complex issues through the synthesis of diverse sources.

AP ENGLISH LITERATURE AND COMPOSITION (119504)
Grades: 12 **Credit: one/weighted +1.0**
Prerequisite: English 11

Students study composition and literary analysis at a level equivalent to that of a full-year introductory college course. Through in-depth study of literary works, students sharpen their awareness of language and their understanding of the writer's craft. They establish critical standards for analyzing and evaluating literature. Students work to master college-level literary analysis writing, as well as to hone their narrative, persuasive, and research writing skills. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved. Completion of this course fulfills the English 12 course requirement.

LITERACY LAB 1 (118100)
Grades: 9 **Credit: one**

Literacy LAB (Literacy Access Bridge) 1 provides students who are reading and/or writing below expected proficiency with direct instruction of content area reading and writing skills. The course emphasizes the reading and writing skills necessary for success in the content of mathematics, science, social studies, and English, as well as the communication skills appropriate across disciplines.

LITERACY LAB 2 (118200)
Grades: 10, 11, 12 **Credit: one**

Literacy LAB (Literacy Access Bridge) 2 provides focused intervention of reading and writing skills as well as English content included in the English 9 and 10 Program of Studies that are necessary to pass the EOC English: Reading and/or Writing SOL tests, which students take in English 11. Successful completion of this course counts as a sequential elective when taken after Literacy LAB 1.

LITERACY LAB 3 (118300)
Grades: 11, 12 **Credit: one**

Literacy LAB (Literacy Access Bridge) 3 provides focused intervention of reading and writing skills as well as English content included in the English 11 Program of Studies that are necessary to pass the EOC English: Reading and/or Writing SOL tests. Successful completion of this course counts as a sequential elective when taken after Literacy LAB 1 or Literacy LAB 2.

JOURNALISM 1 (120000)
Grades: 9, 10, 11, 12 **Credit: one**

In Journalism 1, students learn the history and language of journalism; develop communication skills in writing, designing and editing for a variety of media; understand news and the process of publication; and become more critical readers and consumers of mass media. This course prepares students for continued study in journalism, photojournalism, and broadcast journalism.

JOURNALISM 2 (121000)
Newspaper
Grades: 10, 11, 12 **Credit: one**
Prerequisite: Journalism 1

In Journalism 2, students learn and apply techniques of layout, design, and desktop publishing. Students develop a more sophisticated level of journalistic writing and participate in the operation and production of the high school newspaper and/or student-produced website. Students also learn skills in business and circulation management.

JOURNALISM 3 (121100)
Newspaper
Grades: 11, 12 **Credit: one**
Prerequisite: Journalism 2

In addition to enhancing their skills as reporters, students in Journalism 3 learn the role of editorial leadership, develop a personal sense of professionalism, understand the role of the newspaper in society, and become productive members of the newspaper and/or student-produced website staff. Students also learn skills in business and circulation management.

JOURNALISM 4 (121200)
Newspaper
Grades: 12 **Credit: one**
Prerequisite: Journalism 3

In Journalism 4, students learn marketable publications skills; develop individual writing, layout, and design styles; and may assume editorial leadership and responsibility for producing a high school newspaper and/or student-produced website. Students also take responsibility for business and circulation management.

BROADCAST JOURNALISM 1 (122000)
Grades: 9, 10, 11, 12 **Credit: one**

In this course, students learn and practice the language and processes of broadcast journalism and reporting. They develop an understanding of the role and responsibilities of broadcast journalists.

BROADCAST JOURNALISM 2 (122012)**Grades: 10, 11, 12****Credit: one****Prerequisite: Broadcast Journalism 1**

In this course, students continue to learn and practice the language and processes of broadcast journalism and reporting. They develop an understanding of the role and responsibilities of broadcast journalists.

BROADCAST JOURNALISM 3 (122013)**Grades: 11, 12****Credit: one****Prerequisite: Broadcast Journalism 2**

In this course, students expand their learning and practice the language and processes of broadcast journalism and reporting. They become proficient at producing the news while understanding of the role and responsibilities of broadcast journalists.

BROADCAST JOURNALISM 4 (122014)**Grades: 12****Credit: one****Prerequisite: Broadcast Journalism 3**

In this course, students advance their broadcast journalism skills by practicing communication skills in the community and in the media workplace. They become proficient at producing in-depth news packages and quality field reports. They master the rights and responsibilities of broadcast journalism.

PHOTOJOURNALISM 1 (121500)*Yearbook***Grades: 9, 10, 11, 12****Credit: one****Prerequisite: Journalism 1 or instructor permission**

In Photojournalism 1, students learn the principles of interviewing, copywriting, photography, layout, and design. Students use publishing software to create pages for the school's yearbook.

PHOTOJOURNALISM 2 (121600)*Yearbook***Grades: 10, 11, 12****Credit: one****Prerequisite: Photojournalism 1**

In Photojournalism 2, students develop their copywriting skills and advance their photography and design skills as they create pages for the school's yearbook. They may also become section editors.

PHOTOJOURNALISM 3 (121700)*Yearbook***Grades: 11, 12****Credit: one****Prerequisite: Photojournalism 2**

In Photojournalism 3, students refine their copywriting skills and advance their computer and photography skills, develop individual style, and may assume leadership roles as members of the yearbook staff's editorial board.

PHOTOJOURNALISM 4 (121714)**Grades: 12****Credit: one****Prerequisite: Photojournalism 3**

In Photojournalism 4, students continue to refine their copywriting skills and advance their computer and photography skills, develop individual style, and assume leadership roles.

CREATIVE WRITING 1 (117100)**Grades: 9, 10, 11, 12****Credit: one**

This course provides students an opportunity for additional writing instruction beyond the standard English program. Experimentation with many forms of writing is encouraged, with an emphasis on poetry, prose fiction, plays, and other forms of descriptive writing. Students continue to expand and refine their ability to write through analyzing and evaluating their own writing and that of other students.

SPEECH COMMUNICATION (SEMESTER) (130032)*This course must be blocked with Debate***Grades: 9, 10, 11, 12****Credit: one-half**

Speech Communication is designed to introduce students to the basics of speech communication. Students participate in a variety of speech activities which help them develop self-confidence and poise through preparation, performance, and evaluation. Students participate in interpersonal, group, and public speaking activities.

DEBATE (SEMESTER) (139532)*This course must be blocked with Speech***Grades: 9, 10, 11, 12****Credit: one-half**

The debate course is designed to develop students' creative and critical thinking, research, speaking, listening, and argumentation skills. Students engage in mock trials, Model Congress, and Policy Debate.

FILM STUDY (144600)**Grades: 9, 10, 11, 12****Credit: one**

This course involves the study of classic and award-winning films. Students critique both the artistic and technical merits of the films. They study the development of theme, plot, characterization, and setting in each production. They learn the vocabulary associated with film and use this vocabulary when discussing or writing about films.

FILM STUDY II (144700)**Grades: 10, 11, 12****Credit: one****Prerequisite: Film Study Westfield HS Only**

Film Studies II is an elective English class. In this special topics course, students will gain a deeper understanding of various film genres, significant film movements, and influential filmmakers. Students will learn to recognize familiar tropes of certain genres, be able to identify characteristics and innovations of various film periods, and will be able to acknowledge stylistic hallmarks and subject matter of important filmmakers. Additionally, students will build on their knowledge of film history and terminology gained from Film Study.

ENGLISH FOR SPEAKERS OF OTHER LANGUAGES

ACADEMIC LITERACY (573290)**Grades: 11****Credit: one****•573290 Academic Literacy General•573291 Academic Literacy Level 1•573292 Academic Literacy Level 2 WIDA ELP LEVEL 1,2**

The class is designed to enrich students' disciplinary literacy across the curriculum with a specific focus on the content and skills developed in high school English. Students develop academic language through targeted instruction in academic discourse, vocabulary, reading strategies, and content writing to build the skills necessary for success in English 11. This course is available to students who have not yet reached WIDA ELP 3 after successful completion of English 9 and 10 for ELs. Students are simultaneously enrolled in this course and in the corresponding ELD course. This course may be used to satisfy the fourth English requirement towards graduation.

ENGLISH 9 FOR ENGLISH LEARNERS (ELP LEVELS 1-3) (573090)**Grades: 9****Credit: one****Course Codes:•573990 (General)•573091-Level 1•573092-Level 2•573093-Level 3**

This course is designed to develop content understandings and English language proficiency simultaneously. Students read and analyze a variety of linguistically appropriate literary and nonfiction texts, exploring the characteristics of different forms and the techniques authors use to achieve their intended purpose. Language study extends students' vocabulary through learning about connotations, denotations, word origins, and structures.

Students apply their understanding of grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing to varied and frequent writing assignments. Through narrative, expository, and persuasive writings, students build on their understanding of writing as a process of prewriting, drafting, revising, and publishing. In the research process, students find, evaluate, and select appropriate sources to access information to create a research product. They also develop communication skills through listening to and practicing oral presentations. This course is aligned to the WIDA English language development standards and the English 9 Standards of Learning. (This is a Standards of Learning aligned course, which is tested in 11th grade.)

**ENGLISH 10 FOR ENGLISH LEARNERS (ELP LEVELS 1-3)
(573190)**

Grades: 10 **Credit: one**
Course Codes: 573190- General 573191- Level 1 573192- Level 2 573193- Level 3

This course is designed to develop content understandings and English language proficiency simultaneously. Students read and analyze a variety of literary and nonfiction texts, comparing and contrasting the techniques authors use in literature of different cultures and eras. Language study continues to expand students' vocabulary through learning about connotations, denotations, word origins, and structures. Students apply their understanding of grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing to varied and frequent writing assignments. With an emphasis on expository and analytical writing, students expand their understanding of writing as a process and develop their skills in revising to address a specific audience and purpose. In the research process, students collect, evaluate, organize, and present accurate and valid information to create a research product. They also improve communication and collaboration skills through small and large group discussions and presentations. (This is a Standards of Learning aligned course, which is tested in 11th grade.)

**ENGLISH 11 FOR ENGLISH LEARNERS (ELP LEVELS 3-4)
(115090)**

Grades: 11 **Credit: one**
115090 Level 3 or General (SC) 115094 Level 4 or General (TT)

This course is designed to develop content understandings and English language proficiency simultaneously. Students read and analyze a variety of literary and nonfiction texts, comparing themes of various works and analyzing expository materials to draw conclusions. Language study extends students' vocabulary through applying understanding of connotations, denotations, word origins, and structures. Students apply their understanding of grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing to varied and frequent writing assignments. With an emphasis on persuasive writing, students apply their skills and adapt content, vocabulary, voice, and tone to a specific audience and purpose. In the research process, students analyze, evaluate, synthesize, and organize information from a variety of sources to produce a research product. They also refine their oral communication skills through gathering and organizing evidence to support a position in informative and persuasive presentations.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

ENTERING ELD (ELP LEVEL 1) (572010)

Grades: 9, 10, 11, 12 **Credit: one**
572010- General 572011- (Opt. Grade 9) 572012- (Opt. Grade 10) 572013- (Opt. Grade 11)

English learners develop their English language proficiency and English literacy skills. Students engage in tasks that support academic language development in the four domains—reading, writing, listening and speaking. Ongoing formal and informal assessment data are used to appropriately place and transition students through the levels of the ELD courses. This course is aligned to the WIDA English language development (ELD) standards.

EMERGING ELD (ELP LEVEL 2) (572050)

Grades: 9, 10, 11, 12 **Credit: one**
572050- General 572051- (Opt. Grade 9) 572052- (Opt. Grade 10) 572053- (Opt. Grade 11)

English learners develop their English language proficiency and English literacy skills. Students engage in tasks that support academic language development in the four domains—reading, writing, listening and speaking. Ongoing formal and informal assessment data are used to appropriately place

and transition students through the levels of the ELD courses. This course is aligned to the WIDA English language development (ELD) standards.

DEVELOPING ELD (ELP LEVEL 3) (572090)

Grades: 9, 10, 11, 12 **Credit: one**
572090- General 572091- (Opt. Grade 9) 572092- (Opt. Grade 10) 572093- ELD for English 11 (Pair with 115090)

English learners develop their English language proficiency and English literacy skills. Students engage in tasks that support academic language development in the four domains—reading, writing, listening and speaking. Ongoing formal and informal assessment data are used to appropriately place and transition students through the levels of the ELD courses. This course is aligned to the WIDA English language development (ELD) standards.

EXPANDING ELD (ELP LEVEL 4) (573000)

Grades: 9, 10, 11 **Credit: one**
573000- General 573011- (Opt. Grade 9) 573012- (Opt. Grade 10) 573013- ELD for English 11 (Pair with 115094)

English learners develop their English language proficiency and English literacy skills. Students engage in tasks that support academic language development in the four domains—reading, writing, listening and speaking. Ongoing formal and informal assessment data are used to appropriately place and transition students through the levels of the ELD courses. This course is aligned to the WIDA English language development (ELD) standards.

ENVIRONMENTAL SCI (426590)

Grades: 9, 10, 11, 12 **Credit: one**

Environmental Science is a foundational science course intended for 9th grade students. This course builds on student investigations that began in grades K-8 and integrates biology, earth science, chemistry, and engineering to study many components of our environment. Course outcomes focus on scientific inquiry, the physical world, the living environment, resource conservation, humans' impact on the environment, and legal and civic responsibility. Students will focus on data collection and analysis through laboratory experiences and field work, including descriptive and comparative studies. Through a variety of learning experiences to include career education opportunities, students will gain foundational scientific process skills and environmental literacy to engage the community and provide diverse points of view about the management of natural resources.

BIOLOGY I FOR ENGLISH LEARNERS (431090)

Grades: 9, 10, 11, 12 **Credit: one**
431090 (Sheltered) 431094 (Team Taught)

This course is designed to develop content understandings and English language proficiency simultaneously. In Biology 1, students engage in scientific inquiry through lab work as they explore biological processes. All class and laboratory activities focus on life processes that occur within organisms or cells as well as the characteristics of life including: reproduction, development, and adaptation to the environment. Major topics of study include molecular biology, cells, genetics, organisms, evolution and ecology. If dissections are a part of the laboratory experience, alternatives are available. **Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).**

ACTIVE PHYSICS FOR ENGLISH LEARNERS (451090)

Grades: 10, 11, 12 **Credit: one**

This course is designed to develop content understandings and English language proficiency simultaneously. Active Physics is a physics course for students who have not yet passed Algebra I or were weak in Algebra I during the previous school year. This course has a strong emphasis on experimentation. The units of study focus on predictions and real-world applications such as sports, medicine, transportation, home, and communication. The physics content is presented in a problem solving manner to strengthen both science and mathematics content knowledge and skills.

NUMERACY ESSENTIALS FOR ENGLISH LEARNERS (312196)
Grades: 9, 10 **Credit: one**

This elective credit course is designed to provide direct, explicit and intensive mathematics instruction to English Learners with an English Language Proficiency (ELP) level 1 who have significant gaps in their home language instruction and numeracy skills. With the goal to equip students for success in core mathematics classes, instruction will focus on the essential components of numeracy which include counting (including subitizing), comparisons of quantities, decomposing numbers, patterns, computation and estimation. Due to the targeted and foundational nature of the course, student placement is dependent upon assessment outcomes as well as information gathered and reviewed through a SIFE Consultation. Students placed in Numeracy Essentials may defer enrollment in Individual Mathematics if appropriate for a period of one year while enrolled in this class. Parents must be informed of this placement decision, and a meeting with the parents is recommended to review the student data and student need.

MATH READINESS/ PREALGEBRA (312192/ 312193)
Grades: 9, 10, 11 **Credit: one**

The course is designed for WIDA ELP Level 1 & 2 students with gaps in mathematics to support the development of the mathematics and language skills necessary for success in Algebra I. Students examine algebra- and geometry-preparatory concepts and skills; strategies for collecting, analyzing, and interpreting data; and number concepts and skills emphasizing proportional reasoning. Problem solving, communication, concept representation, and connections among mathematical ideas are presented in a hands-on learning environment. Students may need up to two years to complete the course, but should move to the next course as soon as their mathematics skills warrant. This course emphasizes language objectives in addition to mathematics objectives and does not meet the mathematics graduation requirements; students earn elective credit.

PREALGEBRA FOR ENGLISH LEARNERS (312190)
Grades: 9, 10, 11, 12 **Credit: one**

The course is designed for English Learners to support the development of mathematics and language skills necessary for success in Algebra I. The course focuses on developing an understanding of connections among ratios, fractions, decimals, and percents. Additionally, the course includes fluency with multiplication and division of fractions, decimals and integers, and introduces algebraic concepts with a focus on connecting tables, graphs, equations, and contexts. This course receives elective credit.

VIRGINIA AND UNITED STATES GOVERNMENT FOR ENGLISH LEARNERS (ELP LEVELS 1 & 2) (244090)
Grades: 9, 10, 11, 12 **Credit: one**

This course is designed to develop content understandings and English language proficiency simultaneously. Students examine both the structure and function of American government at the national, state, and local levels using linguistically appropriate resources. The course focuses on political decision-making, comparative political and economic systems, and the student's role as a citizen. Students engage in reading, writing, speaking and listening tasks that promote academic language development and target the language necessary for students to demonstrate complex thinking and learning. This course is aligned to the WIDA English language development standards and the Virginia and US Government Standards of Learning and fulfills the Virginia and United States Government requirement for graduation.

STRATEGIES FOR SUCCESS FOR ENGLISH LEARNERS (788990)
Grades: 9, 10, 11 **Credit: one**

This elective course is designed to provide support to English Learners new to US schools in core curricular areas and to provide direct instruction in specific learning strategies, study skills, time management, organization, and self-advocacy skills to develop the habits necessary for academic success. Students will gain skills in personal development and socio-emotional awareness skills. In addition, this course will teach strategies to enhance English language development in the four language domains of reading, writing, listening and speaking. Students will participate in building a strong classroom and school community through class meetings and intercultural communication. Students who successfully complete the course will earn an elective credit. Students successfully completing two years of this course will satisfy the sequential elective requirement for the Standard Diploma.

STRATEGIES FOR SUCCESS FOR ENGLISH LEARNERS (YR 2) (788991)
Grades: 9, 10, 11, 12 **Credit: one**

This elective course is designed to provide support English Learners in core curricular areas and to provide direct instruction in specific learning strategies, study skills, time management, organization, and self-advocacy skills to develop the habits necessary for academic success. Students will gain skills in personal development and socio-emotional awareness skills. In addition, this course will teach strategies to enhance English language development in the four language domains of reading, writing, listening and speaking. Students will participate in building a strong classroom and school community through class meetings and intercultural communication. Students who successfully complete the course will earn an elective credit. Students successfully completing two years of this course will satisfy the sequential elective requirement for the Standard Diploma.

FAMILY & CONSUMER SCIENCES

CULINARY ARTS 1 (827527)
Grades: 11, 12 **Credit: two**
(Base school optional 827500)
Chantilly HS Academy, Edison HS Academy, Marshall HS Academy - transportation may be provided

This course provides students with a foundation of the food service industry and opportunities to build technical skills in food preparation and service. Content area instruction includes: sanitation, hot food production, meat identification and fabrication, purchasing and receiving goods, and fundamental nutritional principles. The curriculum incorporates math and science in culinary applications.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

CULINARY ARTS 2 (827627)
Grades: 11, 12 **Credit: two**
Prerequisite: Culinary Arts 1 (827627)
(Base school optional 827600)
Chantilly HS Academy, Edison HS Academy, Marshall HS Academy - transportation may be provided

Culinary Arts 2 students continue to acquire a comprehensive knowledge of the food service industry while refining their technical skills. Advanced instruction in table service, baking, and management techniques are emphasized. Students create a plan for establishing a restaurant that includes menu selection and preparation, facilities design, and management components. Students may complete work-based learning in various food service venues, and at catered functions.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

CULINARY ARTS 3 (827927)
Grades: 12 **Credit: two**
Prerequisite: Culinary Arts 2 (827627)
(Base school optional 827900)
Chantilly HS Academy, Edison HS Academy, Marshall HS Academy - transportation may be provided

The Culinary Arts 3 curriculum provides students opportunities to expand their technical skills in a food service specialty. Specialization options may include Baking and Pastry Food-Preparation Techniques, Catering/Banquet Food-Preparation Techniques, Restaurant Operation Techniques, or Quantity Food-Preparation Techniques. The curriculum continues to place a strong emphasis on knowledge and skills and emphasizes critical thinking, practical problem solving, and entrepreneurial opportunities within the field of culinary arts.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

EARLY CHILDHOOD CAREERS 1 (828527)**Grades: 11, 12****Credit: two****(Base school optional 828500)****West Potomac HS Academy - transportation may be provided**

Students prepare to be primary providers of home-, family-, or institution-based childcare services by focusing on the planning, organizing, and conducting of meaningful play and learning activities; child monitoring and supervision; record keeping and referral procedures; and work-based learning experiences in on-site labs, local daycare centers, elementary schools, and other institutions under the supervision of the instructor. Students also prepare for continuing education leading to careers in early childhood fields (e.g., medical, social services, education).

Industry certification may be available as part of this course. Dual enrollment credits with approved colleges or universities may be available through this course. Please note that the Dual Enrollment option for this course carries an additional weight of 1.0.

EARLY CHILDHOOD CAREERS 2 (828627)**Grades: 11, 12****Credit: two/weighted +1.0****Prerequisite: Early Childhood Careers 1 (828527)****(Base school optional 828600)****West Potomac HS Academy - transportation may be provided**

This course offers classroom instruction and requires work based learning experiences in on-site labs, early childhood development centers, elementary schools, and other institutions under the supervision of the instructor. Students focus on occupational skills needed by personnel employed in early childhood-related fields, such as workforce development education, medical/health care, social services, counseling, psychology, and entrepreneurship.

Industry certification may be available as part of this course. Please note that the Dual Enrollment option for this course carries an additional weight of 1.0.

FASHION CAREERS 1 (828027)**Grades: 11, 12****Credit: two****Prerequisite: Art 1 (912000), Fashion Marketing (814000), or****Introduction to Interior Design (825432). A performance review may be required.****Fairfax HS Academy - transportation may be provided**

The Fashion Careers 1 students will begin to develop technical and presentation skills in the field of fashion design. The program will emphasize the creative process of design concepts, sketching, draping, pattern making, and garment construction. These skills will enable the student to design and construct a project from creative conception to completion. Students will learn the business of fashion including fabric technology and apparel-production techniques. Teachers emphasize skills in art, communication, mathematics, science and technology in this course. (Students interested in this course should also see Fashion Marketing 1 under Marketing.)

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

FASHION CAREERS 2 (828127)**Grades: 11, 12****Credit: two****Prerequisite: Fashion Careers 1 (828027) or Portfolio Review (examples of student work) and/or a performance review may be required.****Fairfax HS Academy - transportation may be provided**

Students enrolled in the Fashion Careers 2 course focus on advanced technical skills identified as necessary for careers in the fashion industry. Students build on existing skills in the areas of design concepts, illustration, pattern making, and garment construction and create a fashion portfolio. A fashion line is executed from conception to completion. Opportunities for entrepreneurship within the field of fashion design are explored. (Students interested in this course should also see Fashion Marketing 1 under Marketing.)

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

INTRODUCTION TO CULINARY ARTS (825026)**Grades: 10, 11, 12****Credit: one****(Base school optional 825000)****Chantilly HS Academy, Edison HS Academy, Marshall HS Academy - transportation may be provided**

This course focuses on identifying and exploring the individual careers within the foodservice industry. Units of study include investigating nutrition and

menu development, diverse cuisines and service styles, examine the economics of food, practice food and beverage production and preparation, and implement food safety and sanitation procedures.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

INTRODUCTION TO EARLY CHILDHOOD CAREERS (823426)**Grades: 10, 11, 12****Credit: one****(Base school optional 823400)**

Students focus on the principles of child growth and development by developing an appreciation of diversity; providing project based learning experiences for children; practicing principles of guiding children in a positive manner; creating healthy and safe environments; exploring careers related to early childhood professionals through group learning.

Industry certification may be available as part of this course.

FINE ARTS**DANCE****ACADEMY DANCE 1 (931126)****Grades: 9, 10, 11, 12****Credit: one****West Potomac HS Academy, Fairfax HS Academy - transportation may be provided**

Students will develop fundamental skills in dance through movement, placement, alignment, and technique for selected dance forms which may include ballet, jazz, modern, tap, and social dances. Students will cultivate dance vocabulary, study dance history, and develop improvisational and performance skills. For more information, visit the academy web site.

This course requires a student materials fee as listed in FCPS Notice 5922.

ACADEMY DANCE 2 (931326)**Grades: 10, 11, 12****Credit: one****Prerequisite: Dance 1 or Successful Audition****West Potomac HS Academy, Fairfax HS Academy - transportation may be provided**

Students will develop proficiency in dance through movement, alignment, technique, flexibility and strength. Students will broaden and accrue knowledge in dance history, vocabulary, criticism, anatomy, kinesiology, theory and composition. Students will explore concepts and employ skills in choreography, improvisation and performance. For more information, visit the academy web site.

This course requires a student materials fee as listed in FCPS Notice 5922.

ACADEMY DANCE 3 (931527)**Grades: 11, 12****Credit: two****Prerequisite: Dance 2 or Successful Audition****West Potomac HS Academy, Fairfax HS Academy - transportation may be provided**

Students will build on skills learned in Dance 2 and continue pedagogy in movement, alignment, technique, flexibility and strength. Students will deepen and accrue knowledge in dance history, vocabulary, criticism, anatomy, kinesiology, theory and composition. Students will apply concepts and skills in choreography, improvisation and performance. For more information, visit the academy web site.

This course requires a student materials fee as listed in FCPS Notice 5922.

ACADEMY DANCE 4 (931927)**Grades: 12****Credit: two****Prerequisite: Dance 3 or successful audition.****West Potomac HS Academy, Fairfax HS Academy - transportation may be provided**

Dance 4 students are advanced level dancers who display a mastery of ballet, jazz and modern techniques and demonstrate excellence in artistic discipline, rehearsal, and performance. Students will expand choreographic methods and develop their own artistic voice through creating and critiquing movement and choreography. This course will focus on preparing the dancer for post high school opportunities in the professional dance field including:

professional company auditions, choreography, teaching or earning a degree in Dance Performance or Dance Education. For more information, visit the academy web site.

This course requires a student materials fee as listed in FCPS Notice 5922.

BROADWAY THEATRE DANCE (932126)

Grades: 9, 10, 11, 12

Credit: one

Fairfax HS Academy, West Potomac HS Academy - transportation may be provided

This introductory course is designed to offer instruction in techniques of Broadway dance. Students will study movement in a variety of theatrical styles such as jazz and tap. Students will also increase their knowledge of Broadway's most high-profile choreographers and their famous works. Students will gain the ability to apply dance technique and learn to express musicality in a physical way through class activities and performances.

This course requires a student materials fee as listed in FCPS Notice 5922.

HIP HOP DANCE (932326)

Grades: 9, 10, 11, 12

Credit: one

Fairfax HS Academy, West Potomac HS Academy - transportation may be provided

This high-energy introductory course will focus on the foundations and origins of Hip-Hop dance culture including street, commercial and freestyle forms. Students will be encouraged to step outside of the box by bringing their own individual style and personality to movements. Students will be challenged and encouraged to understand and apply historical and practical knowledge of Hip-Hop through class activities and performances. For more information, visit the academy web site.

This course requires a student materials fee as listed in FCPS Notice 5922.

FINE ARTS MUSIC

BAND (923215)

Grades: 9, 10, 11, 12

Credit: one

Students develop skills as individual musicians and as members of a musical group. Guidance will be given by the instructor in the selection of an instrument. Course content includes beginning level technical and ensemble skills necessary for performance. Some performance opportunities are provided. Marching band techniques and performances may be included. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.

BAND (923315)

Level 1

Concert Band 1 and 2

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Beginning Band or successful audition

Students continue developing as individual musicians and as members of a musical group. Emphasis is placed on the development of intermediate level technical and ensemble skills necessary for performance. Marching band techniques and performances may be included. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.

BAND (923316)

Level 2

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Beginning Band or successful audition

Students continue developing as individual musicians and as members of a musical group. Emphasis is placed on the development of intermediate level technical and ensemble skills necessary for performance. Marching band techniques and performances may be included. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.

ADVANCED BAND (923415)

Level 1

Symphonic Band and Wind Symphony

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Successful audition

Students in this course form the representative performing band for the school. Emphasis is placed on the sequential development of advanced technical skills and on the study of related literature. Based on successful completion of sequential concepts for each level, students will continue to learn advanced musical concepts. Marching band techniques, rehearsals, and performances are required in this course. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.

ADVANCED BAND (923416)

Level 2

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Successful audition

Students in this course form the representative performing band for the school. Emphasis is placed on the sequential development of advanced technical skills and on the study of related literature. Based on successful completion of sequential concepts for each level, students will continue as specified in course level. Marching band techniques, rehearsals, and performances are required in this course. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.

ADVANCED BAND (923417)

Level 3

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Successful audition

Students in this course form the representative performing band for the school. Emphasis is placed on the sequential development of advanced technical skills and on the study of related literature. Based on successful completion of sequential concepts for each level, students will continue to learn advanced musical concepts. Marching band techniques, rehearsals, and performances are required in this course. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.

PERCUSSION ENSEMBLE (925015)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Successful audition

Corequisite: Schools may also require membership in band or advanced band, chorus or orchestra class. Participation in marching band may be a required part of this course.

The percussion ensemble class is designed to meet specific needs of percussionists. Content includes study of the appropriate ensemble literature, and rehearsal and performance techniques from the various areas of musical composition. Instrumentation of the group is at the discretion of the instructor. Marching band techniques and performances may be included. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.

JAZZ ENSEMBLE (924015)

Level 1

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Successful audition or permission of the instructor

Corequisite: Schools may require membership in band or advanced band class, and may require participation in marching band.

The instrumental jazz ensemble curriculum emphasizes improvisation and styles of the jazz idiom. Content includes the study of blues scale patterns and harmonic progressions innate in jazz music. Content also includes the study of the appropriate jazz literature and rehearsal and performance techniques. Instrumentation of the jazz ensemble is at the discretion of the instructor. Marching band techniques and performances may be included. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.

JAZZ ENSEMBLE (924016)

Level 2

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Successful audition or permission of the instructor**Corequisite:** Schools may require membership in band or advanced band class, and may require participation in marching band.

The instrumental jazz ensemble curriculum emphasizes improvisation and styles of the jazz idiom at an intermediate level. Content includes the study of blues scale patterns and harmonic progressions innate in jazz music. Content also includes the study of the appropriate jazz literature and rehearsal and performance techniques. Instrumentation of the jazz ensemble is at the discretion of the instructor. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course. Marching band techniques and performances may be included.

This course requires a student materials fee as listed in FCPS Notice 5922.**BEGINNING ORCHESTRA (923715)**

Grades: 9, 10, 11, 12

Credit: one

Students develop skills as individual musicians and as members of a musical group. Guidance will be given by the instructor in the selection of an instrument. Course content includes beginning level technical and ensemble skills necessary for performance. Some performance opportunities are provided. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.**ORCHESTRA (923815)**

Level 1

Freshmen Orchestra

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Attainment of beginning level skills and permission of instructor

Students continue developing as individual musicians and as members of a musical group. Emphasis is placed on the development of intermediate level technical and ensemble skills necessary for performance. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.**ORCHESTRA (923816)**

Level 2

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Attainment of beginning level skills and permission of instructor.

Students continue developing as individual musicians and as members of a musical group. Emphasis is placed on the development of intermediate level technical and ensemble skills necessary for performance. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.**ADVANCED ORCHESTRA (923915)**

Level 1

Chamber Orchestra

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Successful audition

Students in this course form the representative string performing group for the school. Emphasis is placed on the sequential development of advanced technical, ensemble, and disciplinary skills necessary for refined rehearsal and performance both in and out of school. Based on successful completion of sequential concepts for each level, students will continue to learn advanced musical concepts. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.**ADVANCED ORCHESTRA (923916)**

Level 2

Full Symphony Orchestra - After School

Grades: 9, 10, 11 12

Credit: one

Prerequisite: Successful audition

Students continue developing as individual musicians and as members of a musical group. Emphasis is placed on the development of advanced level technical and ensemble skills necessary for performance. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.**MIXED CHORUS (926015)***Chorale*

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: none

Students will participate in a chorus of mixed voices. Emphasis is placed upon correct vocal performance techniques and sight-singing through the study of appropriate choral literature. Based on successful completion of sequential concepts for each level, students will continue to learn progressive musical concepts. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.**ADVANCED MIXED CHORUS (928915)**

Level 1

Chamber Singers

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Successful audition

Students are offered advanced choral experiences for mixed voices. Emphasis is placed on the development of musicianship and proficiency in ensemble performance. Course content includes a study of choral literature, vocal techniques, and sight-singing. Based on successful completion of sequential concepts for each level, students will continue to learn advanced musical concepts. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.Visit www.westfieldhschoral.org for audition details.**TREBLE CHORUS (926016)**

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: none

Students will participate in a chorus of higher voices with an emphasis on correct vocal performance techniques. Based on successful completion of sequential concepts, students will continue to learn progressive musical concepts and build sight-singing through the study of appropriate choral literature. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.**ADVANCED TREBLE CHORUS (928916)***Bel Canto*

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Successful audition

Students are offered advanced choral experiences for higher voices. Emphasis is placed on the development of musicianship and proficiency in ensemble performance. Course content includes a study of choral literature, vocal techniques, and sight-singing. Based on successful completion of sequential concepts for each level, students will continue as specified in the course. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.

This course requires a student materials fee as listed in FCPS Notice 5922.Visit www.westfieldhschoral.org for audition details.**BASSO CHORUS (926017)**

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: none

Students will participate in a chorus of lower voices with an emphasis on correct vocal performance techniques. Based on successful completion of sequential concepts, students will continue to learn progressive musical concepts and build sight-singing through the study of appropriate choral

literature. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.
This course requires a student materials fee as listed in FCPS Notice 5922.

INTERMEDIATE BASSO CHORUS (928517)

Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: Beginning level chorus or successful audition

Students will participate in an intermediate level of lower voices and continue to study correct vocal production, sight-singing, and development of musicianship through appropriate choral literature. Based on successful completion of sequential concepts for each level, students will continue as specified in course level. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.
This course requires a student materials fee as listed in FCPS Notice 5922.

ADVANCED BASSO CHORUS (928917)

Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: Successful audition

Students are offered advanced choral experiences for lower voices. Emphasis is placed on the development of musicianship and proficiency in ensemble performance. Course content includes a study of choral literature, vocal techniques, and sight-singing. Based on successful completion of sequential concepts for each level, students will continue as specified in the course. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.
This course requires a student materials fee as listed in FCPS Notice 5922.

SHOW/SWING CHOIR (929615)

Broadway Workshop Ensemble - After School
Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: Successful audition
Corequisite: May require membership in another music class

Students are offered choral experiences in the appropriate genre. Emphasis is placed on the development of musicianship and proficiency in ensemble performance. Course content includes a study of appropriate literature, vocal techniques, sight-singing, and choreography. Students must meet both the school day and outside of the school day participation requirements to receive credit for the course.
This course requires a student materials fee as listed in FCPS Notice 5922.
Visit www.westfieldhschoral.org for audition details.

MUSIC THEORY (922500)

Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: Recommendation of the instructor

Emphasis is placed on developing and understanding basic music theory skills. Course content includes recognizing and notating: all major and minor scales, rhythms in simple and compound meters, and triadic chord structures. Composition skills in standard notation of simple melodies, with accompanying chords and keyboard performance of simple tunes, may also be included. Students will become acquainted with appropriate musical terms.
This course requires a student materials fee as listed in FCPS Notice 5922.

ADVANCED PLACEMENT MUSIC THEORY (922604)

Grades: 10, 11, 12 **Credit: one/weighted +1.0**
Prerequisite: Music Theory or equivalency exam

The purpose of this course is to prepare students to take the Advanced Placement Music Theory examination, with college credit and/or placement being awarded if a qualifying score is achieved. Students are given a solid foundation in intervals, pitch patterns, metric/rhythmic patterns, chords, and the terms that are part of a basic understanding of reading, performing, and listening to music. Analysis, elementary composition, aural skills, sight-singing, and keyboard harmony will also be studied. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.
This course requires a student materials fee as listed in FCPS Notice 5922.

MUSIC AND COMPUTER TECHNOLOGY 1 (922527)

Grades: 11, 12 **Credit: two**
Prerequisite: Advanced Music Theory or a music theory background (Interview may be required with the instructor.)
West Potomac HS Academy, Fairfax HS Academy - transportation may be provided

Students will explore the use of computers and other electronic technologies in music including: Musical Instrumental Digital Interface (MIDI), analog and digital synthesis, sequencing, acoustics, sound processing, and electronic musical composition using the latest music industry software and the internet. For more information, visit the academy website.
This course requires a student materials fee as listed in FCPS Notice 5922.

MUSIC AND COMPUTER TECHNOLOGY 2 (922627)

Grades: 12 **Credit: two**
Prerequisite: Music and Computer Technology 1
Fairfax HS Academy, West Potomac HS Academy - transportation may be provided

Students will expand on the use of computers and other electronic technologies developed in Music and Computer Technology I including: Musical Instrumental Digital Interface (MIDI), analog and digital synthesis, sequencing, acoustics, sound processing, and electronic musical composition using the latest music industry software and the internet. For more information, visit the academy website.
This course requires a student materials fee as listed in FCPS Notice 5922.

FINE ARTS THEATRE ARTS

ACTING METHODS (144026)

Grades: 10, 11, 12 **Credit: one**
Prerequisite: One of the following courses: Theatre Arts, Musical Theatre Workshop, or teacher recommendation. Interview may be required.
Fairfax HS Academy - transportation may be provided

Students will explore performance techniques specific to acting for stage and film including actor preparation, methods, characterization, vocal production, movement, and theatre vocabulary. Students will examine classic and contemporary theatre styles, structure, and content related to audition techniques and portfolio development. Participation in academy-based performances are strongly encouraged and may be required. For more information, visit the academy web site.
This course requires a student materials fee as listed in FCPS Notice 5922.

ADVANCED ACTING METHODS (144027)

Grades: 11, 12 **Credit: two**
Prerequisite: Acting Methods or teacher recommendation.
Fairfax HS Academy - transportation may be provided

Students will enhance performance techniques specific to acting for stage and film including actor preparation, methods, characterization, vocal production, movement, and theatre vocabulary. Students will examine and appraise classic and contemporary theatre styles, structure, and content related to audition techniques and portfolio development. Participation in academy-based performances are strongly encouraged and may be required. For more information, visit the academy web site.
This course requires a student materials fee as listed in FCPS Notice 5922.

THEATRE ARTS 1 (141000)

Grades: 9, 10, 11, 12 **Credit: one**

Theatre Arts 1 is a foundations course that introduces students to dramatic literature, theatre history, technical theatre, artistic leadership, and acting. This course provides opportunities for students to experience and participate in the creative processes of performance and production. This course emphasizes skill development and provides theatrical opportunities that enable students to determine personal areas of interest. Participation in co-curricular activities and performances may be required to receive credit for this course. This course may be used to satisfy the graduation requirement for a credit in fine arts.

This course requires a student materials fee as listed in FCPS Notice 5922.
Based on interest and enrollment, an all upperclassmen class may be offered.

THEATRE ARTS 2 (142000)**Grades: 10, 11, 12****Credit: one****Prerequisite: Theatre Arts 1 and recommendation of the theatre arts instructor.**

Theatre Arts 2 integrates and builds upon concepts and skills from Theatre Arts 1. Through various modes of expression and performance, students explore dramatic literature, theatrical styles, and historical periods. Students will study and respond to a variety of theatre experiences that will refine their communicative, collaborative, analytical, interpretive, and problem solving skills. Students will expand their artistic abilities and appreciation of theatre arts. . Participation in co-curricular activities and performances may be required to receive credit for this course. This course may be used to satisfy the graduation requirement for a credit in fine arts.

This course requires a student materials fee as listed in FCPS Notice 5922.**THEATRE ARTS 3 (143000)****Grades: 11, 12****Credit: one****Prerequisite: Theatre Arts 2 or permission from the instructor.**

Students exhibit independence, discipline, and commitment to the theatrical process through their work on assigned projects. Advanced work in script analysis, character interpretation, and performance skills are expected. Collaboration with actors and directors is augmented by special assignments and opportunities. . Participation in co-curricular activities and performances may be required to receive credit for this course. This course may be used to satisfy the graduation requirement for a credit in fine arts.

This course requires a student materials fee as listed in FCPS Notice 5922.**THEATRE ARTS 4 (144000)****Grades: 12****Credit: one****Prerequisite: Theatre Arts 3 or permission from the instructor.**

Students identify areas of special interest in theatre arts, and initiate and complete major research and/or creative projects, such as playwriting, producing, directing, designing, and stage-managing. Emphasis is placed on in-depth study and completion of projects, assumption of leadership roles, and expansion of criteria for self-evaluation. Students will analyze and evaluate scripts, concentrate on vocal and physical dramatics, and undertake a special theatre project in their area of specialization. . Participation in major projects related to the co-curricular theatre productions may be expected. . Participation in co-curricular activities and performances may be required to receive credit for this course. This course may be used to satisfy the graduation requirement for a credit in fine arts.

This course requires a student materials fee as listed in FCPS Notice 5922.**TECHNICAL THEATRE 4 (143514)****Grades: 12****Credit: one****Prerequisite: Technical Theatre 3 or permission from the instructor**

Students will identify areas of special interest in technical theatre. Emphasis is placed on in-depth study, assumption of leadership roles, and application of self-assessment to improve skills and foster artistic growth. Participation in co-curricular activities and productions may be required to receive credit for this course. This course may be used to satisfy the graduation requirement for a credit in fine arts.

This course requires a student materials fee as listed in FCPS Notice 5922.**INTRODUCTION TO MUSICAL THEATRE (143060)****Grades: 10, 11, 12****Credit: one**

Students will explore performance techniques specific to musical theatre including acting, singing, and movement. Students will examine classic and contemporary musical theatre styles, structure, and content with an overall emphasis on performance. Participation in co-curricular activities and performances may be required to receive credit for this course. This course may be used to satisfy the graduation requirement for a credit in fine I arts.

This course requires a student materials fee as listed in FCPS Notice 5922.**MUSICAL THEATRE WORKSHOP (143026)****Grades: 9, 10, 11, 12****Credit: one****Prerequisite: Teatre Arts 1 and/or recommendation of theatre arts instructor****Fairfax HS Academy - transportation may be provided**

Students will explore performance techniques specific to musical theatre including acting, singing, and movement. Students will examine classic and contemporary musical theatre styles, structure, and content with an overall emphasis on performance. Participation in co-curricular activities and performances may be required to receive credit for this course. This course may be used to satisfy the graduation requirement for a credit in fine I arts.

This course requires a student materials fee as listed in FCPS Notice 5922.**MUSICAL THEATRE WORKSHOP (143027)****Grades: 10, 11, 12****Credit: two****Prerequisite: One of the following courses: Theatre Arts, Chorus,****Dance, or teacher recommendation. Interview may be required.****Fairfax HS Academy - transportation may be provided**

Students will enhance performance techniques specific to musical theatre including acting, singing, and dancing. Students will examine and appraise classic and contemporary musical theatre styles, structure, and content with an overall emphasis on performance. Participation in academy-based performances are strongly encouraged and may be required. For more information, visit the academy web site.

ADVANCED MUSICAL THEATRE (145027)**Grades: 11, 12****Credit: two****Prerequisite: Musical Theatre Workshop or teacher recommendation.****Fairfax HS Academy - transportation may be provided**

Students will expand and synthesize knowledge and skills in musical theatre performance and content. Outside class assignments including directing, auditioning for community, regional, and professional theatres, reviewing local performances, and interviewing local theatre professionals will be required. Collegiate and professional audition portfolios will be developed. Participation in academy-based performances are strongly encouraged and may be required. For more information, visit the academy web site.

This course requires a student materials fee as listed in FCPS Notice 5922.**TECHNICAL THEATRE 1 (143511)****Grades: 9, 10, 11, 12****Credit: one****Prerequisite: Theatre Arts 1 and/or recommendation of theatre arts instructor.**

Students will identify areas of special interest in technical theatre. Emphasis is placed on in-depth study, assumption of leadership roles, and application of self-assessment to improve skills and foster artistic growth. Participation in co-curricular activities and productions may be required to receive credit for this course. This course may be used to satisfy the graduation requirement for a credit in fine arts.

This course requires a student materials fee as listed in FCPS Notice 5922.**TECHNICAL THEATRE 2 (143512)****Grades: 10, 11, 12****Credit: one****Prerequisite: Technical Theatre 1 and/or recommendation of theatre arts instructor**

Students apply technical theatre knowledge and skills by participating in practical aspects of the production process. Students will collaborate to execute a variety of technical designs safely and effectively, and develop management and public relation skills. Participation in co-curricular activities and productions may be required to receive credit for this course. This course may be used to satisfy the graduation requirement for a credit in fine arts.

This course requires a student materials fee as listed in FCPS Notice 5922.**TECHNICAL THEATRE 3 (143513)****Grades: 11, 12****Credit: one****Prerequisite: Technical Theatre 2 and permission from instructor**

Students will engage in advanced work in technical theatre production through special assignments and opportunities. Emphasis is on the execution of individual design concepts through collaboration. Participation in co-curricular activities and productions may be required to receive credit for this course. This course may be used to satisfy the graduation requirement for a credit in fine arts.

This course requires a student materials fee as listed in FCPS Notice 5922.

TECHNICAL THEATRE 4 (143514)**Grades: 12** **Credit: one**
Prerequisite: Technical Theatre 3 and permission of the instructor

Students will identify areas of special interest in technical theatre. Emphasis is placed on in-depth study, assumption of leadership roles, and application of self-assessment to improve skills and foster artistic growth. Participation in co-curricular activities and productions may be required to receive credit for this course. This course may be used to satisfy the graduation requirement for a credit in fine arts.

This course requires a student materials fee as listed in FCPS Notice 5922.**FINE ARTS
VISUAL ARTS****3-D STUDIO ART 1 (919711)****Grades: 9, 10, 11, 12** **Credit: one**

Explore materials and processes used to develop unique, meaningful 3-D artworks related to a sense of place. Focus on 3-D media in the fields of sculpture, ceramics, architecture and/or other three-dimensional art forms. Explore contemporary approaches and develop traditional skills and techniques for three-dimensional artmaking. Express meaningful ideas, explore 3-D artists and art movements and develop an understanding of the role of 3-D art in visual culture.

This course requires a student materials fee as listed in FCPS Notice 5922.**3-D STUDIO ART 2 (919712)****Grades: 10, 11, 12** **Credit: one**
Prerequisite: 3-D Studio Art 1

Push the boundaries of materials and develop unique, meaningful artworks related to perceptions of self. Pursue an in-depth study of 3-D media in the fields of sculpture, ceramics, architecture and/or other three-dimensional art forms. Explore exciting new approaches and processes while refining traditional skills and techniques. Cultivate creativity and discover new artists and art movements that expand understanding of art and visual culture. Maintain and refine a required 3-D art portfolio.

This course requires a student materials fee as listed in FCPS Notice 5922.**3-D STUDIO ART 3 (919713)****Grades: 11, 12** **Credit: one**
Prerequisite: 3-D Studio Art 2

Strengthen and broaden knowledge and skills related to 3-D media. Try new and advanced techniques, develop a repertoire of strategies to strengthen creative and critical thinking, and aesthetic perception. Engage in problem solving, experimentation, and independent research while investigating historical and contemporary styles of three-dimensional art. Develop professional exhibition techniques and compile a portfolio that demonstrates expressive content, quality, concentration, and breadth of experience.

This course requires a student materials fee as listed in FCPS Notice 5922.**3-D STUDIO ART 4: PORTFOLIO PREPARATION (914714) NEW CLASS ADDED TO COURSE CATALOG THIS YEAR****Grades: 12** **Credit: one**
Prerequisite: 3-D Studio Art 3

Develop a portfolio of work based on a student selected area of artistic investigation while mastering 3D media skills and techniques. This course is ideally suited for students who work well independently Engage in a personal process of discovery while advancing the study of 3D studio art processes. Find your personal voice to communicate your unique ideas, while developing advanced technical proficiency, personal style, and problem-solving skills. Compile a final portfolio and prepare a culminating exhibition of personal artwork.

This course requires a student materials fee as listed in FCPS Notice 5922.**ADVANCED PLACEMENT 2-D ART AND DESIGN (914804)****Grades: 11, 12** **Credit: one/weighted +1.0**
Prerequisite: Studio Art and Design 1 and 2 or permission of the instructor

This course is designed for highly motivated, advanced art students who have demonstrated a serious interest in the study of art. Ideally suited for students who work well independently, the course will focus on the preparation of a two-dimensional design portfolio of artworks that exhibit quality, sustained investigation, and breadth of experience in the formal, technical, and expressive means of an artist. The two-dimensional portfolio may include, but is not limited to, forms of artwork in graphic design, typography, digital imaging, photography, collage, fabric design, weaving, illustration, painting, and printmaking. Students will submit two-dimensional portfolios based on objectives that reflect the format and requirements established by the College Board for Advanced Placement 2D Art and Design. Students who complete this course are encouraged to submit the associated Advanced Placement portfolio and may earn college credit if a qualifying score is achieved.

This course requires a student materials fee as listed in FCPS Notice 5922.**ADVANCED PLACEMENT: 3-D ART AND DESIGN (914961)****Grades: 11, 12** **Credit: one/weighted +1.0**
Prerequisite: 3D Studio Art and Design 1 and 2 or permission of the instructor

This course is designed for highly motivated, advanced art students who have demonstrated a serious interest in the study of art. Ideally suited for students who work well independently, the course will focus on the preparation of a three-dimensional design portfolio of artworks that exhibit quality, sustained investigation, and breadth of experience in the formal, technical, and expressive means of an artist. The three-dimensional portfolio may include, but is not limited to, traditional sculpture, architectural models, ceramics, and three dimensional fiber arts or metal work. Students will submit three-dimensional portfolios based on objectives that reflect the format and requirements established by the College Board for Advanced Placement Art. Advanced Placement college credit and/or placement may be awarded if a qualifying exam score is achieved. Students who complete this course are encouraged to submit the Advanced Placement portfolio and may earn college credit if a qualifying score is achieved.

This course requires a student materials fee as listed in FCPS Notice 5922.**ADVANCED PLACEMENT: DRAWING (915004)****Grades: 11, 12** **Credit: one/weighted +1.0**
Prerequisite: Studio Art and Design 1 and 2 or permission of the instructor

This course is designed for highly motivated, advanced art students who have demonstrated a serious interest in the study of art. Ideally suited for students who work well independently, the course will focus on the preparation of a drawing portfolio of artworks that exhibit quality, sustained investigation, and breadth of experience in the formal, technical, and expressive means of an artist. The drawing portfolio addresses a broad interpretation of drawing issues including painting, printmaking, studies for sculpture, some forms of design, and abstract and observational works. Students will prepare and submit drawing portfolios based on objectives that reflect the format and requirements established by the College Board for Advanced Placement Drawing. Students who complete this course are encouraged to submit the associated Advanced Placement portfolio and may earn college credit if a qualifying score is achieved.

This course requires a student materials fee as listed in FCPS Notice 5922.**ADVANCED PLACEMENT ART HISTORY (915104)****Grades: 10, 11, 12** **Credit: one/weighted +1.0**

Students explore the history of art across the globe from prehistory to the present, and analyze works of art through observation, discussion, reading, and research. Students should demonstrate a high degree of commitment to academic work and possess academic skills needed to pursue a program designed to meet college standards. The course prepares students for the Advanced Placement Art History examination, for which two semesters of college credit and/or placement may be awarded if a qualifying score is achieved. Objectives for Advanced Placement courses reflect the format and requirements in the Advanced Placement Course Description for Art published by the College Board. No prior experience in art studio or art history is assumed. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

This course requires a student materials fee as listed in FCPS Notice 5922.

DIGITAL ART & DESIGN 1 (918011)*Formerly Computer Graphics 1***Grades: 9, 10, 11, 12****Credit: one**

Use technology to think creatively, solve visual problems, and create personally expressive, original artworks related to the theme of a sense of place. Develop expertise in the use of computers, scanners, and digital cameras for artmaking. Use Adobe Photoshop, Adobe Illustrator, Adobe Animate, 3-D and video software for motion graphics/animation, graphic design, and digital imaging. Make interdisciplinary connections through study of artists, designers, and events in cultural, historical, and contemporary frameworks. Learn to address ethical issues concerning computer generated imagery. No prior computer experience is required.

This course requires a student materials fee as listed in FCPS Notice 5922.**DIGITAL ART & DESIGN 2 (918111)***Formerly Computer Graphics 2***Grades: 10, 11, 12****Credit: one****Prerequisite: Digital Art & Design 1**

Expand knowledge in the application of computer hardware and software to create personally expressive, original art related to the theme of perceptions of self. Solve complex visual problems within the areas of multimedia presentations, motion graphics/animation, graphic design, and digital imaging using Adobe Photoshop, Adobe Illustrator, Adobe Animate, 3-D and video software. Make interdisciplinary connections through study of artists, designers, and events in cultural, historical, and contemporary frameworks. Prepare a final required portfolio for evaluation.

This course requires a student materials fee as listed in FCPS Notice 5922.**DIGITAL ART & DESIGN 3 (918211)***Formerly Computer Graphics 3***Grades: 11, 12****Credit: one****Prerequisite: Digital Art & Design 2**

Expand knowledge and ability in the application of hardware and software to create personally expressive, original art in response to social and contemporary issues. Create visual solutions using a variety of media, including motion graphics/animation, graphic design, game development, web design and print design. Make interdisciplinary connections through study of artists, designers, and events in cultural, historical, and contemporary frameworks. A final portfolio or demo reel is required for evaluation.

This course requires a student materials fee as listed in FCPS Notice 5922.**DIGITAL ART & DESIGN 4: PORTFOLIO PREPARATION (919911)***Formerly Computer. Formerly Computer Graphics 4.***Grades: 12****Credit: one****Prerequisite: Digital Art & Design 3**

Engage in advanced study and application of computer graphics while developing the attitude and self-discipline of a working artist. Integrate advanced knowledge of software with creative thinking skills and interdisciplinary connections to produce a portfolio and digital exhibition of original artworks that show evidence of expressive content, quality, breadth of experience, and sustained investigation.

This course requires a student materials fee as listed in FCPS Notice 5922.**JEWELRY (3-D STUDIO ART) (919765)****Grades: 9, 10, 11, 12****Credit: one-half**

Practice and apply three-dimensional design techniques to jewelry making. Explore a variety of materials and approaches to create exciting jewelry related to the theme of perceptions of self. Think creatively and critically to meet challenges and solve problems in innovative ways. Study the history of jewelry making and leading contemporary artisans to inform personal development of the craft. Compile and maintain a required jewelry making portfolio.

This course requires a student materials fee as listed in FCPS Notice 5922.**JEWELRY (3-D STUDIO ART) (919766)****Grades: 9, 10, 11, 12****Credit: one-half**

Practice and apply three-dimensional design techniques to jewelry making. Explore a variety of materials and approaches to create exciting jewelry related to the theme of perceptions of self. Think creatively and critically to meet challenges and solve problems in innovative ways. Study the history of

jewelry making and leading contemporary artisans to inform personal development of the craft. Compile and maintain a required jewelry making portfolio.

This course requires a student materials fee as listed in FCPS Notice 5922.**PHOTOGRAPHY 1 (919311)****Grades: 9, 10, 11, 12****Credit: one**

Explore and practice standard black and white photographic processes through the use of cameras, films, light effects, and the application of basic darkroom techniques. Explore and practice digital photographic processes. Produce meaningful photographs that express ideas about experiences and observations related to the theme of a sense of place. Study the history of photography and the work of well known photographers to inform artmaking. Develop a beginning portfolio.

This course requires a student materials fee as listed in FCPS Notice 5922.**PHOTOGRAPHY 2 (919411)****Grades: 10, 11, 12****Credit: one****Prerequisite: Photography 1**

Expand on the study of black and white photography and digital processes while creating original artworks related to the theme of perceptions of self. Acquire and apply in-depth knowledge of photographic equipment, films, and specialized processes to include digital applications. Investigate leading exponents, equipment, and techniques from an historical perspective. Learn to critique and evaluate personal artwork and photographic works of others. Examine photography and its relationship to other art forms. Prepare a portfolio of meaningful artworks that demonstrate expressive content and quality of craftsmanship.

This course requires a student materials fee as listed in FCPS Notice 5922.**PHOTOGRAPHY 3 (919511)****Grades: 11, 12****Credit: one****Prerequisite: Photography 2**

Explore and respond to social and contemporary issues through an in-depth exploration of film and digital photography processes. Explore various career paths in photography such as Photojournalism, Commercial, and Fine Art Photography. Apply professional exhibition techniques to present work. Develop a quality portfolio that effectively illustrates a personal voice.

This course requires a student materials fee as listed in FCPS Notice 5922.**PHOTOGRAPHY 4: PORTFOLIO PREPARATION (919914)****Grades: 12****Credit: one****Prerequisite: Photography 3**

Engage in advanced study of photographic processes. Practice the attitude and self-discipline of a working artist. Apply professional exhibition techniques to exhibit personal work. Meet expectations by demonstrating initiative and commitment to communication of ideas through the use of the photographic medium. Prepare a final, required portfolio evidencing technical proficiency, quality, breadth of experience, and sustained investigation.

This course requires a student materials fee as listed in FCPS Notice 5922.**STUDIO ART AND DESIGN 1 (912000)****Grades: 9, 10, 11, 12****Credit: one**

Explore a variety of exciting opportunities and materials to inform the artmaking process. Learn to think conceptually and realize potential as a creative and critical thinker in order to meet the challenges of 21st Century living. Explore personal interests related to the theme of a sense of place while developing skills in the areas of drawing, painting, printmaking, ceramics, sculpture, and digital media. Course content includes art production, art appreciation, and studies in visual culture.

This course requires a student materials fee as listed in FCPS Notice 5922.**STUDIO ART AND DESIGN 2 (913000)****Grades: 10, 11, 12****Credit: one****Prerequisite: Studio Art and Design 1**

Cultivate previously developed artistic knowledge and skills learned in Studio Art and Design 1. Explore new combinations and possibilities in the use of two-dimensional and three-dimensional media including technological applications. Investigate contemporary topics, artistic expression, and design

related to the theme perceptions of self. Ask questions, solve problems, create products, and communicate ideas in innovative ways. Course content includes art production, design thinking, art history, criticism, aesthetics, and studies in visual culture.

This course requires a student materials fee as listed in FCPS Notice 5922.

STUDIO ART AND DESIGN 3 (914000)

Grades: 11, 12

Credit: one

Prerequisite: Studio Art and Design 2

Expand and improve artistic understanding and skills by using creative processes. Develop an individual style and voice to communicate ideas. Articulate responses to social and contemporary issues through the integration of traditional and electronic media. Present artworks in diverse formats. Course content includes art production, design application, art history, criticism, aesthetics, and studies in visual culture.

This course requires a student materials fee as listed in FCPS Notice 5922.

STUDIO ART & DESIGN 4: PORTFOLIO PREPARATION (914700)

Grades: 12

Credit: one

Prerequisite: Studio Art and Design 3

Engage in advanced study of art production, art history, aesthetics, and art criticism while maintaining the attitude and self-discipline of a working artist. Practice and exhibit technical proficiency and personal style, work in advanced media, and apply professional presentation techniques to develop and prepare artwork for exhibitions and portfolios. Demonstrate quality, breadth of experience, and sustained investigation in a body of work and select work for personal exhibitions, exit portfolios, and presentation portfolios.

This course requires a student materials fee as listed in FCPS Notice 5922.

VISUAL COMMUNICATIONS 1 (915311)

Grades: 9, 10, 11, 12

Credit: one

Develop and apply techniques in visual communication through the use of traditional and electronic media. Create original artworks for a variety of intended purposes such as personal, commercial, informational, social, cultural and environmental. Develop an understanding of ways in which artists communicate meaningful ideas for a specific purpose or intent. Become familiar with ethical issues related to the field of visual communications. Maintain a traditional and non-traditional sketchbook in addition to compiling a beginning visual communications portfolio.

This course requires a student materials fee as listed in FCPS Notice 5922.

VISUAL COMMUNICATIONS 2 (915411)

Grades: 10, 11, 12

Credit: one

Prerequisite: Visual Communications 1

Create original works that express depth of thought and complex ideas through visual communication. Use a variety of 2-D, 3-D, and 4-D traditional and electronic media to communicate ideas related to personal, commercial, informational, social, political, cultural, spiritual, or environmental issues. Work with design components, consider technical aspects and focus on ways to interact with the viewer in communication of ideas. Maximize creative approaches and take into account the parameters of a client-driven environment. Conduct oral presentations and critiques and compile a required portfolio based on evidence of content, design quality, and technical skill. Address ethical issues related to the field of visual communications.

This course requires a student materials fee as listed in FCPS Notice 5922.

VISUAL COMMUNICATIONS 3: PORTFOLIO PREPARATION (915511)

Grades: 11, 12

Credit: one

Prerequisite: Visual Communications 2

Refine technical skills and develop a personal style in an advanced study of visual communications. Exhibit initiative, commitment, and an openness to new approaches and conduct an in-depth exploration of a specific idea or theme. Consider aesthetics and issues related to the influence of mass media and visual culture in the development of personal artistic style, and use of symbolism and content. Compile a required final portfolio evidencing effective content, quality, breadth of experience, and sustained investigation. Arrange and present an exhibition of personal artwork. Address ethical issues related to the field of visual communications.

This course requires a student materials fee as listed in FCPS Notice 5922.

GENERAL

APPRENTICESHIP (984100)

Grades: 10, 11, 12

Credit: one

This course is taken in conjunction with a content course and is designed to allow students to participate in the youth apprenticeship program. For more information on applicable companion courses see <https://www.doli.virginia.gov/apprenticeship/youth-apprenticeship/Students> must have instructor permission and an employer willing to sponsor the apprenticeship with the Virginia Department of Labor Youth Apprenticeship program. Students must have transportation to job site. Students should achieve a minimum of 280 hours for the school year (70 hours per quarter).

AIR FORCE JUNIOR RESERVE OFFICER TRAINING CORPS (AFJROTC 1) (791311)

Aerospace Science 1/Leadership Education 1

Grades: 9, 10, 11, 12

Credit: one

Chantilly HS Academy - transportation may be provided

This full-year course is the first in a sequence that teaches citizenship, character development, leadership, teamwork, self-discipline, critical thinking, communication, and organizational skills with a study of the fundamental aspects of health, wellness, and physical fitness. Course study includes an overview of aviation history, as well as the opportunity to study military customs, drills, and the proper wear of the Air Force uniform. The Air Force JROTC program provides a four-year, sequential program of instruction for all students in grades 9 - 12.

Industry certification may be available as part of this course.

AIR FORCE JUNIOR RESERVE OFFICER TRAINING CORPS (AFJROTC 2) (791611)

Aerospace Science 2/Leadership Education 2

Grades: 10, 11, 12

Credit: one

Prerequisite: AFJROTC 1

Chantilly HS Academy - transportation may be provided

This full-year course builds upon the skills and knowledge taught in AFJROTC 1. Students continue their study of citizenship, character development, leadership, teamwork, drills, health, wellness, and physical fitness. Student leadership topics include individual and group behaviors, communication skills, and leadership principles; additionally, students are afforded the opportunity to hold positions of greater responsibility in the planning and execution of cadet corps projects. This course also includes a study of the aircraft flight, basic aerodynamics, aviation weather, navigation, and the effects of flight on the human body. The Air Force JROTC program provides a four-year, sequential program of instruction for all students in grades 9 - 12.

Industry certification may be available as part of this course.

AIR FORCE JUNIOR RESERVE OFFICER TRAINING CORPS (AFJROTC 3) (791811)

Aerospace Science 3/Leadership Education 3

Grades: 11, 12

Credit: one

Prerequisite: AFJROTC 2

Chantilly HS Academy - transportation may be provided

This full-year course builds upon the skills and knowledge taught in AFJROTC 2. Leadership education includes leadership concepts, ethics for the cadet corps and life, management techniques, and stress management. Students continue their study of health, wellness, and physical fitness. These students are the leaders in the planning and execution of cadet corps activities and projects. This course provides an overview of the United States government, other systems of government, and space exploration. Students will practice oral and written communication skills on relevant space and Air Force topics. The Air Force JROTC program provides a four-year, sequential program of instruction for all students in grades 9 - 12.

Industry certification may be available as part of this course.

AIR FORCE JUNIOR RESERVE OFFICER TRAINING CORPS**(AFJROTC 4) (791911)****Aerospace Science 4/Leadership Education 4****Grades: 12****Credit: one****Prerequisite: AFJROTC 3****Chantilly HS Academy - transportation may be provided**

Students will demonstrate leadership skills as a role model, as a mentor, and as a coach. While serving in leadership positions, students will assist the instructors in managing the Corps of Cadets, with instruction in communication skills, drills, and proper wear and respect for the Air Force uniform. This course affords students the opportunity to put leadership theories into practice by using their communication, decision-making, managerial, and organizational skills. The course also includes career exploration and reviews possible life experiences in the Air Force. The Air Force JROTC program provides a four-year, sequential program of instruction for all students in grades 9 - 12.

Industry certification may be available as part of this course.**AP CAPSTONE 1: SEMINAR (982004)****Grades: 10, 11, 12****Credit: one/weighted +1.0**

This course engages students in cross-curricular critical thinking of concepts that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research based written essays, and design and deliver oral and visual presentations, both individually and collaboratively. Students who complete this course and who choose to take the Advanced Placement examination in AP Capstone and may earn college credit if a qualifying score is achieved.

AP CAPSTONE 2: RESEARCH (982014)**Grade: 11, 12****Credit: one/weighted +1.0****Prerequisite: AP Capstone 1: Seminar**

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Students design, plan, and conduct a yearlong mentored investigation addressing a research question of their choosing. The course allows them to further the skills they acquired in the AP Seminar course by employing research methods and ethical research practices, and by analyzing and synthesizing information as they address a research question. Students must: introduce and contextualize their research question; synthesize information and perspectives related to the research question; explain the research method; analyze and interpret the evidence; illustrate a cogent argument based on a clear, evidence-based line of reasoning; reflect on the research project and the implications and limitations of the conclusion(s) reached; and acknowledge and cite sources. Students who choose to take the Advanced Placement examination in AP Capstone may earn college credit if a qualifying score is achieved.

AVID (982800)**Advancement via Individual Determination****Grades: 9, 10, 11, 12****Credit: one****Prerequisite: Participants selected through application and interview process.****Corequisite: Concurrent enrollment in Algebra I or higher, world language, and at least one honors, AP, or IB course**

This course is designed to support motivated, capable students in pursuing a rigorous course of high school study leading to acceptance to and success in a four-year college or university. Through a variety of instructional techniques, students develop skills in higher-level thinking, writing across the curriculum, and reading strategies for accessing challenging course material. Students develop time management, note taking, research, organization, and other skills fundamental to success in higher-level mathematics, social studies, English, science, and world language courses. Students participate in college, career, and cultural exploration activities, including field trips. Students must submit an application to be considered for the AVID program.

ECONOMICS AND PERSONAL FINANCE (612000)**Grades: 9, 10, 11, 12****Credit: one**

Instruction in economics and personal finance prepares students to function effectively as consumers, savers, investors, entrepreneurs, and active citizens. Students learn how economies and markets operate and how the United States' economy is interconnected with the global economy. On a personal level, students learn that their own human capital (knowledge and skills) is their most valuable resource. Beginning with students entering ninth grade in fall 2011, one standard unit of credit in Economics and Personal Finance is required for graduation. Students who choose an EPF option that requires payment, will not be reimbursed should additional options become available.

Industry certification may be available as part of this course.**ECONOMICS AND PERSONAL FINANCE HONORS (612036)****Grades: 9, 10, 11, 12****Credit: one/weighted +.5**

The Honors EPF course expands and enriches the standard Economics and Personal Finance curriculum by incorporating project based learning and curriculum extensions that will require students to analyze the costs and benefits of economic policies to society and to themselves. In addition to being able to define, identify, and understand financial and economic systems, students in the honors course will analyze the differences between domestic and global policies and the evolution, and oftentimes unintended consequences, of those policies. Students will be able to explain the operation of current financial and economic systems, anticipate advantages and disadvantages of evolving systems, and consider how they can best take advantage of these changes to ensure economic security for our nation and for themselves.

Industry certification may be available as part of this course.**INDEPENDENT STUDY (011550)****Grades: 11, 12****Credit: one**

This course will support students in the development of knowledge and skills that foster postsecondary readiness. Students will engage in research and project-based learning of their own choosing with the support of the instructor. Students will be responsible for developing a plan with timelines, checkpoints, and criteria for evaluating their progress throughout the year, culminating in a capstone project and/or presentation. Students will need to submit both form IS-165, Request to Enroll in an Independent Study Course for Elective Credit, and IS-166, Academic Plan for Independent Study for Elective Credit, for approval prior to starting the course.

INTERNSHIP (984200)**Grades: 9, 10, 11, 12****Credit: one**

Internship is a Work-Based Learning experience that places the student in a real workplace environment to develop and practice career-related knowledge and bring together skills and knowledge for a specific career field related to the student's career interests, abilities, and goals. Internships may be paid or unpaid. Meaningful and authentic connections are made to classroom learning and accompanied by structured reflection activities. Students participating in internships are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered. Credit for internship experiences during the school year should be based upon the student's successful completion of the course and continuous, satisfactory employment throughout the school year. Students should achieve a minimum of 280 hours for the school year (70 hours per quarter).

LEADERSHIP TRAINING 1-4 (980800)**Grades: 9, 10, 11, 12****Credit: one****Level 1-980800 Level 2-980812 Level 3-980813 Level 4-980814**

This course provides leadership training to interested students. It is especially appropriate for student body officers, organizational leaders, and class officers. The course includes understanding leadership, assessment of leadership styles, planning and organization skills, relationship building and problem solving. Focus will be placed on organization, time management, election processes, financial planning, opinion surveys, communication techniques, and becoming a community liaison. Student government and class activities will be the basis around which most of the coursework is designed.

PEER HELPING I (980760)**Grades: 7, 8, 10, 11, 12** **Credit: one****Prerequisite: Successful completion of the selection procedures including application, recommendations, and interview. Approval by the peer helper program instructors and the Director of Student Services is required.**

This course is designed to train students to implement a peer helper program in the high school. The training program is designed to develop students' interpersonal, support, and leadership skills for assisting other students to grow socially, emotionally, and academically. Students are taught to help other students (elementary and secondary) by learning to be effective listeners, group leaders, and positive role models. The course presents information and training in the following areas of peer helping preparation: verbal and nonverbal communication, self-exploration and self-esteem, listening skills, decision making/problem solving, peer refusal skills, substance abuse prevention, confidentiality and referral procedures. Emphasis is placed on experiential learning, supervised group activities, and skills practice.

STRATEGIES FOR SUCCESS (788900)**Grades: 9, 10, 11, 12** **Credit: one**

This elective course is designed to provide support to a student in core curricular areas and to provide direct instruction in specific learning strategies, study skills, time management, organization, and self-advocacy skills. Time is also allotted to address individual areas of need. While students may receive assistance on core curricular assignments, the course is not designed to serve as a study hall. Students enrolled in the course receive the equivalent of one period of instruction each day and earn an elective credit. This course may be taught for an elective credit all four years or more, as appropriate. Students successfully completing two years of this course will satisfy the sequential elective requirement for the Advanced or Standard Diploma.

TEACHERS FOR TOMORROW 1 (906200)**Grades: 11, 12** **Credit: one**

The Teachers for Tomorrow course introduces juniors and seniors to a career in teaching and education. The primary elements of the curriculum components are the learner, the school, the teacher, and teaching. The components are intentionally broad in scope and provide a great deal of flexibility based on the career interest of a student. In addition to the fundamental curriculum components, all students are required to observe and participate in an internship outside the teachers for tomorrow classroom. The internship may involve the preschool level through 12th grade.

TEACHERS FOR TOMORROW 2 (907200)**Grades: 12** **Credit: one**

In this advanced level course, students will continue to pursue their interest of careers in education. The primary focus of the class is the teacher and teaching, reinforcing the skills and knowledge needed to prepare students to become future educators. Students will have the opportunity to gain teaching experience through participation in supervised internships outside the teachers for tomorrow classroom. The internships may involve the preschool level through grade 12.

TEACHERS FOR TOMORROW 1 (906226)**Grades: 11, 12** **Credit: one****(Base school course code is 906200)
Chantilly HS Academy, Edison HS Academy - transportation may be provided**

The Teachers for Tomorrow course introduces juniors and seniors to a career in teaching and education. The primary elements of the curriculum foster the students interest in understanding and appreciating the teaching profession, learning the history, structure and governance of teaching and applying professional techniques of teaching during a field experience. The field experience may involve the preschool level through 12th grade.
Industry certification may be available as part of this course.

TEACHERS FOR TOMORROW 2 (907226)**Grades: 12** **Credit: one****Prerequisite: Teachers for Tomorrow 1 (906226)
(Base school course code is 907200)
Chantilly HS Academy, Edison HS Academy - transportation may be provided**

In this advanced level course, students will continue to pursue their interest of careers in education. The primary focus of the class is for students to hone their teaching skills and research post-secondary options in the field of education. Students will have the opportunity to learn about the teachers certification process in Virginia and gain further teaching experience through participation in supervised internships outside the teachers for tomorrow classroom. The internships may involve the preschool level through grade 12.
Industry certification may be available as part of this course.

HEALTH & MEDICAL SCIENCES**911 DISPATCH (833726)****Grades: 10, 11, 12** **Credit: one****West Potomac HS Academy - transportation may be provided**

911 Dispatch is designed to develop entry-level skills needed in a telecommunication environment for rescue, fire, and police. The course provides the beginning telecommunicator with an understanding of situations encountered in an emergency communications environment. Upon completion, the student will be able to: summarize issues involving the telecommunicator's role and responsibilities as a member of health and public safety environment; summarize issues involving available resources to a telecommunicator; the importance of maintaining confidentiality, liability and legal issues involving emergency telecommunicators and their agencies; summarize the process of stress management for inside and outside a communications department/center.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**BIOTECHNOLOGY FOUNDATIONS (834460)****Grades: 11, 12** **Credit: one****Falls Church HS Academy, West Potomac HS Academy - transportation may be provided**

This course focuses on various techniques that are used to modify living organisms, or parts of organisms, to improve plants and animals, and the development of microorganisms for specific purposes. Student activities range from bioprocessing and DNA analysis, to medicine, biomechanical systems, and the environment. Students gain insight and understanding about biotechnology career fields.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922. Dual enrollment credits with approved colleges or universities may be available through this course.**DENTAL CAREERS 1 (832827)****Grades: 11, 12** **Credit: two****Falls Church HS Academy, West Potomac HS Academy, Chantilly HS Academy - transportation may be provided**

Dental Careers 1 is the first-level course of a two-year dental assisting program. The course content focuses on introducing all dental-related careers as well as competencies necessary to manage a dental office. The curriculum includes head and neck anatomy, infection control, tooth charting, and instrumentation. The dental skills relevant to the curriculum are practiced in a classroom dental clinic. Students must purchase liability insurance and meet current health agency requirements to participate in clinical experiences.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

DENTAL CAREERS 2 (832927)**Grades: 12****Credit: two****Prerequisite: Dental Careers 1 (832827)****Falls Church HS Academy, West Potomac HS Academy, Chantilly HS Academy - transportation may be provided**

During the second year of this course, students refine advanced skills and learn more about the management of the office as well as the dental specialties of oral surgery, orthodontics, and periodontics. Students are provided the opportunity to experience an internship while participating in patient care at local dental offices and to earn a DANB Radiation Health and Safety certification. Lab coats or scrubs must be purchased for this class. Students must purchase liability insurance and meet current dental health agency requirements to participate in clinical experiences. Students must purchase liability insurance and meet current health agency requirements to participate in clinical experiences.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

EMERGENCY MEDICAL TECHNICIAN 1 (833326)**Grades: 11, 12****Credit: one****Prerequisite: Exploring Health Sciences and Exploring the Language of Medicine are recommended but not required.****Falls Church HS Academy, West Potomac HS Academy - transportation may be provided**

Students must also register for part two, Emergency Medical Technician 2 for the spring semester. Emergency Medical Technician prepares the student to enter the workforce or pursue further education in the field of Emergency Medical Services (EMS). The principles and practices of emergency response will be explored under the direct supervision of a certified EMT instructor. The curriculum consists of planned learning experiences in the classroom, laboratory, and faculty supervised clinical settings. Students will have the opportunity to observe and interact with a variety of patients experiencing varying degrees of injury or disease that are carefully selected to provide appropriate clinical learning experiences. As preparation, students will be provided with ample lab practice to fully prepare them for the clinical experience and minimize risks. During the course of study, students will have the opportunity to earn N-REMT and other certifications. Offsite clinical lab opportunities with Fairfax County Fire and Rescue may be available to the students. Students must purchase liability insurance and meet current health agency requirements to participate in clinical experiences.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

EMERGENCY MEDICAL TECHNICIAN 2 (833426)**Grades: 11, 12****Credit: one****Prerequisite: Emergency Medical Technician 1 (833326)****Falls Church HS Academy, West Potomac HS Academy - transportation may be provided**

This is part two (spring semester) of a two-part, full-year course. Students must also register for part one, Emergency Medical Technician 1 for the fall semester. Emergency Medical Technician prepares the student to enter the workforce or pursue further education in the field of Emergency Medical Services (EMS). The principles and practices of emergency response will be explored under the direct supervision of a certified EMT instructor. The curriculum consists of planned learning experiences in the classroom, laboratory, and faculty supervised clinical settings. Students will have the opportunity to observe and interact with a variety of patients experiencing varying degrees of injury or disease that are carefully selected to provide appropriate clinical learning experiences. As preparation, students will be provided with ample lab practice to fully prepare them for the clinical experience and minimize risks. During the course of study, students will have the opportunity to earn N-REMT and other certifications. Offsite clinical lab opportunities with Fairfax County Fire and Rescue may be available to the students.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

EXPLORING HEALTH SCIENCES (830226)**Grades: 10, 11, 12****Credit: one****Chantilly HS Academy, Falls Church HS Academy, West Potomac HS Academy - transportation may be provided**

Students must also register for part two, Exploring the Language of Medicine for the spring semester. This course introduces the student to health care careers and develops basic skills common to all health and medical sciences. It is recommended as the first course for other health and medical sciences

courses. This course focuses on exploring health careers, communication skills, safety, first aid, and Healthcare Provider CPR.

Industry certification may be available as part of this course.

EXPLORING THE LANGUAGE OF MEDICINE (838326)**Grades: 10, 11, 12****Credit: one****Prerequisite: Exploring Health Sciences****Chantilly HS Academy, Falls Church HS Academy, West Potomac HS Academy - transportation may be provided**

Students must also register for part one, Exploring Health Sciences for the fall semester. This course builds on the foundations of the Exploring Health Sciences course. Exploring the Language of Medicine is designed to help students learn medical terminology. It is presented in logical order, beginning with each body system anatomy and physiology and progressing through pathology, diagnostic procedures, therapeutic interventions, and pharmacology. Concepts, terms, and abbreviations are also presented to the students. This course is also available online.

Industry certification may be available as part of this course.

FIREFIGHTING 1 (870527)**Grades: 12****Credit: two**

Prerequisite: Students MUST be 16 years old (40-1.79.1 Code of Virginia) by the first day of the course. Enrollment requires parental consent. Students are required to meet a minimum standard on the Candidate Physical Ability Test (CPAT) prior to starting the course. Parents and students are required to attend an orientation session with the instructor prior to the beginning of the course. Emergency Medical Technician 1 and 2 strongly encouraged.

Fairfax County Fire Training Academy, Chantilly HS Academy - transportation may be provided

This is part one (fall semester) of a two-part, full-year course. Firefighting is one of the most dangerous jobs in the world and, therefore, requires complete discipline and attention to achieving the academic and professional standards necessary to successfully fight live fires, address hazardous-material incidents, and conduct search-and-rescue operations. Students will become familiar with the procedures, equipment, and technologies used by current fire departments. This course challenges students academically, mentally, and physically and meets the standards of the National Fire Protection Association (NFPA) 1001-2013 leading to Firefighting 1 certification. NOTE: Students seeking NFPA 1001-2013 Firefighter 1 certification will be required to make up classroom hours missed. Additional requirements, including CPR, HAZMAT operations, and Mayday Awareness are stipulated for those students seeking NFPA 1001-2013 Firefighter 1 certification.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

FIREFIGHTING 2 (870627)**Grades: 12****Credit: two**

Prerequisite: Firefighting I; Students MUST be 16 years old (40-1.79.1 Code of Virginia) by the first day of the course. Enrollment requires parental consent. Students are required to meet a minimum standard on the CPAT prior to starting the course.

Parents and students are required to attend an orientation session with the instructor prior to the beginning of the course. Fairfax County Fire Training Academy, Chantilly HS Academy - transportation may be provided

This is part two (spring semester) of a two-part, full-year course. This course builds upon the professional knowledge gained and skills taught in Firefighting I. Students respond to simulated hazardous-material incidents and conduct rescue operations, including vehicle extrication. Students react to multi-faceted situations (e.g., caused by simulated terrorism, accidents, and natural disasters) by managing resources such as medivac 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 firefighting II certification. NOTE: Students seeking NFPA 1001-2013 Firefighter II certification will be required to make up classroom hours missed. Additional requirements, including CPR, HAZMAT operations, and Mayday Awareness are stipulated for those students seeking NFPA 1001-2013 Firefighter II certification.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

HEALTH INFORMATICS (833827)**Grades: 9, 10, 11, 12****Credit: two****Falls Church HS Academy - transportation may be provided**

Health Informatics is information engineering applied to the field of health care. This is essentially the management and use of patient health care information and deals with the resources, devices, and methods required to optimize the use of information in health and bio-medicine. Disciplines include information science, computer science, social science, behavioral science and is applied to areas of nursing, clinical medicine, dentistry, pharmacy, public health, occupational therapy, physical therapy, biomedical research and alternative medicine. This course offers an overview by providing students with the fundamental knowledge of the concepts of health informatics and how technology can be used in the delivery of healthcare. Students are provided a broad exposure to health informatics in topics including networking, information systems, security, and HIPAA. This is part of the Claude Moore Health Informatics Program.

Industry certification may be available as part of this course.**INTRODUCTION TO NURSING I (835526)****Grades: 11, 12****Credit: one****Falls Church HS Academy, Plum Center, Chantilly HS Academy, West Potomac HS Academy - transportation may be provided**

This is part one (fall semester) of a two-part, full-year course. Students must also register for part two, Introduction to Nursing 2 for the spring semester. Introduction to Nursing I emphasizes the study of nursing occupations as related to the healthcare system. Students study normal growth and development, simple body structure and function, medical terminology and are introduced to concepts of infection prevention and disease processes. Advanced on-the-job clinical experience in a healthcare facility may be available as a part of the course. Successful completion of the program may lead to employment in physicians' offices or clinics. Students must purchase liability insurance and meet current health agency requirements to participate in clinical experiences.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**INTRODUCTION TO NURSING II (835626)****Grades: 11, 12****Credit: one****Prerequisite: Introduction to Nursing I****Falls Church HS Academy, Plum Center, Plum Center, Chantilly HS Academy, West Potomac HS Academy - transportation may be provided**

This is part two (spring semester) of a two-part, full-year course. Course content progresses from Introduction to Nursing I and emphasizes advanced skill training and admission and discharge procedures. Students build on knowledge of diseases and body systems as related to advanced clinical care of the acute medical-surgical patient, the chronically ill, and the elderly. Advanced on-the-job clinical experience in a healthcare facility may be available as a part of the course. Students must purchase uniforms and liability insurance and meet current health agency requirements to participate in clinical experiences. Students successfully completing an optional clinical rotation may be eligible to sit for the Certified Nursing Assistant (CNA) exam. Successful completion of the program may lead to employment in assisted living facilities, physicians' offices or clinics. Students must purchase liability insurance and meet current health agency requirements to participate in clinical experiences.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**MEDICAL ASSISTANT 1 (834526)****Grades: 11, 12****Credit: one****Prerequisite: Exploring Health Sciences (830226) and Exploring the Language of Medicine (838326) are recommended but not required. Falls Church HS Academy, West Potomac HS Academy, Chantilly HS Academy - transportation may be provided**

This is part one (fall semester) of a two-part, full-year course. Students must also register for part two, Medical Assistant 2 for the spring semester. Medical Assistant 1 allows students to develop entry-level skills and techniques to increase their knowledge base so that they may enter the healthcare field. Some of these skills and knowledge base areas include administrative and clinical medical assisting. Field trips to a variety of health care settings may be available. Students must purchase liability insurance and meet current health agency requirements to participate in clinical experiences.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**MEDICAL ASSISTANT 2 (834626)****Grades: 11, 12****Credit: one****Prerequisite: Medical Assistant 1 (834526)****Falls Church HS Academy, West Potomac HS Academy, Chantilly HS Academy - transportation may be provided**

This is part two (spring semester) of a two-part, full-year course. Students must also register for part one, Medical Assistant 1 for the fall semester. Students further develop medical-assisting skills and techniques learned in Medical Assistant 1. They also learn management of patient records, cardiopulmonary resuscitation, care and use of equipment, collection and analysis of laboratory specimens, special diagnostic testing, basic diseases and disorders, basic knowledge of treatment and medication, and job preparedness skills. Advanced on-the-job clinical experience in a healthcare facility may be available as a part of the course. Successful completion of the program may lead to employment in physicians' offices or clinics. Students have the opportunity to earn Healthcare Provider CPR and Students have the opportunity to take the Certified Clinical Medical Assistant (CCMA) credential. Students must purchase liability insurance and meet current health agency requirements to participate in clinical experiences.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**MEDICAL BILLING/CODING I (838826)****Grades: 10, 11, 12****Credit: one****Falls Church HS Academy - transportation may be provided**

Students must also register for part two, Medical Billing/Coding II for the spring semester. Students will be introduced to healthcare systems, how to manage an office, and the electronic medical record as it pertains to the field of medical coding and billing. Students will be exposed to the medical terminology used to describe human anatomy and physiology. Students will also be introduced to the field of health informatics. This is part of the Claude Moore Health Informatics Program.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**MEDICAL BILLING/CODING II (838926)****Grades: 10, 11, 12****Credit: one****Prerequisite: Students must also register for part one, Medical Billing/Coding I for the fall semester.****Falls Church HS Academy - transportation may be provided**

Students will become familiar with the health insurance industry and legal and regulatory issues. Students will learn the principles of medical coding and billing related to reimbursement, claim submission, and payment regarding ICD, CPT, and HCPCS coding systems. Students will consider the impact of fraud and importance of biomedical ethics. This is part of the Claude Moore Health Informatics Program.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**PATIENT CARE TECH (830327)****Grades: 12****Credit: two****Prerequisite: Certified Nursing Assistant certification available through Introduction to Nursing 1 and 2.****Plum Center via Falls Church HS Academy.****Falls Church HS Academy, Plum Center - transportation may be provided**

Patient Care Technician, emphasizes the study of nursing occupations as related to the healthcare system. Students study normal growth and development, simple body structure and function, and medical terminology and are introduced to microbes and disease. Upon completion of the course, students will master skills performing ECGs, basic medical, lab and exam procedures, drawing blood, and providing basic patient care. Students will be eligible to take the National Certification exams to become a Certified Phlebotomy Technician, Certified EKG Technician, and Certified Patient Care Technician. Students must purchase liability insurance and meet current health agency requirements to participate in clinical experiences. This is part of the Claude Moore Health Informatics Program.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

PHARMACY TECH 1 (830527)

Grades: 11, 12 **Credit:** one
 Chantilly HS Academy, Falls Church HS Academy, West Potomac HS Academy - transportation may be provided

The Pharmacy Technician course incorporates both classroom and clinical lab pharmacy experiences. The student will be given the opportunity to meet state pharmacy technician competencies as well as be exposed to the larger arena of pharmacy careers. Students may have the opportunity to participate in a clinical experience. Students must purchase liability insurance and meet current health agency requirements to participate in clinical experiences. **Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**

PHARMACY TECH 2 (830627)

Grades: 11, 12 **Credit:** two
Grade 11 - *Must be within 60 days of graduation to sit for the Exam for the Certification of Pharmacy Technician
 Chantilly HS Academy, Falls Church HS Academy, West Potomac HS Academy - transportation may be provided

The Pharmacy Technician course incorporates both classroom and clinical lab pharmacy experiences. The student will be given the opportunity to meet state pharmacy technician competencies as well as be exposed to the larger arena of pharmacy careers. Students may have the opportunity to participate in a clinical experience. Students must purchase liability insurance and meet current health agency requirements to participate in clinical experiences. Students in this course are eligible to sit for the Exam for the Certification of Pharmacy Technicians provided they have a Social Security Number or a control number issued by the Virginia Department of Motor Vehicles and they are within 60 days of high school graduation. **Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**

PHYSICAL THERAPY/OCCUPATIONAL THERAPY 1 (836527)

Grades: 11, 12 **Credit:** two
Prerequisite: Biology 1, Exploring Health Sciences and Exploring the Language of Medicine are recommended but not required.
 West Potomac HS Academy, Chantilly HS Academy - transportation may be provided

This course is designed to provide an introduction to the professions of physical and occupational therapy. Students will explore the principles and practices of therapists in the healthcare industry and may participate in a clinical experience under the direct supervision of a licensed physical and/or occupational therapist. Clinical skills in the areas of physical therapy and occupational therapy will enable students to gain experience in rehabilitative care, which is practiced throughout the continuum of care and across the lifespan of individuals. After successful completion of this course, students will be prepared for employment as a rehabilitation technician or students may seek higher education for specific degrees in a variety of fields such as physical therapy, occupational therapy, speech therapy, sports medicine, athletic training, chiropractic medicine, biology, or exercise physiology. Students must purchase liability insurance and meet current health agency requirements to participate in clinical experiences. **Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**

PHYSICAL THERAPY/OCCUPATIONAL THERAPY 2 (836627)

Grades: 11, 12 **Credit:** two
Prerequisite: Physical Therapy/Occupational Therapy 1 (836527)
 West Potomac HS Academy, Chantilly HS Academy - transportation may be provided

Physical Therapy/Occupational Therapy 2 provides a more in-depth study of the topics covered in the first-level course with emphasis upon individual interests and strengths. Students will be able to select and participate in a clinical experience of their choice from a wide range of clinical settings serving diverse patient populations. The course work will focus on the advancement of problem-solving skills, hands-on techniques, and interpersonal skills with an introduction to clinical research. There will be a greater emphasis on musculoskeletal anatomy during the first two quarters of this course. This course is most appropriate for students anticipating employment or further studies in physical therapy, occupational therapy, or other related healthcare careers. Students must purchase scrubs and liability insurance and meet current health agency requirements to participate in clinical experiences. Students must purchase liability insurance and meet current health agency requirements to participate in clinical experiences. **Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**

PRACTICAL NURSING COHORT (835760)

Grades: 12 **Credit:** two/weighted +.5
Prerequisite: Student must be 18 years old by January 1 of senior year in order to participate in clinical hours.
Must be registered for all three courses. Class meets at the Plum Center for Lifelong Learning.
 Falls Church HS Academy - transportation may be provided

This newly revised and Board of Nursing approved program will run as a 15-month uninterrupted cohort. This cohort will run designated weeks of summer immediately following end of junior year, every other day for 5 hours (B days) during senior year and will continue through the summer immediately following HS graduation. Practical Nursing offers preclinical nursing instruction and includes nursing education in communication, anatomy and physiology, medical math, anatomy and physiology, and introduction to pharmacology. Competency-based instruction provides students with the skills needed to provide basic bedside nursing care used for hospitalized, nursing home, and homebound patients. Following successful completion of Practical Nursing 1 and 2, students may continue in the post-secondary clinical level end of senior year through the summer immediately after graduation. Classes are held at the Plum Center for Lifelong Learning while community healthcare agencies serve as sites for the practical application of the learned competencies. Students must purchase uniforms and liability insurance and meet current health agency requirements to participate in clinical experiences. Students successfully completing the post-secondary course are eligible to sit for the Virginia Practical Nursing Licensing Exam (NCLEX-PN) provided they have a Social Security Number or a control number issued by the Virginia Department of Motor Vehicles as required by the Virginia Board of Nursing. **Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**

PRACTICAL NURSING COHORT (835860)

Grades: 12 **Credit:** two/weighted +.5
Prerequisite: Student must be 18 years old by January 1 of senior year in order to participate in clinical hours.
Must be registered for all three courses (835760, 835860, 835960). Class meets at the Plum Center for Lifelong Learning.
 Falls Church HS Academy - transportation may be provided

This newly revised and Board of Nursing approved program will run as a 15-month uninterrupted cohort. This cohort will run designated weeks of summer immediately following end of junior year, every other day for 5 hours (B days) during senior year and will continue through the summer immediately following HS graduation. Practical Nursing offers preclinical nursing instruction and includes nursing education in communication, anatomy and physiology, medical math, anatomy and physiology, and introduction to pharmacology. Competency-based instruction provides students with the skills needed to provide basic bedside nursing care used for hospitalized, nursing home, and homebound patients. Following successful completion of Practical Nursing 1 and 2, students may continue in the post-secondary clinical level end of senior year through the summer immediately after graduation. Classes are held at the Plum Center for Lifelong Learning while community healthcare agencies serve as sites for the practical application of the learned competencies. Students must purchase uniforms and liability insurance and meet current health agency requirements to participate in clinical experiences. Students successfully completing the post-secondary course are eligible to sit for the Virginia Practical Nursing Licensing Exam (NCLEX-PN) provided they have a Social Security Number or a control number issued by the Virginia Department of Motor Vehicles as required by the Virginia Board of Nursing. **Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**

PRACTICAL NURSING COHORT (835960)

Grades: 12 **Credit:** one/weighted +.5
Prerequisite: Students must be 18 years old by January 1 of senior year in order to participate in clinical hours.
Must be registered for all three courses (835760, 835860, 835960). Class meets at the Plum Center for Lifelong Learning.
 Falls Church HS Academy - transportation may be provided

This newly revised and Board of Nursing approved program will run as a 15-month uninterrupted cohort. This cohort will run designated weeks of summer immediately following the end of junior year, every other day for 5 hours (B days) during senior year and will continue through the summer immediately following HS graduation. Practical Nursing offers preclinical nursing instruction and includes nursing education in communication, anatomy and physiology, medical math, anatomy and physiology, and introduction to pharmacology. Competency-based instruction provides students with the skills needed to provide basic bedside nursing care used for hospitalized,

nursing home, and homebound patients. Following successful completion of Practical Nursing 1 and 2, students may continue in the post-secondary clinical level end of senior year through the summer immediately after graduation. Classes are held at the Plum Center for Lifelong Learning while community healthcare agencies serve as sites for the practical application of the learned competencies. Students must purchase uniforms and liability insurance and meet current health agency requirements to participate in clinical experiences. Students successfully completing the post-secondary course are eligible to sit for the Virginia Practical Nursing Licensing Exam (NCLEX-PN) provided they have a Social Security Number or a control number issued by the Virginia Department of Motor Vehicles as required by the Virginia Board of Nursing.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

VETERINARY SCIENCE 1 (808827)

Grades: 10, 11, 12

Credit: two

Chantilly HS Academy, Edison HS Academy - transportation may be provided

Students interested in studying animals and desiring experience in the care of a variety of animals will benefit from this course. The course is designed for students interested in a career in the animal health care field. Core curriculum includes animal anatomy, animal behavior, handling techniques, nutrition, disease pathology, sanitation, and disease control. Students gain hands-on experience working with live animals.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

VETERINARY SCIENCE 2 (808927)

Grades: 11, 12

Credit: two

Prerequisite: Veterinary Science 1 (808827)
Chantilly HS Academy, Edison HS Academy - transportation may be provided

Course content progresses from Veterinary Science 1 and expands student knowledge of animal science and the care of animals, including animal structure and function. Students develop more advanced skills and techniques for assisting the veterinarian. Students continue to care for live animals.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

HEALTH and PHYSICAL EDUCATION

HEALTH AND PHYSICAL EDUCATION 9 (730000)

Grades: 9

Credit: one

Students demonstrate the ability to use basic skills, strategies, and tactics in a variety of lifetime physical activities. Students will continue to gain and demonstrate more specialized knowledge in identifying and applying key movement concepts and principles. In health education students integrate a variety of health concepts, skills, and behaviors to develop plans for their lifelong health and fitness goals. These include awareness and consequences of risky behaviors, disease prevention, overall wellness, and identification of community health resources. They see themselves as having an active role in creating a healthy lifestyle for themselves, for their families, and for the community. Instruction in first aid, cardiopulmonary resuscitation (CPR), and automated external defibrillation (AED) is included.

HEALTH AND PHYSICAL EDUCATION 10 (740500)

Grades: 10

Credit: one

Prerequisite: Successful completion of Health and Physical Education, grade 9

Students demonstrate competency in lifelong physical activities and create, implement, self-assess, and modify a personal fitness plan. Students develop the ability to understand and anticipate how physical activity interests and abilities change through their lifetime. Students continue their learning of health education through in-depth exploration of health topics, health-related careers, and continued development of personal wellness plans. The course includes one quarter of instruction in classroom driver education during which students gain knowledge to become proficient users of the highway transportation system. The 90-minute parent/teen traffic safety presentation

(Partner's for Safe Teen Driving) is offered to fulfill the requirements of juvenile licensing. Grades from all quarters are averaged to determine the final course grade.

The student and parent MUST attend the mandatory Parent/Teen Safe Driving Presentation and the student MUST pass the drivers education class in order to receive the DEC-1 card.

ADAPTED HEALTH AND PHYSICAL EDUCATION (770002)

Grades: 9, 10

Credit: one

Prerequisite: Students must have an Individual Education Plan (IEP) for course enrollment.

The adapted health and physical education course is a modified version of the general health and physical education course and is designed for students who have IEPs indicating adapted physical education services in a special education setting. Students gain knowledge and skills in a variety of individual and team sports/activities and participate in individualized personal fitness plans to promote an active lifestyle. Activities are individualized based on the student's present level of performance and identified areas of need and designed to maximize participation. Students will participate in modified health education units required of their grade level.

ADAPTED PHYSICAL EDUCATION (770003)

Grades: 11, 12

Credit: one

Prerequisite: Students must have an Individual Education Plan (IEP) for course enrollment.

The adapted physical education elective course builds on the knowledge and skills acquired in 9th and 10th grade and is designed for students who have IEPs indicating adapted physical education services in a special education setting. Students gain knowledge and skills in a variety of individual and team sports/activities and participate in individualized personal fitness plans to promote an active lifestyle. Activities are individualized based on the student's present level of performance and identified areas of need and designed to maximize participation. NOTE: This course is not required for students who have completed 9th and 10th grade health and physical education and enrollment should be determined by IEP teams.

ADVANCED ADAPTED PHYSICAL EDUCATION (770050)

Grades: 11, 12

Credit: one

Advanced Adapted Physical Education is an elective course available to students who have an IEP and who have successfully completed two years of Adapted Health and Physical Education as required for graduation. Students focus on fitness for vocational tasks as they continue to learn and refine the skills and knowledge to promote life-long health and wellness. Students apply concepts related to human anatomy, physiology, kinesiology, nutrition, and personal fitness planning to achieve and maintain a health-enhancing level of physical fitness for a lifetime. Activities are individualized based on the student's present level of performance and identified areas of need. Students may not take this course in lieu of or simultaneous to the Adapted Health and Physical Education courses required for graduation.

ADVANCED PHYSICAL EDUCATION LEVEL 1 (751000)

Grades: 11, 12

Credit: one

Prerequisite: Successful completion of grade 9 and grade 10 health and physical education.

Students extend and enrich their knowledge and the application of human anatomy and physiology, kinesiology, nutrition, and personal fitness planning. Students will develop and participate in a personal fitness program to improve cardiorespiratory endurance, flexibility, muscular strength and endurance, and body composition. Students will utilize concepts to assess, plan, monitor, and modify their individual personal fitness plan. Students may not take this course in lieu of the grade 9 or grade 10 Health and Physical Education requirements.

Based on interest and enrollment, an all-female personal fitness class may be offered.

FITNESS INSTRUCTOR (764060)**Grades: 12****Credit: one****Prerequisite: Successful completion of health and physical education grades 9 and 10. Human Anatomy and Physiology completion. Sports Medicine or Personal Fitness – Level 1 and/or teacher recommendation.**

Fitness Instructor extends and enriches students' interdisciplinary body of knowledge grounded in the biological, psychological, physical, and social sciences. Units of study include anatomy and physiology, safety and fitness etiquette, motor learning, exercise programming, nutrition, and professional responsibilities and business fundamentals specific to the personal training profession. Students may not take this course in lieu of the grade 9 or grade 10 Health and Physical Education requirements. Industry certification may be available as part of this course.

PERSONAL FITNESS - LEVEL 1 (764011)**Grades: 10, 11, 12****Credit: one**

Personal Fitness is an elective physical education course that extends and deepens knowledge of fitness, strength training, physical conditioning, and lifetime health concepts, activities and knowledge to promote health and wellness. Students apply concepts related to human anatomy, physiology, kinesiology, nutrition, and personal fitness planning to achieve and maintain a health-enhancing level of physical fitness for a lifetime. Students may not take this course in lieu of the grade 9 or grade 10 Health and Physical Education requirements.

Based on interest and enrollment, an all female personal fitness class may be offered.

PERSONAL FITNESS - LEVEL 2 (764012)**Grades: 10, 11, 12****Credit: one****Prerequisite: Successful completion of Personal Fitness - Level 1**

Students extend and enrich their knowledge and the application of human anatomy and physiology, kinesiology, nutrition, and personal fitness planning. Students will develop and participate in a personal fitness program to improve cardiorespiratory endurance, flexibility, muscular strength and endurance, and body composition. Students will utilize concepts to assess, plan, monitor, and modify their individual personal fitness plan. Students may not take this course in lieu of the grade 9 or grade 10 Health and Physical Education requirements.

Based on interest and enrollment, an all female personal fitness class may be offered.

SPORTS MEDICINE (763000)**Grades: 9, 10, 11, 12****Credit: one****Prerequisite: Successful completion or concurrent enrollment in biology.**

Students will study and apply concepts related to anatomy and physiology of the skeletal and muscular systems and kinesiology as they relate to injury prevention, recognition, treatment, and rehabilitation. Students will learn nutrition principles for physically active individuals. Students will be introduced to a variety of professions in the sports medicine field. Students have the opportunity to earn certification in first aid, cardiopulmonary resuscitation (CPR), and automated external defibrillation (AED). Students may not take this course in lieu of the grade 9 or grade 10 Health and Physical Education requirements.

YOGA FOR WELLNESS (751050)**Grades: 9, 10, 11, 12****Credit: one**

Yoga for Wellness is an elective physical education course. Students will learn the physical postures and exercises of yoga that develop strength, flexibility, coordination, and balance. Relaxation techniques, breathing practices, and mindfulness practices that support fitness and well-being will be incorporated. Students will apply concepts of basic anatomy and physiology to understand alignment, benefits, and contraindications of yoga poses and exercises. Students will develop independent, personal yoga practices that can be adapted and modified to their individual needs. Students will explore nutritional requirements needed for lifelong health and well-being. Students may not take this course in lieu of the grade 9 or grade 10 health and physical education requirements.

MARKETING**ADVANCED MARKETING (813000)****Grades: 11, 12****Credit: one****Prerequisite: Marketing 1 (812000), Fashion Marketing 1 (814000), Sports and Entertainment Marketing (817500), or approval of instructor**

Students build on knowledge gained in a prior Marketing course. Students participate in supervisory and management activities focusing on the marketing mix, purchasing, financing, human resources, global marketing, pricing, and emerging technologies. Students will prepare for advancement in marketing careers and postsecondary education. Classroom instruction will be reinforced through the use of case studies, guest lecturers, and work-based learning experiences. This course reinforces mathematics, science, English, and history/social science Standards of Learning (SOL). Computer/technology applications and DECA activities enhance the course. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

CLASSROOM-ON-THE-MALL: FASHION MARKETING 2 (814523)**Grades: 11, 12****Credit: one****Prerequisite: Marketing 1 (812000) or Fashion Marketing 1 (814000)****Fair Oaks Mall - transportation may be provided**

This specialized program enables students to learn business organization as well as operation skills and techniques in a realistic business setting. Classes are held in Fair Oaks shopping mall. Traditional classroom instruction in marketing, merchandising, fashion and management is enhanced by the opportunity for students to meet and work with professionals in the mall businesses. Students will develop critical-thinking and decision-making skills through the application of marketing principles to small and large businesses, nonprofit organizations, service industries, and other institutions or associations that make products or provide services. Students attend their base schools for regular classes and then travel to Fair Oaks shopping mall for both classroom instruction and related on-the-job training. The Holiday Gift Wrap Center and Prom Dress Shop offer additional opportunities for real-life entrepreneurial experiences. Due to the unique structure of this program, excellent attendance is mandatory. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

CLASSROOM-ON-THE-MALL: MARKETING MANAGEMENT (813223)**Grades: 11, 12****Credit: one****Fair Oaks Mall - transportation may be provided**

This specialized program enables students to learn business organization as well as operation skills and techniques in a realistic business setting. Classes are held in Fair Oaks shopping mall. Traditional classroom instruction in marketing, merchandising, fashion and management is enhanced by the opportunity for students to meet and work with professionals in the mall businesses. Students will develop critical-thinking and decision-making skills through the application of marketing principles to small and large businesses, nonprofit organizations, service industries, and other institutions or associations that make products or provide services. Students attend their base schools for regular classes and then travel to Fair Oaks shopping mall for both classroom instruction and related on-the-job training. The Holiday Gift Wrap Center and Prom Dress Shop offer additional opportunities for real-life entrepreneurial experiences. Due to the unique structure of this program, excellent attendance is mandatory. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

ENTREPRENEURSHIP 1 (909300)**Grades: 11, 12**
(Academy 909326)**Credit: one****Chantilly HS Academy, Marshall HS Academy - transportation may be provided**

Entrepreneurship provides students opportunities for learning small business ownership skills. Students will experience the process of developing, financing, and marketing a new product or service through an interactive curriculum. Classroom instruction will be reinforced through the use of case studies, guest lecturers, and work-based learning experiences. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year. **Industry certification may be available as part of this course.**

ENTREPRENEURSHIP 1 DE (9093DE)**Grades: 11, 12****Credit: one/weighted +1.0****Base school optional 909300****Chantilly HS Academy, Marshall HS Academy - transportation may be provided**

Entrepreneurship provides students opportunities for learning small business ownership skills. Students will experience the process of developing, financing, and marketing a new product or service through an interactive curriculum. Classroom instruction will be reinforced through the use of case studies, guest lecturers, and work-based learning experiences. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year. **Industry certification may be available as part of this course. Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).**

ENTREPRENEURSHIP 2 (909400)**Grades: 12****Credit: one****Prerequisite: Entrepreneurship 1 (909300/909326)**
(Academy 909416)**Chantilly HS Academy, Marshall HS Academy - transportation may be provided**

Entrepreneurship 2 is an advanced course enabling students to further investigate and prepare for owning and operating a small business. Students enrolled in this class are encouraged to pursue the business developed in Entrepreneurship 1. The curriculum provides an in-depth study of business ownership. Students will develop a deeper understanding of the role of marketing and finance in their business success in order to implement their Business Plan. Classroom instruction will be supplemented with industry guest speakers, and field experiences. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.**FASHION MARKETING 1 (814000)***Fashion Marketing 1 - Course Available for 9th Grade Students***Grades: 10, 11, 12****Credit: one**

In this specialized course, students gain a basic knowledge of the apparel and accessories industry and skills necessary for successful employment in apparel businesses. Students develop general marketing skills necessary for successful employment in fashion marketing, general marketing skills applicable to the apparel and accessories industry, and specialized skills unique to fashion marketing. Personal selling, sales promotion, purchasing, physical distribution, market planning, and product/service technology as well as academic skills (mathematics, science, English, and history/social science) related to the content are part of this course. Computer/technology applications supporting this course are studied. Marketing simulations, case studies, projects, teamwork, guest speakers, and DECA activities provide many opportunities for application of instructional competencies. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year. **Industry certification may be available as part of this course.**

FASHION MARKETING 2 (814500)**Grades: 11, 12****Credit: one****Prerequisite: Marketing 1 (812000) or Fashion Marketing 1 (814000)**

Students with a career interest in apparel and accessories marketing gain in-depth knowledge of the apparel and accessories industry and skills important for employment in apparel businesses. They develop advanced skills unique to fashion marketing and advanced general marketing skills applied to the apparel and accessories industry. Professional selling, sales promotion, buying, merchandising, marketing research, product/service technology, and supervision as well as academic skills (mathematics, science, English, and history/social science) related to the content are part of this course. Computer/technology applications supporting this course are studied. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year. (Students interested in this course should also see Fashion Design 1 under Family and Consumer Sciences.)

Industry certification may be available as part of this course.**INTRODUCTION TO MARKETING (811000)****Grades: 9, 10****Credit: one**

Students gain an understanding of the importance of marketing in today's society. They develop skills related to interpersonal communication, self-presentation, economics, marketing, sales, employability, career discovery, and ethical decision-making. This course reinforces mathematics, science, English, and history/social science Standards of Learning (SOL). Computer/technology applications and DECA activities support this course. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Field trips, guest speakers, and competitive events through DECA membership enhance the course work. **Industry certification may be available as part of this course.**

MARKETING 1 (812000)**Grades: 10, 11, 12****Credit: one**

Students examine activities in marketing and business important for success in marketing employment and postsecondary education. Students will learn how products are developed, branded, and sold to businesses and consumers. Students will analyze industry trends and gain hands-on experience in the marketing of goods, services, and ideas. Topics will include professionalism in the workplace, product planning and positioning, promotion, pricing, selling, economic issues, and the impact of technology on the marketplace. This course reinforces mathematics, science, English, and history/social science Standards of Learning (SOL). Computer/technology applications and DECA activities enhance the course. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.**SOCIAL MEDIA MARKETING (812526)****Grades: 10, 11, 12****Credit: one****Fairfax HS Academy - transportation may be provided**

Students receive an introduction to marketing functions and study the Internet and Social Media marketing's role in the global economy. Students gain knowledge of the tools and techniques used in Internet and Social Media marketing. They explore ethical, legal, and security aspects and prepare for a career in Internet and/or Social Media marketing. Academic skills (mathematics, science, English, and history/social science) related to the content are part of this course. Computer/technology applications supporting this course are studied. Classroom instruction will be reinforced through the use of outside lectures, case studies, and work-based learning experiences. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

SPORTS AND ENTERTAINMENT MANAGEMENT (817700)
Grades: 11, 12 **Credit: one**
Prerequisite: Sports and Entertainment Marketing (817500)

Students will build on prior knowledge of sports, entertainment, and recreation marketing. This course focuses on the principles of management and planning supported by research, financial, and legal concepts. Students will be able to plan and execute an event, develop a career plan, and establish a sports, entertainment, or recreation marketing product/business. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Computer/technology applications supporting this course are studied. Classroom instruction will be reinforced through the use of case studies, guest lecturers, and work-based learning experiences. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

SPORTS AND ENTERTAINMENT MARKETING (817500)
Grades: 10, 11, 12 **Credit: one**

This introductory course helps students develop a thorough understanding of fundamental marketing concepts and theories as they relate to the sports, entertainment, and recreation industries. Students will investigate the components of branding, sponsorships and endorsements, as well as promotion plans needed for sports, entertainment and recreation events. The course also supports career development skills and explores career options. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Classroom instruction will be reinforced through the use of outside lectures, case studies, and field trip experiences. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Internship is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Industry certification may be available as part of this course.

MATHEMATICS

ALGEBRA 1 (313000)
Grades: 8, 9, 10, 11 **Credit: one**
Prerequisite: Mathematics 7 and/or Prealgebra

This course extends students' knowledge and understanding of the real number system and its properties through the study of variables, expressions, equations, inequalities, and analysis of data derived from real-world phenomena. Topics include linear equations and inequalities, systems of linear equations, relations, functions, polynomials. Emphasis is placed on making connections in algebra to geometry. Graphing utilities and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

ALGEBRA 1 / PART 1 (313100)
Grades: 9, 10 **Credit: one**
Prerequisite: Middle School Mathematics

This course builds on students' understanding of the real number system and its properties through the study of variables, expressions, equations, inequalities, and analysis of data derived from real-world phenomena. Topics include algebraic expressions, linear equations and inequalities, linear relations and functions, and review of middle school mathematics objectives as needed. Graphing utilities and other relevant technology tools will be used extensively to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships conceptually. This course may be used in conjunction with Algebra 1 (313000) for Double Block instruction. This course does not count towards a mathematics graduation credit.

ALGEBRA 2 (313500)
Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: Algebra 1 and Geometry

Algebra 2 provides a thorough treatment of algebraic concepts through the study of functions, polynomials, rational expressions, complex numbers, exponential and logarithmic equations, arithmetic and geometric sequences and series, and data analysis. Emphasis is placed on the mechanics of algebra with real world applications and modeling. A transformational approach to graphing is used with families of related graphs. Numerical, graphical, and algebraic solutions are considered for all problems as applicable. Graphing utilities and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

ALGEBRA 2 HONORS (313536)
Grades: 8, 9, 10, 11 **Credit: one/weighted +.5**
Prerequisite: Algebra 1 and Geometry

The depth and level of understanding expected in Algebra 2 Honors is beyond the scope of Algebra 2. Students are expected not only to master algebraic mechanics but also to understand the underlying theory and to apply the concepts to real-world situations in a meaningful way. A thorough treatment of advanced algebraic concepts is provided through the study of functions, polynomials, rational expressions, complex numbers, matrices, exponential and logarithmic equations, infinite geometric sequences and series, permutations and combinations, data analysis, and selected topics in discrete mathematics. Emphasis is on modeling, logic, and interpretation of results. A transformational approach to graphing is used with families of related graphs. Numerical, graphical, and algebraic solutions are considered for all problems, as applicable. Graphing utilities and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

GEOMETRY (314300)
Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: Algebra 1

This course emphasizes two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. A variety of applications and some general problem-solving techniques, including algebraic skills, will be used to explore geometric relationships. Conjectures about properties and relationships are developed inductively and then verified deductively. Graphing utilities, dynamic geometry software, and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

GEOMETRY HONORS (314336)
Grades: 8, 9, 10 **Credit: one/weighted +.5**
Prerequisite: Algebra 1

The depth and level of understanding expected in Geometry Honors is beyond the scope of Geometry. This course emphasizes two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. A variety of applications and some general problem-solving techniques, including algebraic skills, will be used to explore geometric relationships. Conjectures about properties and relationships are developed inductively and then verified deductively. Students investigate non-Euclidean geometries, formal logic, and use deductive proofs to verify theorems. Graphing utilities, dynamic geometry software, and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

GEOMETRY / PART 1 (314400)**Grades: 10, 11****Credit: one****Prerequisite: Algebra 1**

Students develop an understanding of the reasoning process and the concept of proof. Properties and relationships of lines, angles, and triangles are developed inductively and then verified deductively. Topics include conditional statements, syllogisms, points in space, parallel lines, transversals, planes, congruence, the Pythagorean Theorem, and similarity. Graphing utilities, dynamic geometry software, and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships. This course includes an integrated review of algebraic topics needed in geometry. This course does not count towards a mathematics graduation credit.

GEOMETRY / PART 2 (314500)**Grades: 11, 12****Credit: one****Prerequisite: Geometry / Part 1**

Students investigate properties of quadrilaterals, other polygons, circles, and three-dimensional figures using inductive and deductive reasoning. Topics include area, perimeter, symmetry, reflections, rotations, translations, arc length, circumference, secants, tangents, volume, polyhedra, and surface area. Graphing utilities, dynamic geometry software, and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships. This course includes a review of the Geometry / Part 1 topics needed for the Geometry SOL test.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

ADVANCED PLACEMENT CALCULUS AB (317004)**Grades: 11, 12****Credit: one/weighted +1.0****Prerequisite: Precalculus with Trigonometry or Precalculus with Trigonometry Honors**

This course emphasizes a multi-representational approach to calculus. Concepts, results, and problems are expressed graphically, numerically, analytically, and verbally. Content includes concepts and applications of differential and integral calculus, limits, and elementary differential equations. Graphing utilities and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships. Content of this college-level course corresponds to the syllabus of the College Board Calculus AB Advanced Placement Program. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

ADVANCED PLACEMENT CALCULUS BC (317704)**Grades: 10, 11, 12****Credit: one/weighted +1.0****Prerequisite: Precalculus with Trigonometry Honors or AP Calculus AB.**

This course is an extension of Advanced Placement Calculus AB. This course emphasizes a multi-representational approach to calculus. Concepts, results, and problems are expressed graphically, numerically, analytically, and verbally. Content includes concepts and applications of differential and integral calculus, sequences and series, and elementary differential equations. Graphing utilities and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships. Content of this college-level course corresponds to the syllabus of the College Board Calculus BC Advanced Placement Program. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

ADVANCED PLACEMENT COMPUTER SCIENCE A (318505)**Grades: 10, 11, 12****Credit: one/weighted +1.0****Prerequisite: Algebra 1 and Geometry**

The purpose of this course is to prepare students for the Advanced Placement Computer Science A examination, for which college credit and/or placement may be given, if a qualifying score is achieved. Content of this college-level course corresponds to the syllabus of the College Board Advanced Placement Program for Computer Science A. Students will design software to solve problems and use data structures, such as classes and arrays, to represent information within a program. Students will also gain a working knowledge

of the major hardware and software components of computer systems. Java is the primary programming language for implementing solutions to problems. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES (318507)**Grades: 9, 10, 11, 12****Credit: one/weighted +1.0**

The AP Computer Science Principles course is equivalent to a first-semester introductory college computing course. The course explores the big ideas of computing: creativity, abstraction, data and information, algorithms, programming, the Internet, and global impact. These big ideas are fundamental to computing and connect students to a curriculum that includes the art of programming but is not programming-centric. Students in this course design and produce solutions, models, and artifacts, and they evaluate and analyze their own computational work as well as the computational work others have produced. There is an emphasis on innovation through collaboration and communication as a tool to analyze, justify and describe computational work. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

ADVANCED PLACEMENT STATISTICS (319204)**Grades: 10, 11, 12****Credit: one/weighted +1.0****Prerequisite: Geometry and Algebra 2**

Advanced Placement Statistics includes graphical and numerical techniques to study patterns and explore data, strategies for developing a plan to conduct a study based on data analysis, probability as a tool for predicting distribution of data, and techniques of statistical inference. Graphing utilities and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships. Content of this course corresponds to the syllabus of the College Board Advanced Placement Statistics Program. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

ALGEBRA, FUNCTIONS, AND DATA ANALYSIS (313400)**Grades: 10, 11, 12****Credit: one****Prerequisite: Algebra 1 and Geometry**

This course provides an opportunity for students to develop understanding of the role of mathematics in the world around them. It is designed for students who have completed Algebra 1 and Geometry and may benefit from additional support in their transition to Algebra 2 and higher level mathematics courses. Within the context of mathematical modeling and data analysis, students will study functions and their behaviors, systems of inequalities, probability, experimental design and implementation, and analysis of data. Data will be generated through practical applications arising from science, business, and finance. Students will solve problems that require the formulation of linear, quadratic, exponential, or logarithmic equations or a system of equations. Students will be asked to collect and analyze univariate and bivariate data using a variety of statistics and analytical tools, including graphing utilities and other technology tools.

APPLIED CALCULUS (319910)**Grades: 11, 12****Credit: one****Prerequisite: Precalculus with Trigonometry**

This course provides a conceptual introduction to calculus. Students will investigate the big ideas of differential and integral calculus through applications in business, engineering, and physical and life sciences. They will work individually and collaboratively to engage in research and problem solving, and an emphasis will be placed on communication about their ideas. Graphing utilities and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships.

COMPUTER SCIENCE (318400)**Grades: 9, 10, 11, 12****Credit: one****Prerequisite: Algebra 1 and Geometry**

Students develop detailed knowledge of the fundamental structure of a computer system, with emphasis on problem solving and structured programming. Skills in defining, writing, and running programs on a computer are developed through an individual approach that allows the student to work with both mathematical and non-mathematical problems. Java will be the primary programming language.

DISCRETE MATHEMATICS SEMESTER COURSE (315432)*This course must be blocked with Trigonometry***Grades: 11, 12****Credit: one-half****Prerequisite: Geometry and Algebra 2**

Discrete mathematics requires problem-solving strategies be applied to real-world application, develops verbal and written skills in the process of problem-solving, and promotes mathematical connections across disciplines. Course content includes management science, the mathematics of apportionment, matrix operations and applications, recursion, and other discrete applications in the natural and social sciences. Graphing utilities and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships.

ENGINEERING MATHEMATICS (316326)**Grades: 10, 11, 12****Credit: one****Prerequisite: Algebra 2****Corequisite: Precalculus with Trigonometry****Chantilly HS Academy - transportation may be provided**

The mathematics topics taught in this course are motivated through direct applications in engineering. Engineering Mathematics addresses salient mathematics topics actually used in the primary core engineering college courses; Basic Algebraic Manipulations; Trigonometry; 2-D Vectors; Complex Numbers; Sinusoids and Harmonic Signals; Systems of Equations and Matrices; Basics of Differentiation; Basics of Integration; Linear Differential Equations with Constant Coefficients. Course material is taught through hands-on physical experiments in the classroom and laboratory, and is thoroughly integrated with the engineering analysis software MATLAB. Students learn the interconnection between classroom theory, laboratory measurement and numerical representation of their engineering results.

MATRIX ALGEBRA (319800)*This course must be blocked with Multivariable Calculus***Grades: 11, 12****Credit: one-half/weighted +1.0****Prerequisite: AP Calculus AB or AP Calculus BC or IB Mathematics Analysis and Approaches HL 2 or IB Mathematics Applications and Interpretation HL 2**

This college-level course includes the study of systems of linear equations, vector spaces, linear dependence, linear transformations and matrix representation, orthogonal reduction, determinants, eigenvectors and eigenvalues, and a variety of applications. This course will receive a weighted grade and may be taken for college credit for a fee through a dual-enrollment agreement with George Mason University.

MULTIVARIABLE CALCULUS (317860)*This course must be blocked with Matrix Algebra***Grades: 11, 12****Credit: one-half/weighted +1.0****Prerequisite: AP Calculus BC or IB Mathematics Analysis and Approaches HL 2**

A third semester college-level course, Multivariable calculus is the calculus of three dimensions and includes the study of partial differentiation, multiple integrals, and line integrals. This course will receive a weighted grade and may be taken for college credit for a fee through a dual-enrollment agreement with George Mason University.

PRECALCULUS WITH TRIGONOMETRY (316000)**Grades: 10, 11, 12****Credit: one****Prerequisite: Geometry and Algebra 2**

Precalculus with Trigonometry includes all the topics of Trigonometry (3150) and a thorough treatment of functions through the study of polynomials, rational functions, logarithmic, exponential, and inverse functions. Topics

include continuity, maximum and minimum points, an intuitive approach to limits, and rates of change. A transformational approach to graphing is used with families of related graphs. Numerical, graphical, and algebraic solutions are considered for all problems as applicable. Emphasis will be placed on problem solving techniques. Graphing utilities and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships.

PRECALCULUS WITH TRIGONOMETRY HONORS (316036)**Grades: 9, 10, 11, 12****Credit: one/weighted +.5****Prerequisite: Geometry and Algebra 2**

The depth and level of understanding expected in Precalculus with Trigonometry Honors is beyond the scope of Precalculus with Trigonometry. Precalculus with Trigonometry Honors includes all of the topics of Trigonometry (3150) and an in-depth treatment of functions through the study of polynomials, transformations, rational functions, exponential and logarithmic functions, inverses, polar equations, parametric equations, two-dimensional vectors, and selected topics in discrete mathematics. The course also includes the study of limits, continuity, maximum and minimum points and values, definition and properties of the derivative, rules of differentiation, equations of tangent lines to polynomial functions, infinite limits, and partial fractions. Numerical, graphical, and algebraic solutions are considered for all problems as applicable. Graphing utilities and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships.

PROBABILITY AND STATISTICS (319032)**Grades: 11, 12****Credit: one****Prerequisite: Geometry and Algebra 2**

Probability and Statistics is an activity-based introduction to statistics that emphasizes working with data, graphs, and statistical ideas including the use of statistical software. Course content includes theory of probability, description of statistical measurements, probability distributions, and statistical inference. Optional topics include statistical inference involving two populations, linear regression, and correlation. Graphing utilities and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships.

TRIGONOMETRY (315032)*This course must be blocked with Discrete Math***Grades: 11, 12****Credit: one-half****Prerequisite: Geometry and Algebra 2**

Trigonometry topics include circular functions, right triangle ratios, solving trigonometric equations, inverses, identities, the Laws of Sines and Cosines, graphing trigonometric functions, and applying trigonometric techniques to solving real-world problems. A transformational approach to graphing is used with families of related graphs. Numerical, graphical, and algebraic solutions are considered for all problems as applicable. Graphing utilities and other relevant technology tools will be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships.

SCIENCE**ACTIVE PHYSICS (451050)****Grades: 9, 10****Credit: one**

Active Physics is a physics course for students who were weak in Math 8 or Algebra 1. This course has a strong emphasis on experimentation. The units of study focus on predictions, algebraic patterns, and real-world applications. Students study mechanics, electricity, wave phenomena, energy, and forces through hands-on investigations. The physics content is presented in a problem solving manner to strengthen both science and mathematics content knowledge and skills.

ADVANCED PLACEMENT BIOLOGY (437004)**Grades: 11, 12** **Credit: one/weighted +1.0**
Prerequisite: Biology 1 and Chemistry 1

After completing the core science curriculum, students pursue a more advanced and specialized study of biology topics. Students conduct standard first year college-level laboratory research as well as analyze and interpret biological data. Students engage in authentic science practices and examine biology content within four big ideas: 1) the process of evolution drives the diversity of life, 2) biological systems utilize energy and molecular building blocks to grow, reproduce and maintain homeostasis, 3) living systems retrieve, transmit, and respond to information essential to life processes, and 4) biological systems interact, and these interactions possess complex properties. If dissections are part of the laboratory experience, alternatives are available. Students are encouraged to take the associated Advanced Placement exam and may earn college credit if a qualifying score is achieved.

ADVANCED PLACEMENT CHEMISTRY (447004)**Grades: 11, 12** **Credit: one/weighted +1.0**
Prerequisite: Chemistry 1 and Algebra 2

Advanced Placement Chemistry is a second-level, laboratory-centered course that provides an opportunity for students to undertake a more comprehensive investigation at a level above Chemistry 1. It is designed for students who have completed a core science curriculum and are now ready to pursue more advanced and specialized studies. Advanced Placement Chemistry represents a full year (two semesters) of college chemistry. Students are encouraged to take the associated Advanced Placement exam and may earn college credit if a qualifying score is achieved.

ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE (427004)**Grades: 11, 12** **Credit: one/weighted +1.0**
Prerequisite: Biology 1 and Chemistry 1

The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science and is designed to stress scientific principles and analysis. The course includes a laboratory component. Students examine how science is a process, how energy conversions underlie all ecological processes, and how the Earth is one interconnected system. Students will explore how humans alter the natural system and the cultural and social context of environmental problems. Major topics include earth systems and resources, the living world, population, land and water use, energy resources and consumption, pollution, and global change. Students are encouraged to take the associated Advanced Placement exam, and may earn college credit if a qualifying score is achieved.

ADVANCED PLACEMENT PHYSICS 1 (457306)**Grades: 11, 12** **Credit: one/weighted +1.0**
Prerequisite: Biology 1 and one other laboratory science
Corequisite: Precalculus with Trigonometry

AP Physics 1 is a first year, college-level physics course. The course is designed around six big ideas: objects and systems have properties; fields can be used to explain interactions; interactions between objects can be described by forces; interactions result in changes in systems; changes are constrained by conservation laws; and waves can transfer energy and momentum. These big ideas are developed through inquiry and experimentation. All students are encouraged to take the associated Advanced Placement exam and may earn college credit if a qualifying score is achieved.

ADVANCED PLACEMENT PHYSICS 2 (457406)**Grades: 12** **Credit: one/weighted +1.0**
Prerequisite: Physics 1 or a comparable physics introductory course

AP Physics 2 is the second year of a two year Physics sequence that builds on the six big ideas that are developed in the AP Physics 1 course. Additionally, students learn how the mathematics of probability can be used to describe the behavior of complex systems and how to interpret the behavior of quantum mechanical systems. These big ideas are developed through inquiry and experimentation similar to AP Physics 1. All students are encouraged to take the associated Advanced Placement exam and may earn college credit if a qualifying score is achieved.

ADVANCED PLACEMENT PHYSICS C - MECHANICS (457504)**Grades: 11, 12** **Credit: one/weighted +1.0**
Prerequisite: Biology 1 and one other laboratory science
Corequisite: AP Calculus AB or BC

Advanced Placement Physics C - Mechanics is a second-level course which surveys a selection of physics topics dealing only with Mechanics at a level above Physics 1. It is designed for students who have completed a core science curriculum and are now ready to pursue more advanced and specialized studies in mechanics. AP Physics C serves as the foundation in physics for students who wish to pursue physical science or engineering degrees. Students are encouraged to take the Mechanics Advanced Placement exam and may be awarded college credit if a qualifying score is achieved.

ASTRONOMY (426000)**Grades: 11, 12** **Credit: one**
Prerequisite: Geosystems or Any Physics Course

Astronomy deals with topics such as the universe, universal laws, galaxies, stellar evolution, the solar system and its motion, and the exploration of space. This course is designed to be an in-depth and mathematical survey of astronomy concepts.

This course includes participation in five outdoor night sky observation labs.

BIOLOGY 1 (431000)**Grades: 9, 10, 11, 12** **Credit: one**

In Biology 1, students engage in scientific inquiry through lab work as they explore biological processes. All class and laboratory activities focus on life processes that occur within organisms or cells as well as the characteristics of life including: reproduction, development, and adaptation to environments. Major topics of study include molecular biology, cells, genetics, organisms, evolution and ecology. If dissections are a part of the laboratory experience, alternatives are available.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

BIOLOGY 1 HONORS (431036)**Grades: 9, 10, 11, 12** **Credit: one/weighted +.5**

In Biology 1 Honors, students engage in scientific inquiry as they explore biological processes. All class and laboratory activities focus on life processes that occur within organisms or cells as well as the characteristics of life including: reproduction, development, and adaptation to environments. Major topics of study include molecular biology, cells, genetics, organisms, evolution and ecology. Students in honors Biology investigate some topics at a deeper level than the general education curriculum, including biotechnology, and health and environmental issues. Students, either individually or with a team, will participate in an externally-moderated experimental/research project. If dissections are a part of the laboratory experience, alternatives are available. Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only). **Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).**

CHEMISTRY 1 (441000)**Grades: 10, 11, 12** **Credit: one**
Prerequisite: Biology 1 and Algebra 1

Chemistry 1 provides students the opportunity to develop their critical thinking skills as they acquire a better understanding of the chemical nature of our world. Students investigate the composition, properties, and reactions of matter. The approach is inductive, mathematical, and conceptual. Laboratory experiments and subsequent classroom analysis are integral components of the course.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

CHEMISTRY 1 HONORS (441036)**Grades: 10, 11, 12****Credit: one/weighted +.5****Prerequisite: Biology 1 and Geometry**

Chemistry 1 Honors provides students the opportunity to utilize their strong critical thinking skills and apply their mathematical knowledge as they investigate the composition, properties, and reactions of matter in depth. Laboratory experiments and subsequent classroom analysis are integral components of the course. Students, either individually or with a team, will participate in an externally-moderated experimental/research project.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

ENVIRONMENTAL SCIENCE (426500)**Grades: 9****Credit: one**

Environmental Science is a foundational science course intended for 9th grade students. This course builds on student investigations that began in grades K-8 and integrates biology, earth science, chemistry, and engineering to study many components of our environment. Course outcomes focus on scientific inquiry, the physical world, the living environment, resource conservation, humans' impact on the environment, as well as legal and civic responsibility. Students will focus on data collection and analysis through laboratory experiences and field work, including descriptive and comparative studies. Through a variety of learning experiences to include career education opportunities, students will gain foundational scientific process skills and environmental literacy to engage the community and provide diverse points of view about the management of natural resources.

ENVIRONMENTAL SCIENCE (426550)**Grades: 11, 12****Credit: one****West Springfield High School Only**

Environmental Science is a foundational science course intended for 9th grade students. This course builds on student investigations that began in grades K-8 and integrates biology, earth science, chemistry, and engineering to study many components of our environment. Course outcomes focus on scientific inquiry, the physical world, the living environment, resource conservation, humans' impact on the environment, and legal and civic responsibility. Students will focus on data collection and analysis through laboratory experiences and field work, including descriptive and comparative studies. Through a variety of learning experiences to include career education opportunities, students will gain foundational scientific process skills and environmental literacy to engage the community and provide diverse points of view about the management of natural resources.

GENETICS AND BIOTECHNOLOGY (435000)**Grades: 11, 12****Credit: one****Prerequisite: Biology 1 and Chemistry 1**

This course introduces students to the fundamental concepts of biotechnology. It is designed to acquaint students with not only the classical patterns of inheritance but also with present findings in molecular genetics. Laboratory experiments provide active participation in demonstrating and applying the concepts and theories of genetics and biotechnology.

GEOSYSTEMS (422000)**Grades: 11, 12****Credit: one****Prerequisite: Biology 1 and one other laboratory science course**

Geosystems utilizes content from geology, astronomy, oceanography, and meteorology to investigate, both qualitatively and quantitatively, the major earth systems (atmosphere, hydrosphere, lithosphere, biosphere) and their dynamic inter-relationships. Students explore concepts with the same tools professional scientists use including computers, Geographic Information Systems (GIS), image processing software, and probeware.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

GEOSYSTEMS HONORS (422036)**Grades: 11, 12****Credit: one/weighted +.5****Prerequisite: Biology 1 and Chemistry 1**

Geosystems Honors utilizes content from geology, astronomy, oceanography, and meteorology to investigate, both qualitatively and quantitatively, the major earth systems (atmosphere, hydrosphere, lithosphere, biosphere) and their dynamic interrelationships. Students explore concepts with the same tools professional scientists use including computers, Geographic Information Systems (GIS), image processing software, and probeware. Students will investigate some topics at a deeper level and will participate, either individually or with a team, in an externally-moderated experimental/research project.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

HUMAN ANATOMY AND PHYSIOLOGY: AN INTRODUCTION TO THE MEDICAL SCIENCES (433000)**Grades: 11, 12****Credit: one****Prerequisite: Biology 1 and Chemistry 1**

Human Anatomy and Physiology provides students with an in-depth understanding and working knowledge of the human body. It covers human body systems with an emphasis on the mechanisms that maintain homeostasis. Lab activities cover both the physiological and anatomical aspects of human biology. Students have the opportunity to explore careers in the medical sciences. An independent project is required. If dissections are part of the laboratory experience, alternatives are available.

A 25 hour internship will also satisfy the independent project requirement.

PHYSICS 1 (451000)**Grades: 11, 12****Credit: one****Prerequisite: Biology 1, one other laboratory science, and Geometry**

Physics 1 introduces the central concepts of physics, including kinematics, dynamics, the conservation laws (mass, energy, and momentum), electricity, magnetism, and waves. This laboratory-centered course utilizes an approach that is inductive and mathematical as well as conceptual.

PHYSICS 1 HONORS (451036)**Grades: 11, 12****Credit: one/weighted +.5****Prerequisite: Biology 1 and one other laboratory science****Corequisite: Precalculus with Trigonometry or IB Mathematics Analysis and Approaches I**

Physics 1 Honors introduces the most central concepts of physics, including the dual wave-particle nature of light, kinematics, dynamics, the conservation laws (mass, energy, and momentum), electricity, magnetism, and waves. This course is laboratory-centered and employs the methods of scientific inquiry. Students, either individually or with a team, will participate in an externally-moderated experimental/research project.

SOCIAL STUDIES**AFRICAN AMERICAN HISTORY (237100)****Grades: 9, 10, 11, 12****Credit: one**

The course will challenge students to explore primary and secondary sources documenting the African American experience by surveying African American history from precolonial Africa through today. It introduces students to key concepts in African American history, from early beginnings in Africa through the transatlantic slave trade, the Civil War, Emancipation, Reconstruction, the Civil Rights era and to the present. Students will learn about African American voices, including many not traditionally highlighted, and their contributions to the story of Virginia and America. The course includes a capstone project requiring students to conduct independent research on a question or problem of their choosing and to demonstrate a deeper understanding of African American history. This is an elective course to be offered at each high school. It does not fulfill the VA/US History graduation requirement.

WORLD HISTORY AND GEOGRAPHY 1 (221900)**Grades: 9, 10****Credit: one**

This is the first of a two-year, chronologically and thematically organized study of world history and geography. In this first year, students study the world from ancient times to 1500 CE. The course highlights relationships between the geography and history of Europe, Africa, Asia, and Latin America. Students refine and expand critical thinking skills, practice decision making and problem solving, and formulate questions to guide research. Additionally, students will apply social science skills -historical thinking, geographic analysis, economic decision making, and responsible citizenship – to course content. World History and Geography 1 is required for graduation.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

WORLD HISTORY AND GEOGRAPHY 1 HONORS (221936)**Grades: 9, 10****Credit: one/weighted +.5**

This is the first of a two-year, chronologically and thematically organized study of world history and geography. In this first year, students study the world from ancient times to 1500 CE. The course highlights the relationship between the geography and history of Europe, Africa, Asia, and Latin America. Students examine the relationship among social, economic and geopolitical developments across time and place. They use the processes of conceptual and critical thinking to analyze historical and contemporary issues. Students are encouraged to think independently while developing group process skills. Additionally, students will apply social science skills -historical thinking, geographic analysis, economic decision making, and responsible citizenship – to course content. World History and Geography 1 Honors satisfies the World History and Geography 1 graduation requirement.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

ADVANCED PLACEMENT HUMAN GEOGRAPHY (221204)**Grades: 10, 11, 12****Credit: one/weighted +1.0**

The purpose of Advanced Placement Human Geography is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, interaction with, and alteration of the earth's surface. Students will use spatial concepts and landscape analysis to analyze human social organization and its environmental consequences. They also will learn about the methods and tools geographers use in their science and practice. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

WORLD HISTORY AND GEOGRAPHY 2 (222100)**Grades: 9, 10****Credit: one**

This is the second of a two-year, chronologically and thematically organized study of world history and geography. In this second year, students study the world from 1500 CE through the present. The course weaves together the skills and content of both history and geography so that students may learn how both affect the world around them. Regions of study include North and South America, Europe, Asia, and Africa. Students continue to refine and expand critical thinking skills, practice decision making and problem solving, and formulate questions to guide research. Additionally, students will apply social science skills -historical thinking, geographic analysis, economic decision making, and responsible citizenship – to course content. World History and Geography 2 is required for graduation.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

WORLD HISTORY AND GEOGRAPHY 2 HONORS (222136)**Grades: 9, 10****Credit: one/weighted +.5**

This is the second of a two-year, chronologically and thematically organized study of world history and geography. In this second year, students study the world from 1500 CE through the present. The course weaves together the skills and content of both history and geography so that students may learn how both affect the world around them. Regions of study include North and South America, Europe, Asia, and Africa. Students continue to examine the relationship among social, economic, and geopolitical developments across time and place. Students are encouraged to think independently while

developing group process skills. Additionally, students will apply social science skills -historical thinking, geographic analysis, economic decision making, and responsible citizenship – to course content. World History and Geography 2 is required for graduation.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

ADVANCED PLACEMENT WORLD HISTORY: MODERN (234004)**Grades: 10, 11, 12****Credit: one/weighted +1.0**

In Advanced Placement World History students investigate significant events, individuals, developments and processes in four historical periods from approximately 1200 C.E. to the present. Students develop the skills, practices, and methods employed by historians. This course may be used to satisfy the World History and Geography II requirement. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

VIRGINIA AND UNITED STATES HISTORY (236000)**Grades: 11****Credit: one**

Students examine the political, economic, social, and cultural changes of the United States, including the role of Virginia. Students study major historical developments and their impact on contemporary society and on the individual. Geography skills, critical thinking, writing, research, and group-process skills are refined. Additionally, students will apply social science skills -historical thinking, geographic analysis, economic decision making, and responsible citizenship – to course content. Virginia and United States History is required for graduation.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

VIRGINIA AND UNITED STATES HISTORY HONORS (236036)**Grades: 11****Credit: one/weighted +.5**

Virginia and United States History Honors deepens and advances the curriculum of Virginia and United States History. Students examine the political, economic, social, and cultural changes of the United States, including the role of Virginia. Students study major historical developments and their impact on contemporary society and on the individual. Geography skills, critical thinking, writing, research, and group-process skills are refined. Additionally, students will apply social science skills -historical thinking, geographic analysis, economic decision making, and responsible citizenship – to course content. Virginia and United States History is required for graduation.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

ADVANCED PLACEMENT UNITED STATES HISTORY (231904)**Grades: 11****Credit: one/weighted +1.0**

In this course students develop the factual knowledge and analytical skills necessary to deal with the issues and problems of American History. They do in-depth analysis of major developments; become familiar with primary sources; assess historical materials, evidence, and interpretations; and learn to write research papers. Completion of this course fulfills the graduation requirement for one credit in Virginia and United States History. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

Students are required to take the Standards of Learning End of Course Test if required for federal accountability or for use as a verified credit (high school credit courses only).

VIRGINIA AND UNITED STATES GOVERNMENT (244000)**Grades: 12** **Credit: one**

Students examine both the structure and function of American government at the international, national, state, and local levels. The course focuses on political decision-making, comparative political and economic systems, and the student's role as a citizen. Critical thinking, writing, research, and group-process skills are refined. Additionally, students will apply social science skills -historical thinking, geographic analysis, economic decision making, and responsible citizenship – to course content. Virginia and United States Government is required for graduation.

VIRGINIA AND UNITED STATES GOVERNMENT HONORS (244036)**Grades: 12** **Credit: one/weighted +.5**

Virginia and United States Government Honors deepens and advances the curriculum of Virginia and United States Government. Students examine both the structure and function of American government at the international, national, state, and local levels. The course focuses on political decision-making, comparative political and economic systems, and the student's role as a citizen. Critical thinking, writing, research, and group-process skills are refined. Additionally, students will apply social science skills -historical thinking, geographic analysis, economic decision making, and responsible citizenship – to course content. Virginia and United States Government is required for graduation.

ADVANCED PLACEMENT US GOVERNMENT AND POLITICS (244504)**Grades: 12** **Credit: one/weighted +1.0**

This study of American government is an introduction to the discipline of political science. Students study required US foundational documents and Supreme Court decisions to gain an understanding of the relationships and interactions among political institutions, processes and behaviors. Students learn and apply the skills of data interpretation, comparison, application and development of an argument. In addition, students will complete a political science research or applied civics project. This course prepares students to take the Advanced Placement examination. Completion of this course fulfills the graduation requirement for one credit in Virginia and United States Government. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

ADVANCED PLACEMENT COMBINED US AND COMPARATIVE GOVERNMENT AND POLITICS (244567)**Grades: 12** **Credit: one/weighted +1.0**

This course includes a study of comparative government as well as American government and politics. In the study of American government, students interpret national, state, and local government and politics through a study of both general concepts and specific case studies. In the study of comparative government, emphasis is placed on understanding the world's diverse political structures and practices, as well as on interpreting and analyzing the key political relationships found in national governments. This course prepares students to take both the Advanced Placement examination for United States Government and Politics and the Advanced Placement examination for Comparative Government. Completion of this course fulfills the graduation requirement for one credit in Virginia and United States Government. Students who complete this course are encouraged to take the associated Advanced Placement examinations and may earn college credit if a qualifying score is achieved.

ADVANCED PLACEMENT MACRO AND MICROECONOMICS (280404)**Grades: 11, 12** **Credit: one/weighted +1.0**

This course is designed to provide students with an understanding of the economic principles which apply to an economic system as a whole. This course is designed to provide students with an understanding of the principles of economics which apply to the functions of decision-makers, both consumers and producers, within economic systems. Topics include, national economics, international economics, the nature and functions of product markets, the study of factor markets, and the role of government in promoting greater efficiency and equity in the economy.. This course fulfills the Economic and Personal Finance and virtual graduation requirements. Students who complete this course are encouraged to take the associated Advanced

Placement examinations and may earn college credit if a qualifying score is achieved.

PSYCHOLOGY (290000)**Grades: 9, 10, 11, 12** **Credit: one**

In this course, students examine patterns and variations of human behavior and the process of individual human development. They identify and examine the emotional, cognitive, and physical factors which influence the development of the individual human being. Students distinguish among the major schools and systems of psychology and methods of investigation.

ADVANCED PLACEMENT PSYCHOLOGY (290204)**Grades: 11, 12** **Credit: one/weighted +1.0**

The purpose of this course is to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the methods psychologists use in their science and practice. The aim of Advanced Placement Psychology is to provide the students with a learning experience equivalent to that obtained in an introductory college psychology course. The rigorous course syllabus and college level texts both suggest that students who enroll should be highly motivated and intellectually curious. Students who complete this course are encouraged to take the associated Advanced Placement examinations and may earn college credit if a qualifying score is achieved.

SOCIOLOGY (SEMESTER) (250032)*Sociology - blocked with Current Affairs*
Grades: 9, 10, 11, 12 **Credit: one-half**

This elective course examines the ways individuals and groups function in society, analyzes social constructs, and explores societal behaviors and beliefs. Students develop hypotheses about society and gather information to test their claims.

CURRENT AFFAIRS (SEMESTER) (299632)*Current Affairs - blocked with Sociology*
Grades: 9, 10, 11, 12 **Credit: one-half**

This elective course provides students with an understanding of the skills with which to analyze basic frameworks, concepts, terminology and principles of contemporary issues and events. Students will use various resources and technologies to examine topics and issues of local, state, national, international, and global significance.

ADVANCED PLACEMENT EUROPEAN HISTORY (239904)**Grades: 10, 11, 12** **Credit: one/weighted +1.0**

The Advanced Placement European History covers the basic chronology of events from 1450 (the High Renaissance) to the present. Students are expected to demonstrate a knowledge of this basic chronology and of major events and trends in the intellectual cultural, political-diplomatic, and social-economic history of modern Europe. In addition, students are expected to demonstrate an ability to analyze historical evidence and to express that understanding and analysis in writing. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

PHILOSOPHY (295000)*Philosophy - 1/2 Credit - blocked with World Religions*
Grades: 9, 10, 11, 12 **Credit: one**

This course offers students an opportunity to investigate classical philosophical issues from both secular and religious sources. A study of philosophy will help students respect the difference between systematic philosophical investigation and personal belief; develop critical skill in the analysis of the writings of the philosophers and a comprehensive understanding of similarities and differences in philosophical discussion, both religious and secular, throughout the ages; value the rich diversity of ideas and points of view on many issues; and transfer philosophical knowledge and method to the study of other disciplines and to problem solving.

WORLD RELIGIONS (SEMESTER) (295062)**Grades: 9, 10, 11, 12****Credit: one-half**

In this course, students develop the background knowledge and habits of mind necessary for an appreciation of the basic beliefs and practices of the world's religions. Importance is placed on historical origins as well as current beliefs. Students will study Buddhism, Christianity, Confucianism, Hinduism, Islam, Judaism, Shintoism, Taoism, and other belief systems.

COMBATING INTOLERANCE (982200)**Grades: 9, 10, 11, 12****Credit: one**

This elective course examines fundamental human rights issues which emerge within diverse societies. Themes of study include the nature of prejudice, stereotyping, bias, and discrimination; individual and governmental responsibility; and the ways in which individual choices can both combat or promote intolerance. Topics of study include, but are not limited to: genocide, racism, xenophobia, religious intolerance, sexism, ableism, and homophobia. Students enrolling in this course should be open to reflecting on and examining their own identity, beliefs and worldview. Students will engage in course content through inquiry, discussion, collaboration and informed action.

TECHNOLOGY AND ENGINEERING EDUCATION

AEROSPACE SCIENCE 1 (848700)**Grades: 10, 11, 12****Credit: one**

Aerospace Science 1 is a course that allows students to study aerodynamic principles, aviation history, electrical and mechanical systems, instrumentation, flight operations, safety and security, air traffic control, airport design, economic impacts, rocketry, and satellite and space operations. Numerous lab activities include computer simulators, and model aircraft design and testing. Leading national institutions and commercial businesses provide valuable resources and career experiences to participating students. **Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**

AEROSPACE SCIENCE 2 (848800)**Grades: 11, 12****Credit: one****Prerequisite: Aerospace Science 1 (848700) or teacher approval**

This course provides students with the opportunity to increase their depth and understanding of aerospace principles. Students may be involved with internship opportunities in a variety of areas including air traffic control, airport operations, and fixed-based operator's management. Upon successful completion of the course, students will be endorsed to take the written portion of the private pilot's examination. This is the first step to earning a private pilot's license. In addition, students will be exposed to a variety of guest speakers who will provide firsthand knowledge of the aerospace industry as well as postsecondary and career education opportunities.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

STEM DESIGN (840300)**Grades: 9, 10, 11, 12****Credit: one**

STEM Design is a high school foundation class in Technology and Engineering Education. The course provides balance between basic applied engineering using the newest technologies, and skill building in Computer Aided Design (CAD). Students will be exposed to authentic problems which will assist in the development of personal skills in visualization, design, construction, digital development and problem solving principles. Students will also implement standards and concepts from mathematics and science to Mechanical Motion, Energy, Electronics, and Transportation Systems.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

STEM PRE-ENGINEERING (840500)**Grades: 10, 11, 12****Credit: one****Prerequisite: STEM Design (843500) required or teacher approval**

STEM Pre-Engineering is the study of various technologies working together as a system. The central theme of STEM Pre-Engineering is the integration of the technological systems of production, energy, communication, transportation, and other related current or emerging technologies. Students work on individual and group activities that are integrated with core subjects and reinforce mathematics, science, and technical writing. Integrated or thematic activities in this course challenge students to use the technological method to solve practical and critical thinking skills problems in a variety of systems or subsystems.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

STEM ENGINEERING (845060)**Grades: 10, 11, 12****Credit: one/weighted +.5****Prerequisite: STEM Design (843500) required, STEM Pre-Engineering (840500) recommended or teacher approval****Corequisite: Algebra II or teacher approval**

For students interested in engineering, this course builds a solid foundation to move forward in the Science, Technology, Engineering and Math (STEM) curriculum. Students are introduced conceptually and analytically to the primary concepts in the four classic engineering disciplines civil, mechanical, electrical, and aerospace engineering. Students will explore and develop college level engineering problems in these areas while working as real world collaborative teams. By applying STEM concepts to design problems students will dramatically improve their use of mathematics (Trigonometry and Algebra II), computer simulations, scientific analysis, oral and technical writing skills during this course. This course provides for orientation to the careers and challenges of engineering. Students are actively involved with high-tech devices, engineering graphics, and mathematics/scientific principles through problem-solving and critical thinking experiences.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

STEM ADVANCED ENGINEERING (845360)**Grades: 11, 12****Credit: one/weighted +.5****Prerequisite: STEM Engineering (845060)**

This advanced level engineering course emphasizes student knowledge and application of engineering problem-solving through research and development concepts. It focuses on current and emerging technologies. Students learn to work in collaborative engineering teams and solve group design and projects. Students are challenged to solve problems using design, mathematics, computer simulations, scientific analysis, and oral and written skills. Engineering is studied with a focus on modeling, systems, optimization, technology-society interaction, design, and engineering ethics. Projects may be models, systems, or products that creatively solve an engineering problem. This course is the capstone course in the engineering sequence to prepare students for college or engineering careers.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

ROBOTIC SYSTEMS 1 (854760)**Grades: 10, 11, 12****Credit: one/weighted +.5****Prerequisite: STEM Engineering (845060) required or teacher approval****Chantilly HS Academy, Marshall HS Academy - transportation may be provided**

Our ability to function and progress in the modern age is dependent on electronics and robotics technologies. This course provides a depth and breadth of the basic skills required to build, program and test robotics used in a variety of industries. Students will explore careers, build circuits, and use principles of physics to analyze basic electronic and robotic systems.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

ROBOTICS SYSTEMS 2 (855860)
Grades: 11, 12 **Credit: one/weighted +.5**
Prerequisite: Robotic Systems 1 (854760)
Chantilly HS Academy, Marshall HS Academy - transportation may be provided

This course provides instruction in programming robots used in assembly and manufacturing settings. Students will work with various power systems while acquiring machining and system engineering skills.
Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

ENGINEERING SYSTEMS 1 (842560)
Grades: 10, 11, 12 **Credit: one/weighted +.5**
Prerequisite: STEM Engineering (845060) required or teacher approval
Chantilly HS Academy, Marshall HS Academy - transportation may be provided

This course provides an orientation to careers in various fields of manufacturing. Emphasis will be placed on manufacturing systems, safety, materials, production, business concepts, and the manufacturing process. Students participate in individual and team activities to create products that demonstrate critical elements of manufacturing.
Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

ENGINEERING SYSTEMS 2 (842760)
Grades: 11, 12 **Credit: one/weighted +.5**
Prerequisite: Engineering Systems 1 (842560)
Chantilly HS Academy, Marshall HS Academy - transportation may be provided

Students develop and in-depth understanding of automation and its applications in manufacturing. Activities center on flexible manufacturing processes and computer integrated manufacturing (CIM). Students work in teams to solve complex interdisciplinary problems that stem from the major systems in automated manufacturing.
Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

ENGINEERING MATHEMATICS (316326)
Grades: 10, 11, 12 **Credit: one**
Prerequisite: Algebra 2
Corequisite: Precalculus with Trigonometry
Chantilly HS Academy - transportation may be provided

The mathematics topics taught in this course are motivated through direct applications in engineering. Engineering Mathematics addresses salient mathematics topics actually used in the primary core engineering college courses; Basic Algebraic Manipulations; Trigonometry; 2-D Vectors; Complex Numbers; Sinusoids and Harmonic Signals; Systems of Equations and Matrices; Basics of Differentiation; Basics of Integration; Linear Differential Equations with Constant Coefficients. Course material is taught through hands-on physical experiments in the classroom and laboratory, and is thoroughly integrated with the engineering analysis software MATLAB. Students learn the interconnection between classroom theory, laboratory measurement and numerical representation of their engineering results.

TRADE AND INDUSTRIAL

AUTOMOTIVE TECHNOLOGY 1 (850600)
Grades: 9, 10, 11, 12 **Credit: one**

Students will study and define the eight major systems of the automobile, related tools and equipment, and the automotive industry. An emphasis will be placed on diagnosing systems, developing troubleshooting skills, and the safe use of laboratory equipment. Curriculum is developed from the National Automotive Technicians Education Foundation (NATEF) task lists. Major topics include engine performance, brakes, electrical and electronic systems, and suspension and steering systems. In addition, students will be tested on NATEF criteria.

AUTOMOTIVE TECHNOLOGY 1 (850626)
Grades: 10, 11 **Credit: one**
(Base school optional 850600)
Chantilly HS Academy, Edison HS Academy, Marshall HS Academy - transportation may be provided

Students will study and define the eight major systems of the automobile, related tools and equipment, and the automotive industry. An emphasis will be placed on diagnosing systems, developing troubleshooting skills, and the safe use of laboratory equipment. Curriculum is developed from Automotive Service Excellence (ASE) task lists. Major topics include engine performance, brakes, electrical and electronic systems, and suspension and steering systems. In addition, students will be tested on ASE criteria.
Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922. Please note that the Dual Enrollment option for this course carries an additional weight of 1.0.

AUTOMOTIVE TECHNOLOGY 2 (850727)
Grades: 11, 12 **Credit: two**
Prerequisite: Automotive Technology 1 (850626)
(Base school optional 850700)
Chantilly HS Academy, Edison HS Academy, Marshall HS Academy - transportation may be provided

Students will study and define the eight major systems of the automobile, related tools and equipment, and the automotive industry. An emphasis will be placed on diagnosing systems, developing troubleshooting skills, and the safe use of laboratory equipment. Curriculum is developed from Automotive Service Excellence (ASE) task lists. Major topics include engine performance, brakes, electrical and electronic systems, and suspension and steering systems. In addition, students will be tested on ASE criteria. As an option, many students may have an opportunity to participate in local internship experiences.
Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922. Please note that the Dual Enrollment option for this course carries an additional weight of 1.0.

AUTOMOTIVE TECHNOLOGY 3 (850827)
Grades: 12 **Credit: two**
Prerequisite: Automotive Technology 2 (850727)
(Base school optional 850800)
Chantilly HS Academy, Edison HS Academy, Marshall HS Academy - transportation may be provided

Students will diagnose, troubleshoot, and install components and parts, while focusing on the standards established by the Automotive Service Excellence (ASE). Opportunities will be provided to enhance skills and competencies. An emphasis is placed on problem-solving issues related to technological enhancements in the automotive industry. In addition, students will be tested on NATEF criteria. As an option, students may have an opportunity to participate in local internship experiences.
Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922. Please note that the Dual Enrollment option for this course carries an additional weight of 1.0.

AUTOMOTIVE COLLISION SERVICE 1 (867626)
Grades: 10, 11, 12 **Credit: one**
Chantilly HS Academy, Edison HS Academy - transportation may be provided

Students are introduced to skill sets derived from industry standards in the auto body repair and restoration industry. The curriculum and laboratory activities are defined by I-CAR and the Automotive Service Excellence (ASE) and include panel repairs, painting, frame and unibody construction, steering, suspension, detailing, and welding. In addition, students are exposed to the theoretical and practical aspects of this career.
Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

AUTOMOTIVE COLLISION SERVICE 2 (867727)
Grades: 11, 12 **Credit: two**
Prerequisite: Auto Collision Service 1 (867626)
Chantilly HS Academy, Edison HS Academy - transportation may be provided

Students will refine existing skills and develop specific skills necessary to repair late-model damaged vehicles to their original condition. The curriculum and laboratory practices are defined by I-CAR and Automotive Service Excellence (ASE) and include the following: refinishing, metalworking, welding, frame-strengthening systems, unibody measuring principles, structural repair, steering, suspension, mechanical, and electrical repairs. As an option, many students may have an opportunity to participate in local internship experiences.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

AUTOMOTIVE COLLISION SERVICE 3 (867827)
Grades: 12 **Credit: two**
Prerequisite: Automotive Collision Service 2 (867727)
Chantilly HS Academy, Edison HS Academy - transportation may be provided

Students participating in Automotive Collision 3 will strive towards independence and quality workmanship as they become more proficient in their individual skill set to repair and/or refinish minor late-model damaged vehicles. The curriculum and laboratory practices defined by I-CAR and Automotive Service Excellence (ASE) and include the following: refinishing, metalworking, welding, frame-strengthening systems, unibody measuring principles, structural repair, steering, suspension, mechanical, and electrical repairs. As an option, many students may have an opportunity to participate in local internship experiences.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

CARPENTRY 1 (860127)
Grades: 10, 11, 12 **Credit: one**
Chantilly HS Academy - transportation may be provided

Students will have an opportunity to study and learn about a \$700 billion industry providing a variety of employment opportunities. An emphasis will be focused on construction safety, OSHA regulations, mathematics applications, and craft knowledge. In addition to a variety of hands-on experiences, students will be introduced to electricity, framing, plumbing, millwork, and problem solving activities related to the construction industry. Students will become proficient in identifying types of residential construction components to form foundations and frame walls, floors, ceilings, roofs, doors, and windows. Curriculum is developed by the National Association of Home Builders (NAHB).

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

CARPENTRY 2 (860227)
Grades: 11, 12 **Credit: two**
Prerequisite: Carpentry 1 (860126)
Chantilly HS Academy - transportation may be provided

Students will receive advanced instruction and experiences in the areas of layout and design, framing, estimating, purchasing, planning, and installing. Topics will range from residential through commercial construction. An emphasis will be placed on entrepreneurship and construction site management using curriculum developed by the National Association of Home Builders (NAHB). Students will become proficient in assembling and installing various types of residential construction components that are current with industry standards, including rigging and job-estimating procedures, forming foundations, framing floors, walls, ceilings, roofs, trusses, roofing materials, stairs, exterior doors and windows, decks, and porches. Student internship experiences are an option for this course.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

CARPENTRY 3 (860327)
Grades: 12 **Credit: two**
Prerequisite: Carpentry 2 (860227)
Chantilly HS Academy - transportation may be provided

Students will receive advanced instruction and experiences in the areas of layout and design, framing, estimating, purchasing, planning, installing, and

project management. Topics will range from residential through commercial construction. An emphasis will be placed on entrepreneurship and construction site management using curriculum developed by the National Association of Home Builders (NAHB). Student internship experiences are an option for this course.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

CRIMINAL JUSTICE 1 (870226)
Grades: 10, 11, 12 **Credit: one**
(Base school optional 870200)
Falls Church HS Academy, West Potomac HS Academy, Chantilly HS Academy, Edison HS Academy, Marshall HS Academy - transportation may be provided

This course is designed for students who are considering a career in criminal justice. The course prepares students for career opportunities within the criminal justice system as well as entrance into institutions of higher learning. Specific areas of training will be provided in criminal law and investigation, security training, communications, emergency response, crimes, search and seizures, arrests, crime prevention, court procedure, and police operations. The program is structured to give students a strong academic background with the skills and knowledge necessary to meet the needs of a career in any of the cited fields. In addition, experts from various agencies provide in-depth information and experiences.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

CRIMINAL JUSTICE 2 (870327)
Grades: 11, 12 **Credit: two**
Prerequisite: Criminal Justice 1 (870200)
(Base school optional 870300)
Falls Church HS Academy, West Potomac HS Academy, Chantilly HS Academy, Edison HS Academy, Marshall HS Academy - transportation may be provided

This course is an in-depth study of crime in America, United States' courts in action, and law enforcement efforts to deal with crime. The course will look into victimization, due process, and Constitutional laws affecting law enforcement as well as a review of sentencing offenders, parole, prison rehabilitation, and corrections of the 1990s. Included will be a view of other employment careers in private and mechanical security systems as well as local, state, and federal law enforcement. A major component of level 2 will include the work-experience component, i.e., shadowing, mentorship, etc.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

ELECTRICAL CONSTRUCTION AND ENGINEERING 1 (853326)
Grades: 10, 11, 12 **Credit: one**
Edison HS Academy - transportation may be provided

Laboratory work and academic studies include AC/DC circuit analysis, designing and construction switching circuits, fixture specifications and installations, computing and fabricating residential electrical services, and other wiring exercises as required by residential wiring systems. Theory and the national electric code are taught as they apply to the lesson topic. Students learn to install, relocate, troubleshoot, and repair copper twisted pair network cabling.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

ELECTRICAL CONSTRUCTION AND ENGINEERING 2 (853427)
Grades: 11, 12 **Credit: two**
Prerequisite: Electrical Construction and Engineering 1 (853326)
Edison HS Academy - transportation may be provided

Further study of electrical wiring and power distribution techniques is offered, including direct- and alternating-current machines, such as motors and generators, and magnetic controls and transformers in both single- and two- or three-phase systems. National Electrical Codes, as well as state and power company policies pertaining to electrical power distribution, are studied. Major appliance repair is also taught. Student internship experiences are an option for this course.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

ELECTRICAL CONSTRUCTION AND ENGINEERING 3 (853527)
Grades: 12 **Credit: two**
Prerequisite: Electrical Construction and Engineering 2 (853427)
Edison HS Academy - transportation may be provided

Students will further their electrical studies to learn about layout, planning, and installation of wiring systems in commercial facilities. An introduction to programmable logic controls (PLC) and its associated applications will be provided with the most current Allen Bradley controls. Students will also get the chance to lead other students in installing wiring in a residential house. Upon completion of this course students should be able to install and wire all aspects of a residential house to include ordering and managing materials and equipment. Students should also have a knowledge of PLCs, solar power and other related electrical specialty fields. Student internship experiences are an option for this course.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION 1 (850326)
Grades: 10, 11, 12 **Credit: one**
Edison HS Academy - transportation may be provided

In the first year of the heating, ventilation and air conditioning (HVAC) program students will learn to use a variety of hand tools including wrenches, pliers, screwdrivers, hammers as well as specially tools of the HVAC trade which include digital multimeters, thermometers, scales, vacuum pumps and refrigerant recovery equipment. Students will complete projects utilizing copper tubing, PVC and black iron pipe with ACR tubing cutters, flaring, swaging and threading tools. Students will also master the use of various types of torches for soldering and brazing and build a basic mechanical refrigeration cycle. Students will also learn the concepts of electricity and complete a series of electrical projects and also be introduced to the sheet metal arts. Internship is available.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION 2 (850427)
Grades: 11, 12 **Credit: two**
Prerequisite: Heating, Ventilation, Air Conditioning, and Refrigeration 1 (850326)
Edison HS Academy - transportation may be provided

Students continuing their education of the HVAC program in the second year which focuses on the installation, maintenance, troubleshooting service and repair of a central air conditioning system as well as a gas furnace, oil furnace and heat pump systems. Students will also learn about weatherization and energy efficiency of HVAC equipment and ductwork as well as understanding various types of motors used in HVAC equipment. During the second year focus is also given to the Environmental Protection Agency's Section 608 refrigerant handling certification with the goal of passing the Core section plus one or more types in either small appliances, high or low pressure systems earning them an industry credential. Student internship experiences are an option for this course.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

PROFESSIONAL PHOTOGRAPHY STUDIO 1 (860726)
Grades: 11, 12 **Credit: one**
Fairfax HS Academy - transportation may be provided

In a state-of-the art digital photography lab/studio, students use the latest digital cameras on both the PC and Mac platforms. Students will photograph people, places, and objects and will prepare these images with the intent of professional publication using software such as Adobe Photoshop, Illustrator, InDesign, and Acrobat. The course allows the students to see dynamic results in real time and to print their work on professional level color printers. Topics include image composition, digital editing, studio and location lighting, file formats, file maintenance and storage, and print production. Students will relate these skills to the current business and art practices of the modern commercial photographic industry. In addition, students will develop personal portfolios to aid in entry into the marketplace or advanced photography educational program.

Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.

PROFESSIONAL PHOTOGRAPHY STUDIO 2 (860827)
Grades: 11, 12 **Credit: two**
Prerequisite: Professional Photography Studio 1 (860726). Portfolio review may be required.
Fairfax HS Academy - transportation may be provided

This course provides students with experience needed to begin a career in commercial photography as well as an in-depth view of digital photography and related industries. Students will develop studio lighting techniques and composition skills in this project-oriented course. Creativity, imagination, and innovation are qualities that will be exercised by using high-end digital cameras and sophisticated imagery and production software such as Adobe Photoshop, Adobe Illustrator, InDesign, and Acrobat. Students will relate these skills to the current practices of art and business in the modern commercial photographic industry. A component of this course is dedicated to learning how to open and maintain a professional photography studio. Students will work independently, as well as collaboratively, toward the completion of class projects. Students will develop personal portfolios to aid in entry into the marketplace or advanced photography educational program. **Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**

TELEVISION AND MEDIA PRODUCTION 1 (868826)
Grades: 10, 11, 12 **Credit: one**
West Potomac HS Academy, Fairfax HS Academy - transportation may be provided

This curriculum is designed to train students for a career in, or entry into a collegiate program involving the television and film production industries. Film, Video, and Multimedia terminology, technique, and theory will be discussed. State-of-the-art, video equipment is used by the students in this class. Students will learn to operate professional video cameras and field equipment for productions outside of the classroom, and professional studio cameras, audio equipment, special effect generators, and character generators for use in the fully outfitted studio. With parental permission, equipment may be checked out and used for on-location shoots. Students learn post-production skills on cutting edge non-linear editing equipment, and finalize their projects to DVD. Toward the end of the first year, students may be presented with internship and professional work opportunities. **Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**

TELEVISION AND MEDIA PRODUCTION 2 (868927)
Grades: 11, 12 **Credit: two**
Prerequisite: Professional Television Production 1 (868826)
West Potomac HS Academy, Fairfax HS Academy - transportation may be provided

Students continue to build a foundation of knowledge and skills through hands-on experience operating professional television production equipment in the field and studio as described in Television Production 1. Students are expected to take advantage of numerous internship opportunities that are available for 2nd year students. New learning opportunities include the ability to specialize in any of several dozen areas of interest with regards to pre-production, production, and post-production. **Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**

TELEVISION AND MEDIA PRODUCTION 3 (869027)
Grades: 12 **Credit: two**
Prerequisite: Professional Television Production 2 (868927)
West Potomac HS Academy, Fairfax HS Academy - transportation may be provided

Students will demonstrate mastery of media production knowledge and skills. They will function as media producers by creating original productions developed and marketed toward target audiences. Students will assemble a professional digital portfolio to advance postsecondary and career goals. They will investigate the dynamic media production industry and identify opportunities for real-world experiences (e.g., internships, job shadowing). Students will research postsecondary opportunities and formulate strategies for both college and career success. **Industry certification may be available as part of this course. This course requires a student materials fee as listed in FCPS Notice 5922.**

WORLD LANGUAGES

AMERICAN SIGN LANGUAGE (ASL) 1 (599000)

Grades: 9, 10, 11, 12

Credit: one

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in signing, receiving signs and non-manual gestures, and reading. Students begin to explore and study the themes of Personal and Family Life, School Life, Social Life, and Community Life. This course may be counted as a world languages course in fulfilling requirements for the Advanced Studies Diploma.

AMERICAN SIGN LANGUAGE (ASL) 1 (599026)

Grades: 9, 10, 11, 12

Credit: one

Fairfax HS Academy - transportation may be provided

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in signing, receiving signs and non-manual gestures, and reading. Students begin to explore and study the themes of Personal and Family Life, School Life, Social Life, and Community Life. This course may be counted as a world languages course in fulfilling requirements for the Advanced Studies Diploma.

AMERICAN SIGN LANGUAGE (ASL) 2 (599500)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: ASL 1 or equivalency test

Students continue to develop proficiency in American Sign Language. They learn to function in real-life situations using more complex language structures and a wider range of vocabulary. Students continue to explore as they study the themes of Home Life, Student Life, Leisure Time, and Vacation and Travel. This course may be counted as a world languages course in fulfilling requirements for the Advanced Studies Diploma.

AMERICAN SIGN LANGUAGE (ASL) 2 (599526)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: ASL 1 or equivalency test.

Fairfax HS Academy - transportation may be provided

Students continue to develop proficiency in American Sign Language. They learn to function in real-life situations using more complex language structures and a wider range of vocabulary. Students continue to explore as they study the themes of Home Life, Student Life, Leisure Time, and Vacation and Travel. This course may be counted as a world languages course in fulfilling requirements for the Advanced Studies Diploma.

AMERICAN SIGN LANGUAGE (ASL) 3 (599700)

Grades: 10, 11, 12

Credit: one

Prerequisite: ASL 2 or equivalency test

Students continue to develop and refine their proficiency in American Sign Language. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students add vocabulary and idiomatic expressions in the context of everyday interactions and social relationships. Students gain a deeper understanding of the world around them while studying Rights and Responsibilities, Future Plans and Choices, Teen Culture, Environment, and Humanities. This course may be counted as a world languages course in fulfilling requirements for the Advanced Studies Diploma.

AMERICAN SIGN LANGUAGE (ASL) 3 (599726)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: ASL 2 or equivalency test.

Fairfax HS Academy - transportation may be provided

Students continue to develop and refine their proficiency in American Sign Language. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students add vocabulary and idiomatic expressions in the context of everyday interactions and social relationships. Students gain a deeper

understanding of the world around them while studying Rights and Responsibilities, Future Plans and Choices, Teen Culture, Environment, and Humanities. This course may be counted as a world languages course in fulfilling requirements for the Advanced Studies Diploma.

AMERICAN SIGN LANGUAGE (ASL) 4 (599800)

Grades: 10, 11, 12

Credit: one/weighted +.5

Prerequisite: ASL 3 or equivalency test.

Students continue to develop and refine their proficiency in American Sign Language. They communicate using complex language structures on a variety of topics, moving from concrete to abstract concepts. At this level, students add vocabulary and idiomatic expressions in the context of everyday interactions and social relationships. Students begin to explore the world of interpretation. Students gain a deeper understanding of the world around them while studying Deaf Culture, Globalization and Communication, Science, and Social Issues.

ARABIC 1 (501026)

Grades: 9, 10, 11, 12

Credit: one

Fairfax HS Academy, Marshall HS Academy - transportation may be provided

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to communicate orally and in writing. Students begin to explore and study the themes of Personal and Family Life, School Life, Social Life, and Community Life. For middle school students, this credit becomes a part of the high school transcript, is included in the determination of the high school grade point average (GPA), and counts toward fulfilling the world languages requirement of the high school Advanced Studies diploma. It also counts toward the total number of credits required for graduation.

ARABIC 2 (502026)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Arabic 1 or equivalency test

Fairfax HS Academy, Marshall HS Academy - transportation may be provided

Students continue to develop proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to communicate orally and in writing. They learn to function in real-life situations using more complex sentences and language structures. They read material on familiar topics and produce short writing samples. Students continue to explore as they study the themes of Home Life, Student Life, Leisure Time, and Vacation and Travel.

ARABIC 3 (503026)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Arabic 2 or equivalency test

Fairfax HS Academy, Marshall HS Academy - transportation may be provided

Students continue to develop and refine their proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students comprehend the main ideas of the authentic materials that they read and hear, and they are able to identify significant details when the topics are familiar. Students gain a deeper understanding of the world around them while studying Rights and Responsibilities, Future Plans and Choices, Teen Culture, Environment, and Humanities.

ARABIC 4 (504026)

Grades: 10, 11, 12

Credit: one/weighted +.5

Prerequisite: Arabic 3 or equivalency test

Fairfax HS Academy, Marshall HS Academy - transportation may be provided

Students continue to develop and refine their proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students comprehend the main ideas of the

authentic materials that they read and hear, and they are able to identify significant details when the topics are familiar. Students gain a deeper understanding of the world around them while studying Rights and Responsibilities, Future Plans and Choices, Teen Culture, Environment, and Humanities.

CHINESE 1 (581026)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: none

Fairfax HS Academy, Marshall HS Academy, Edison HS Academy - transportation may be provided

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to communicate orally and in writing. Students begin to explore and study the themes of Personal and Family Life, School Life, Social Life, and Community Life. This course is only offered at Fairfax Academy and Marshall Academy.

CHINESE 2 (582026)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Chinese 1 or equivalency test

Fairfax HS Academy, Marshall HS Academy, Edison HS Academy - transportation may be provided

Students continue to develop proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to communicate orally and in writing. They learn to function in real-life situations using more complex sentences and language structures. They read material on familiar topics and produce short writing samples. Students continue to explore as they study the themes of Home Life, Student Life, Leisure Time, and Vacation and Travel. This course is only offered at Fairfax Academy and Marshall Academy.

CHINESE 3 (583026)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Chinese 2 or equivalency test

Marshall HS Academy, Fairfax HS Academy, Edison HS Academy - transportation may be provided

Students continue to develop and refine their proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students comprehend the main ideas of the authentic materials that they read and hear, and they are able to identify significant details when the topics are familiar. Students gain a deeper understanding of the world around them while studying Rights and Responsibilities, Future Plans and Choices, Teen Culture, Environment, and Humanities. This course is only offered at the Marshall Academy.

CHINESE 4 (584026)

Grades: 10, 11, 12

Credit: one/weighted +.5

Prerequisite: Chinese 3 or equivalency test

Marshall HS Academy, Fairfax HS Academy, Edison HS Academy - transportation may be provided

Students develop more sophisticated communication skills in all four areas - listening, speaking, reading and writing - with emphasis on the ability to interact orally and in writing. The authentic reading selections are emphasized at this level. Students communicate using more complex language structures and express abstract ideas with reasonable fluency. Students are able to create and listen with understanding to reports and presentations. They are also able to describe, summarize and discuss selected upper level POS themes and topics. This course is only offered at the Marshall Academy.

ADVANCED PLACEMENT CHINESE LANGUAGE AND CULTURE (584005)

Grades: 11, 12

Credit: one/weighted +1.0

Prerequisite: Chinese 4 or equivalency

Fairfax HS Academy - transportation may be provided

In this course, students study the use of language for active communication. Emphasis is placed on the development of the three modes of communication (interpersonal, interpretive and presentational). The course is structured around six overarching themes: Beauty, and Aesthetics, Contemporary Life,

Families and Communities, Global Challenges, Personal and Public Identities, and Science and Technology. Students use language structures in context and use them to convey meaning. The course promotes fluency and accuracy to facilitate the study of language and culture. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

FRENCH 1 (511000)

Grades: 8, 9, 10, 11, 12

Credit: one

Prerequisite: none

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to communicate orally and in writing. Students begin to explore and study the POS themes of Personal and Family Life, School Life, Social Life, and Community Life. For middle school students, this credit becomes a part of the high school transcript, is included in the determination of the high school grade point average (GPA), and counts toward fulfilling the world languages requirement of the high school Advanced Studies diploma. It also counts toward the total number of credits required for graduation.

FRENCH 2 (512000)

Grades: 8, 9, 10, 11, 12

Credit: one

Prerequisite: French 1 or equivalency test

Students continue to develop proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to communicate orally and in writing. They learn to function in real-life situations using more complex sentences and language structures. They read material on familiar topics and produce short writing samples. Students continue to explore as they study the POS themes of Home Life, Student Life, Leisure Time, and Vacation and Travel.

FRENCH 3 (513000)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: French 2 or equivalency test

Students continue to develop and refine their proficiency in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students comprehend the main ideas of the authentic materials that they read and hear and are able to identify significant details when the topics are familiar. Students gain a deeper understanding of the world around them while studying the POS themes of Rights and Responsibilities, Future Plans and Choices, Teen Culture, Environment, and Humanities.

FRENCH 4 (514000)

Grades: 10, 11, 12

Credit: one/weighted +.5

Prerequisite: French 3 or equivalency test

Students develop more sophisticated communication skills in all four areas - listening, speaking, reading and writing - with emphasis on the ability to interact orally and in writing. The authentic reading selections are emphasized at this level. Students communicate using more complex language structures and express abstract ideas with reasonable fluency. Students are able to create and listen with understanding to reports and presentations. They are also able to describe, summarize and discuss selected upper level POS themes and topics.

ADVANCED PLACEMENT FRENCH LANGUAGE AND CULTURE (517004)

Grades: 11, 12

Credit: one/weighted +1.0

Prerequisite: French 4 or equivalency test

Students study three modes of communication (interpersonal, interpretive and presentational) to approach six units of study, taking a holistic approach. Students use language structures in context and use them to convey meaning. The course promotes fluency and accuracy to facilitate the study of language and culture. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

GERMAN 1 (521000)
Grades: 8, 9, 10, 11, 12

Credit: one

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to communicate orally and in writing. Students begin to explore and study the POS themes of Personal and Family Life, School Life, Social Life, and Community Life. For middle school students, this credit becomes a part of the high school transcript, is included in the determination of the high school grade point average (GPA), and counts toward fulfilling the world languages requirement of the high school Advanced Studies diploma. It also counts toward the total number of credits required for graduation.

GERMAN 2 (522000)
Grades: 9, 10, 11, 12

Credit: one

Prerequisite: German 1 or equivalency test

Students continue to develop proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to communicate orally and in writing. They learn to function in real-life situations using more complex sentences and language structures. They read material on familiar topics and produce short writing samples. Students continue to explore as they study the POS themes of Home Life, Student Life, Leisure Time, and Vacation and Travel.

GERMAN 3 (523000)
Grades: 9, 10, 11, 12

Credit: one

Prerequisite: German 2 or equivalency test

Students continue to develop and refine their proficiency in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students comprehend the main ideas of the authentic materials that they read and hear and are able to identify significant details when the topics are familiar. Students gain a deeper understanding of the world around them while studying the POS themes of Rights and Responsibilities, Future Plans and Choices, Teen Culture, Environment, and Humanities.

GERMAN 4 (524000)
Grades: 10, 11, 12

Credit: one/weighted +.5

Prerequisite: German 3 or equivalency test

Students develop more sophisticated communication skills in all four areas - listening, speaking, reading and writing - with emphasis on the ability to interact orally and in writing. The authentic reading selections are emphasized at this level. Students communicate using more complex language structures and express abstract ideas with reasonable fluency. Students are able to create and listen with understanding to reports and presentations. They are also able to describe, summarize and discuss selected upper level POS themes and topics.

ADVANCED PLACEMENT GERMAN LANGUAGE AND CULTURE (527004)

Grades: 11, 12

Credit: one/weighted +1.0

Prerequisite: German 4 or equivalency test

The AP German Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive and presentational skills in real life situations as applied to six themes. This includes vocabulary usage, language control, communication strategies and cultural awareness. The course engages students in an exploration of culture in both contemporary and historical contexts. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

ADVANCED PLACEMENT JAPANESE LANGUAGE AND CULTURE (597004)

Grades: 11, 12

Credit: one/weighted +1.0

Prerequisite: Japanese 4 or equivalency test

Students study the use of language for active communication. Specifically, they understand the spoken target language in both formal and conversational situations. They express ideas accurately and resourcefully, both orally and in writing, with reasonable fluency, and they develop a vocabulary sufficiently ample for reading newspaper and magazine articles, contemporary literature, and other non technical writings. They receive extensive training in the organization and writing of compositions, review syntax, and study selected works by contemporary authors. Materials will include recordings, films, newspapers, and magazines. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

ADVANCED PLACEMENT LATIN (537004)

Grades: 11, 12

Credit: one/weighted +1.0

Prerequisite: Latin 3, Latin 4, or equivalency test

The AP Latin course focuses on the in-depth study of selections from two of the greatest works in Latin literature: Vergil's Aeneid and Caesar's Gallic War. Students study the literary techniques used by Roman authors by reading Latin poetry and prose with historical and literary sensitivity. Students are encouraged to develop linguistic skills by engaging in multiple activities, including translating poetry and prose from the required-reading list, precisely and literally; reading passages of poetry and prose with comprehension; and analyzing literary texts in clear, coherent written arguments, supported by textual examples. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

ADVANCED PLACEMENT SPANISH LANGUAGE AND CULTURE (557004)

Grades: 11, 12

Credit: one/weighted +1.0

Prerequisite: Spanish 4 or equivalency test

Students study the use of language for active communication. Specifically, they understand the spoken target language in both formal and conversational situations. They express ideas accurately and resourcefully, both orally and in writing, with reasonable fluency, and they develop a vocabulary sufficiently ample for reading newspaper and magazine articles, contemporary literature, and other non technical writings. They receive extensive training in the organization and writing of compositions, review syntax, and study selected works by contemporary authors. Materials will include recordings, films, newspapers, and magazines. Students who complete this course are encouraged to take the associated Advanced Placement examination and may earn college credit if a qualifying score is achieved.

JAPANESE 1 (591000)

Grades: 8, 9, 10, 11, 12

Credit: one

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to communicate orally and in writing. The Kana system of writing, along with some basic characters, is taught in this course. Students begin to explore and study the themes of Personal and Family Life, School Life, Social Life, and Community Life. For middle school students, this credit becomes a part of the high school transcript, is included in the determination of the high school grade point average (GPA), and counts toward fulfilling the world languages requirements of the high school Advanced Studies diploma. It also counts toward the total number of credits required for graduation.

JAPANESE 2 (592000)

Advanced Japanese 9 Immersion (593060)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Japanese 1 or equivalency test

Students continue to develop proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to communicate orally and in writing. They learn to function in real-life situations using more complex sentences and language structures. They read material on familiar topics and produce short writing samples. Students continue to explore as

they study the themes of Home Life, Student Life, Leisure Time, and Vacation and Travel.

JAPANESE 3 (593000)

Advanced Japanese 10 Immersion (594060)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Japanese 2 or equivalency test

Students continue to develop and refine their proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students comprehend the main ideas of the authentic materials that they read and hear, and they are able to identify significant details when the topics are familiar. Students gain a deeper understanding of the world around them while studying Rights and Responsibilities, Future Plans and Choices, Teen Culture, Environment, and Humanities.

JAPANESE 4 (594000)

Advanced Japanese 11 Immersion (595060)

Grades: 10, 11, 12

Credit: one/weighted +.5

Prerequisite: Japanese 3 or equivalency test

Students develop more sophisticated communication skills in all four areas - listening, speaking, reading and writing - with emphasis on the ability to interact orally and in writing. The authentic reading selections are emphasized at this level. Students communicate using more complex language structures and express abstract ideas with reasonable fluency. Students are able to create and listen with understanding to reports and presentations. They are also able to describe, summarize and discuss selected upper level POS themes and topics.

KOREAN 1 (587000)

Grades: 8, 9, 10, 11, 12

Credit: one

Prerequisite: none

8th grade at Liberty MS and Lake Braddock MS only

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to communicate orally and in writing. Students begin to explore and study the themes of Personal and Family Life, School Life, Social Life, and Community Life. For middle school students, this credit becomes a part of the high school transcript, is included in the determination of the high school grade point average (GPA), and counts toward fulfilling the world languages requirements of the high school Advanced Studies diploma. It also counts toward the total number of credits required for graduation.

KOREAN 1 (587026)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: none

Fairfax HS Academy, Chantilly HS Academy - transportation may be provided

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to communicate orally and in writing. Students begin to explore and study the themes of Personal and Family Life, School Life, Social Life, and Community Life. The implementation of this course is contingent upon an enrollment of 25 students. This course is only offered at the Fairfax Academy.

KOREAN 2 (587500)

Grades: 8, 9, 10, 11, 12

Credit: one

Prerequisite: Korean 1 or equivalency test

Students continue to develop proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to communicate orally and in writing. They learn to function in real-life situations using more complex sentences and language structures. They read material on familiar topics and produce short writing samples. Students continue to explore as they study the themes of Home Life, Student Life, Leisure Time, and Vacation and Travel.

KOREAN 2 (587526)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Korean 1 or equivalency test

Fairfax HS Academy, Chantilly HS Academy - transportation may be provided

Students continue to develop proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to communicate orally and in writing. They learn to function in real-life situations using more complex sentences and language structures. They read material on familiar topics and produce short writing samples. Students continue to explore as they study the themes of Home Life, Student Life, Leisure Time, and Vacation and Travel. The implementation of this course is contingent upon an enrollment of 25 students. This course is only offered at the Fairfax Academy.

KOREAN 3 (588000)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Korean 2 or equivalency test

Students continue to develop and refine their proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students comprehend the main ideas of the authentic materials that they read and hear, and they are able to identify significant details when the topics are familiar. Students gain a deeper understanding of the world around them while studying Rights and Responsibilities, Future Plans and Choices, Teen Culture, Environment, and Humanities.

KOREAN 3 (588026)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Korean 2 or equivalency test

Fairfax HS Academy, Chantilly HS Academy - transportation may be provided

During this fall semester course students continue to develop and refine their proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students comprehend the main ideas of the authentic materials that they read and hear, and they are able to identify significant details when the topics are familiar. Students gain a deeper understanding of the world around them while studying Rights and Responsibilities, Future Plans and Choices, Teen Culture, Environment, and Humanities. The implementation of this course is contingent upon an enrollment of 25 students. This course is only offered at the Fairfax Academy. Students who sign up for Korean 3 in the fall semester must take Korean 4 in the spring semester.

KOREAN 4 (588526)

Grades: 9, 10, 11, 12

Credit: one/weighted +.5

Prerequisite: Korean 3 or equivalency test

Fairfax HS Academy - transportation may be provided

During this spring semester course students develop more sophisticated communication skills in all four areas - listening, speaking, reading and writing - with emphasis on the ability to interact orally and in writing. The authentic reading selections are emphasized at this level. Students communicate using more complex language structures and express abstract ideas with reasonable fluency. Students are able to create and listen with understanding to reports and presentations. They are also able to describe, summarize and discuss selected upper level POS themes and topics. The implementation of this course is contingent upon an enrollment of 25 students. This course is only offered at the Fairfax Academy. Students who sign up for Korean 4 in the spring semester must have taken Korean 3 in the fall semester.

LATIN 1 (531000)

Grades: 8, 9, 10, 11, 12

Credit: one

Students learn basic language structures and essential elements of Latin pronunciation in order to be able to read simple passages in Latin. The relationship of English to Latin is emphasized in vocabulary building, word derivation, and meanings of prefixes and suffixes. Language structures and syntax are developed through the study of literary passages. The geography, history, government and the culture of the Roman Empire are studied. For middle school students, this credit becomes a part of the high school transcript, is included in the determination of the high school grade point average (GPA),

and counts toward fulfilling the world languages requirements of the high school Advanced Studies diploma. It also counts toward the total number of credits required for graduation.

LATIN 2 (532000)
Grades: 8, 9, 10, 11, 12 **Credit: one**
Prerequisite: Level 1 or equivalency test

Students learn additional vocabulary, more complex language structures and syntax in order to be able to read more challenging passages in Latin. Language structures and syntax are developed through the study of literary passages. Students continue to explore as they study Roman life and Rome's contribution to our civilization.

LATIN 3 (533000)
Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: Latin 2 or equivalency test

Students continue to develop and refine their reading skills through the study of Latin literature. Additional vocabulary, more complex language structures and syntax are emphasized in order to be able to read the writings of prose authors. Through translation and interpretation, students gain a greater understanding of the foundation of Western government and civilization.

LATIN 4 (534000)
Grades: 11, 12 **Credit: one/weighted +.5**
Prerequisite: Latin 3 or equivalency test

Students continue to develop and refine their reading skills through the study of Latin literature. Students read Vergil's Aeneid silently for comprehension and orally for poetic meter and analyze the various passages for content, connotation of words and author's style. Students study the life and times of Vergil, his influence on later writers, his poetic devices, and his Aeneid as a literary work.

SPANISH 1 (551000)
Grades: 8, 9, 10, 11, 12 **Credit: one**

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to communicate orally and in writing. Students begin to explore and study the POS themes of Personal and Family Life, School Life, Social Life, and Community Life. For middle school students, this credit becomes a part of the high school transcript, is included in the determination of the high school grade point average (GPA), and counts toward fulfilling the world languages requirements of the high school Advanced Studies diploma. It also counts toward the total number of credits required for graduation.

SPANISH 2 (552000)
Grades: 8, 9, 10, 11, 12 **Credit: one**
Prerequisite: Spanish 1 or equivalency test

Students continue to develop proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to communicate orally and in writing. They learn to function in real-life situations using more complex sentences and language structures. They read material on familiar topics and produce short writing samples. Students continue to explore as they study the POS themes of Home Life, Student Life, Leisure Time, and Vacation and Travel.

SPANISH 3 (553000)
Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: Spanish 2 or equivalency test

Students continue to develop and refine their proficiency in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students comprehend the main ideas of the authentic materials that they read and hear and are able to identify significant details when the topics are familiar. Students gain a deeper understanding of the world around them while studying the POS themes of Rights and

Responsibilities, Future Plans and Choices, Teen Culture, Environment, and Humanities.

SPANISH 4 (554000)
Grades: 9, 10, 11, 12 **Credit: one/weighted +.5**
Prerequisite: Spanish 3 or equivalency test

Students develop more sophisticated communication skills in all four areas - listening, speaking, reading and writing - with emphasis on the ability to interact orally and in writing. The authentic reading selections are emphasized at this level. Students communicate using more complex language structures and express abstract ideas with reasonable fluency. Students are able to create and listen with understanding to reports and presentations. They are also able to describe, summarize and discuss selected upper level POS themes and topics.

SPANISH FOR FLUENT SPEAKERS 1 (551100)
Grades: 8, 9, 10, 11, 12 **Credit: one**
Prerequisite: Permission from instructor

This course offers fluent speakers of Spanish the opportunity to strengthen their basic skills in reading and writing Spanish. The students learn about the Hispanic contributions to the English language and American culture. The students also study the major historical figures and events of Spanish-speaking countries. The course is conducted in Spanish and counts toward fulfilling the world languages requirement. Middle School: credit becomes a part of the high school transcript, is included in the determination of the high school grade point average (GPA), and counts toward fulfilling the world languages requirements of the high school Advanced Studies diploma. It also counts toward the total number of credits required for graduation.

SPANISH FOR FLUENT SPEAKERS 2 (552100)
Grades: 8, 9, 10, 11, 12 **Credit: one**
Prerequisite: Spanish for Fluent Speakers 1 or permission from instructor

This course, designed for fluent speakers of Spanish, continues to emphasize the improvement of students' skills in speaking, reading, and writing in Spanish. Students read and critique contemporary short stories and make oral presentations. The writing and reading processes are emphasized to ensure growth in both skills. The students will also study various Hispanic personalities and historic events of Spanish-speaking countries. The course is conducted in Spanish. Middle School: credit becomes a part of the high school transcript, is included in the determination of the high school grade point average (GPA), and counts toward fulfilling the world languages requirements of the high school Advanced Studies diploma. It also counts toward the total number of credits required for graduation.

SPANISH FOR FLUENT SPEAKERS 3 (553100)
Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: Spanish for Fluent Speakers 2 or permission from instructor

This course, designed for speakers of Spanish, continues to emphasize the refinement of proficiency in reading, writing, and speaking Spanish. Students develop research skills through the reading and critiquing of literary works. The influence of Hispanic culture in contemporary American society is highlighted. The course is conducted in Spanish and counts toward fulfilling the world languages requirement of the high school Advanced Studies diploma.

VIETNAMESE 1 (598000)
Grades: 9, 10, 11, 12 **Credit: one**
Falls Church HS Academy - transportation may be provided

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to communicate orally and in writing. Students begin to explore and study the themes of Personal and Family Life, School Life, Social Life, and Community Life.

VIETNAMESE 1 (598026)**Grades: 9, 10, 11, 12****Credit: one****Falls Church HS Academy - transportation may be provided**

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to communicate orally and in writing. Students begin to explore and study the themes of Personal and Family Life, School Life, Social Life, and Community Life.

VIETNAMESE 2 (598100)**Grades: 9, 10, 11, 12****Credit: one****Falls Church HS Academy - transportation may be provided**

Students continue to develop proficiency in all four language skills – listening, speaking, reading and writing – with emphasis on the ability to communicate orally and in writing. They learn to function in real-life situations using more complex sentences and language structures. They read material on familiar topics and produce short writing samples. Students continue to explore as they study the themes of Home Life, Student Life, Leisure Time, and Vacation and Travel.

VIETNAMESE 2 (598126)**Grades: 9, 10, 11, 12****Credit: one****Prerequisite: Vietnamese 1 or equivalency test.****Falls Church HS Academy - transportation may be provided**

Students continue to develop proficiency in all four language skills – listening, speaking, reading and writing – with emphasis on the ability to communicate orally and in writing. They learn to function in real-life situations using more complex sentences and language structures. They read material on familiar topics and produce short writing samples. Students continue to explore as they study the themes of Home Life, Student Life, Leisure Time, and Vacation and Travel.

VIETNAMESE 3 (598200)**Grades: 9, 10, 11, 12****Credit: one****Prerequisite: Vietnamese 2 or equivalency test.****Falls Church HS Academy - transportation may be provided**

Students continue to develop and refine their proficiency in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students comprehend the main ideas of the authentic materials that they read and hear and are able to identify significant details when the topics are familiar. Students gain a deeper understanding of the world around them while studying the POS themes of Rights and Responsibilities, Future Plans and Choices, Teen Culture, Environment, and Humanities.

VIETNAMESE 3 (598226)**Grades: 9, 10, 11, 12****Credit: one****Prerequisite: Vietnamese 2 or equivalency test.****Falls Church HS Academy - transportation may be provided**

Students continue to develop and refine their proficiency in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students comprehend the main ideas of the authentic materials that they read and hear and are able to identify significant details when the topics are familiar. Students gain a deeper understanding of the world around them while studying the POS themes of Rights and Responsibilities, Future Plans and Choices, Teen Culture, Environment, and Humanities.

VIETNAMESE 4 (598300)**Grades: 10, 11, 12****Credit: one/weighted +.5****Prerequisite: Vietnamese 3 or equivalency test****Falls Church HS Academy - transportation may be provided**

Students develop more sophisticated communication skills in all four areas - listening, speaking, reading and writing - with emphasis on the ability to interact orally and in writing. The authentic reading selections are emphasized

at this level. Students communicate using more complex language structures and express abstract ideas with reasonable fluency. Students are able to create and listen with understanding to reports and presentations. They are also able to describe, summarize and discuss selected upper level POS themes and topics.

VIETNAMESE 4 (598326)**Grades: 10, 11, 12****Credit: one/weighted +.5****Prerequisite: Vietnamese 3 or equivalency test****Falls Church HS Academy - transportation may be provided**

Students develop more sophisticated communication skills in all four areas - listening, speaking, reading and writing - with emphasis on the ability to interact orally and in writing. The authentic reading selections are emphasized at this level. Students communicate using more complex language structures and express abstract ideas with reasonable fluency. Students are able to create and listen with understanding to reports and presentations. They are also able to describe, summarize and discuss selected upper level POS themes and topics.

SCIENCE**BIOLOGY PART 1 (430080)****Grades: 9****Credit: one**

Biology Part 1 is designed to introduce students to the big concepts in biology before they enter the standard biology course. Students will strengthen their communication skills as they engage in scientific inquiry through lab work. All class and laboratory activities focus on life processes that occur within organisms or cells as well as the characteristics of life including: reproduction, development, and adaptation to environment. This course is for students who are accessing credit accommodations for the standard diploma.

SPECIAL EDUCATION**LITERACY ESSENTIALS (118080)****Grades: 9, 10, 11, 12****Credit: one**

This course is designed to provide direct, explicit and intensive literacy instruction to students with disabilities who are reading and/or writing significantly below grade level. Basic objectives of this literacy course is focused on closing the gap between the student's present level of performance and the level of performance needed to successfully access the general curriculum. Instruction focuses on increasing student's decoding, fluency and comprehension skills of fiction and nonfiction materials, and improving writing skills across the curriculum which is based on the diagnosis of each student's needs as outlined through the student's Individual Education Program (IEP). Students successfully completing two years of this course will satisfy the sequential elective requirement for the Standard Diploma and the Standard Diploma with credit accommodations.

STRATEGIES FOR SUCCESS (788980)**Grades: 9, 10, 11, 12****Credit: one**

This elective course is designed to provide support to a student in core curricular areas and to provide direct instruction in specific learning strategies, study skills, time management, organization, and self-advocacy skills. Time is also allotted to address individual areas of need as identified in a student's Individual Educational Plan (IEP). While students may receive assistance on core curricular assignments, the course is not designed to serve as a study hall. Students enrolled in the course receive the equivalent of one period of instruction each day and earn an elective credit. This course may be taught for an elective credit all four years or more, as appropriate. Students successfully completing two years of this course will satisfy the sequential elective requirement for the Standard and Modified Standard Diploma. (Students may be awarded a half-credit upon completion of a full semester of placement in the Strategies for Success course. Such a decision is made by the school counselor in conjunction with the special education department chair.)

CAREER PREPARATION (789861)**Grades: 9, 10, 11, 12**
(2 credits - First year)**Credit: two**

This is an adapted curriculum elective geared to students needing intensive support. Instruction is very concrete with extensive physical modeling and assistance. Work experience may take place in the community, around the school, or in the classroom. This course is designed for students who are likely to age out of FCPS and work with the Community Services Board to select a day support or employment agency able to meet their support needs. This course is taught by adapted curriculum teachers. The course will identify work-related abilities, provide training and work skills, and prepare students for post-secondary participation in community-based worksites.

CAREER PREPARATION (789862)**Grades: 10, 11, 12**
(2 credits - 2nd year)**Credit: two**

This is an adapted curriculum elective geared to students needing intensive support. Instruction is very concrete with extensive physical modeling and assistance. Work experience may take place in the community, around the school, or in the classroom. This course is designed for students who are likely to age out of FCPS and work with the Community Services Board to select a day support or employment agency able to meet their support needs. This course is taught by adapted curriculum teachers. The course will identify work-related abilities, provide training and work skills, and prepare students for post-secondary participation in community-based worksites.

CAREER PREPARATION (789863)**Grades: 11, 12**
(2 credits - 3rd year)**Credit: two**

This is an adapted curriculum elective geared to students needing intensive support. Instruction is very concrete with extensive physical modeling and assistance. Work experience may take place in the community, around the school, or in the classroom. This course is designed for students who are likely to age out of FCPS and work with the Community Services Board to select a day support or employment agency able to meet their support needs. This course is taught by adapted curriculum teachers. The course will identify work-related abilities, provide training and work skills, and prepare students for post-secondary participation in community-based worksites.

CAREER PREPARATION (789882)**Grades: 9, 10, 11, 12**
(IDSC)**Credit: one**

This is an adapted curriculum elective geared to students needing intensive support. Instruction is very concrete with extensive physical modeling and assistance. Work experience may take place in the community, around the school, or in the classroom. This course is designed for students who are likely to age out of FCPS and work with the Community Services Board to select a day support or employment agency able to meet their support needs. This course is taught by adapted curriculum teachers. The course will identify work-related abilities, provide training and work skills, and prepare students for post-secondary participation in community-based worksites.

EDUCATION FOR EMPLOYMENT - LEVEL 1 (908561)**Grades: 9, 10, 11, 12****Credit: one**

This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self-advocacy, customer-service, and life skills. Students successfully completing two years of this course will satisfy sequential elective requirements prescribed in certain diplomas.

EDUCATION FOR EMPLOYMENT - LEVEL 1 (908562)**Grades: 9, 10, 11, 12****Credit: two**

This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self-advocacy, customer-service, and life skills. Students successfully completing two years of this course will satisfy sequential elective requirements prescribed in certain diplomas.

EDUCATION FOR EMPLOYMENT - LEVEL 1 (908563)**Grades: 9, 10, 11, 12****Credit: three**

This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self-advocacy, customer-service, and life skills. Students successfully completing two years of this course will satisfy sequential elective requirements prescribed in certain diplomas.

EDUCATION FOR EMPLOYMENT - LEVEL 2 (908761)**Grades: 9, 10, 11, 12****Credit: one**

This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self-advocacy, customer-service, and life skills. Students successfully completing two years of this course will satisfy sequential elective requirements prescribed in certain diplomas.

EDUCATION FOR EMPLOYMENT - LEVEL 2 (908762)**Grades: 9, 10, 11, 12****Credit: two**

This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self-advocacy, customer-service, and life skills. Students successfully completing two years of this course will satisfy sequential elective requirements prescribed in certain diplomas.

EDUCATION FOR EMPLOYMENT - LEVEL 2 (908763)**Grades: 9, 10, 11, 12****Credit: three**

This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self-advocacy, customer-service, and life skills. Students successfully completing two years of this course will satisfy sequential elective requirements prescribed in certain diplomas.

EDUCATION FOR EMPLOYMENT FOR THE OFFICE (908551)**Grades: 9, 10, 11, 12****Credit: one**

This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self-advocacy, customer-service, MS Office applications, and to perform assignments essential to the operation of an office in a school or community business. This course can be taken for more than one year. Students successfully completing two years of this course will satisfy the sequential elective requirement for certain diploma options.

EDUCATION FOR EMPLOYMENT FOR THE OFFICE (908552)**Grades: 9, 10, 11, 12****Credit: two**

This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self-advocacy, customer-service, MS Office applications, and to perform assignments essential to the operation of an office in a school or community business. This course can be taken for more than one year. Students successfully completing two years of this course will satisfy the sequential elective requirement for certain diploma options.

EDUCATION FOR EMPLOYMENT FOR THE OFFICE (908553)
Grades: 9, 10, 11, 12 **Credit: three**

This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self-advocacy, customer-service, MS Office applications, and to perform assignments essential to the operation of an office in a school or community business. This course can be taken for more than one year. Students successfully completing two years of this course will satisfy the sequential elective requirement for certain diploma options.

FOUNDATIONS OF ENGLISH 9-12 (781380)
Grades: 9, 10, 11, 12 **Credit: one**

Foundations of English, 9-12, is a one-credit elective course designed to support instruction along the FCPS Program of Studies and the VA Aligned Standards of Learning (ASOL) in the identified content area; does not require SOL testing. Students may enroll in this elective class each year of HS participation. Instruction is individualized based on needs identified in the IEP to help students gain a basic content vocabulary, knowledge and skills and designed to be taught at the learning pace of the individual students. Participation in Foundations courses will aid the student in fulfilling requirements of the Virginia Alternative Assessment Program (VAAP) and meet the requirements for an Applied Studies Diploma.

FOUNDATIONS OF SCIENCE (781180)
Grades: 9, 10, 11, 12 **Credit: one**

Foundations of Science is a one-credit elective course designed to support instruction along the FCPS Program of Studies and the VA Aligned Standards of Learning (ASOL) in the identified content area; does not require SOL testing. Students may enroll in this elective class each year of HS participation. Instruction is individualized based on needs identified in the IEP to help students gain a basic content vocabulary, knowledge and skills and designed to be taught at the learning pace of the individual students. Participation in Foundations courses will aid the student in fulfilling requirements of the Virginia Alternative Assessment Program (VAAP) and meet the requirements for an Applied Studies Diploma.

FOUNDATIONS OF UNITED STATES AND VIRGINIA HISTORY (781480)
Grades: 9, 10, 11, 12 **Credit: one**

Foundations of United States and Virginia History is a one-credit elective course designed to support instruction along the FCPS Program of Studies and the VA Aligned Standards of Learning (ASOL) in the identified content area; does not require SOL testing. Students may enroll in this elective class each year of HS participation. Instruction is individualized based on needs identified in the IEP to help students gain a basic content vocabulary, knowledge and skills and designed to be taught at the learning pace of the individual students. Participation in Foundations courses will aid the student in fulfilling requirements of the Virginia Alternative Assessment Program (VAAP) and meet the requirements for an Applied Studies Diploma.

FOUNDATIONS OF WORLD HISTORY/GEOGRAPHY (781080)
Grades: 9, 10, 11, 12 **Credit: one**

Foundations of World History/Geography is a one-credit elective course designed to support instruction along the FCPS Program of Studies and the VA Aligned Standards of Learning (ASOL) in the identified content area; does not require SOL testing. Students may enroll in this elective class each year of HS participation. Instruction is individualized based on needs identified in the IEP to help students gain a basic content vocabulary, knowledge and skills and designed to be taught at the learning pace of the individual students. Participation in Foundations courses will aid the student in fulfilling requirements of the Virginia Alternative Assessment Program (VAAP) and meet the requirements for an Applied Studies Diploma.

INDEPENDENT LIVING SKILLS (789661)
Grades: 9, 10, 11, 12 **Credit: one**

This course, offered at Davis and Pulley Centers and STEP, is designed to teach students with disabilities skills for independent living.

INDIVIDUALIZED MATHEMATICS (312180)
Grades: 9, 10, 11, 12 **Credit: one**

The purpose of this course is to provide instruction of foundational mathematics skills to special education students who are functioning more than two years below grade level in mathematics. The course is designed to present the foundational skills necessary to enter Algebra I using manipulatives, special materials, and adaptive strategies. The course may include number concepts, mental mathematics, estimation, problem solving, operations, measurement, geometry, data analysis, statistics, probability, and fractions. This course should be reflected in the student's IEP. This course does not meet the mathematics graduation requirements for the Standard or Advanced Studies Diploma. Students earn elective credit.

LIFE SKILLS (798800)
Grades: 9, 10, 11, 12 **Credit: one**

This comprehensive individualized program is designed to prepare students for a style of living that will require a minimum of dependence on family. The course is geared to meet the needs of the students as they prepare to enter employment and emphasizes developing interpersonal skills, following directions, working independently, completing a task, and developing self-advocacy and other community living skills.

PERSONAL LIVING AND FINANCE (312080)
Grades: 11, 12 **Credit: one**
Prerequisite: One high school mathematics course

Students learn how to navigate the financial decisions they must face and to make informed decisions related to budgeting, banking, credit, insurance, spending, taxes, saving, investing, buying/leasing a vehicle, living independently, and inheritance. Instruction in personal finance prepares students to function effectively as consumers, savers, investors, entrepreneurs, and active citizens. This course has been augmented to include the 21 Workplace Readiness Skills (WRS) and upon completion of this course, students may take the WRS assessment, and if successful, receive a Career and Technical Education (CTE) credential. This course is an allowable credit accommodation for students pursuing a standard diploma and may satisfy the Economics and Personal Finance requirement if the student has earned at least 3 credits in history and social science.

PERSONAL DEVELOPMENT (781580)
Grades: 9, 10, 11, 12 **Credit: one**

This course is designed to provide instruction to enhance personal development and interpersonal skills for students with disabilities. In addition, this course will provide social and/or emotional support in order to progress in the general education curriculum. Students who participate in the course have documented social and/or emotional needs in their individualized education program (IEP) and/or have a Behavior Intervention Plan (BIP). The areas of instruction for this course include peer relations, self-management, academic skills, compliance skills, and assertion skills. This course may be taught for an elective credit all four years or more, as appropriate. Students successfully completing two years of this course will satisfy the sequential elective requirement for the Standard and Modified Standard Diploma.

WORK AWARENESS AND TRANSITION (907161)
Grades: 9, 10, 11, 12 **Credit: one**

This option is available to high school students receiving special education services. Students explore potential career options while developing/improving skills needed for success in employment such as interpersonal/co-worker relationships and self-advocacy skills. Students participate in career activities and work-based learning, explore various educational options, and develop or revise a plan related to their academic and career-related goals.

Westfield High School
9TH GRADE COURSE SELECTION SHEET 2021-22

9th Graders Only
Class of 2025
Student Label

LAST NAME _____ FIRST NAME _____ MI _____ HOME TELEPHONE # _____
 E-MAIL ADDRESS PARENT _____ E-MAIL ADDRESS STUDENT _____

To Parent/Guardian:

- Students must select 7 credits. All courses are 1 credit unless indicated with an “S” or semester course. Semester courses are a half credit. They must be matched with another semester course. Students must hand write alternate courses as back up choices.
- These are the courses that your student selected for the 2021-22 school year. Please review these selections to be sure that they satisfy graduation requirements, as well as academic needs, career interests, and personal goals.
- Prior to June 11, change requests should be made with high school counselors and will be honored only if class space permits.
- After June 11, schedule changes will be made only to correct errors in placement or to resolve conflicts with classes.

PARENT/GUARDIAN SIGNATURE _____

Standard Courses

English

- 113000 English 9
- 113036 English 9 Honors

Social Studies

- 221900 World History & Geography 1
- 221936 World History/Geog 1 Honors

Mathematics

- 313000 Algebra 1
- 313100 Algebra 1 Part 1
- 314300 Geometry
- 314336 Geometry Honors
- 313500 Algebra 2
- 313536 Algebra 2 Honors
- 316000 Precalculus w/ Trig
- 316036 Precalculus w/ Trig Honors

Science

- 431000 Biology 1
- 431036 Biology 1 Honors
- 426500 Environmental Science

Health & Physical Education

- 730000 HPE 9

Special Education

- 113071 English 9 (TT)
- 113081 English 9 (SC)
- 221971 World History & Geog 1 (TT)
- 221981 World History & Geog 1 (SC)
- 313181 Algebra 1, Pt 1 (SC)
- 313071 Algebra 1 (TT)
- 313081 Algebra 1 (SC)
- 313151 Alg 1 Pt 1 blocked w/Alg 1 (TT)
- 313051 Alg 1 blocked w/Alg 1 Pt 1 (TT)
- 314371 Geometry (TT)
- 314381 Geometry (SC)
- 430080 Biology Part 1
- 431071 Biology (TT)
- 431081 Biology (SC)
- 426571 Environmental Science (TT)
- 426581 Environmental Science (SC)
- 770002 Adapted PE
- 118081 Literacy Essentials
- 781580 Personal Development (ED)
- 788980 Strategies for Success
- 908561 Ed. For Employment--1 credit
- 908562 Ed. For Employment--2 credit

ESOL

- ESOL Level 1 – English 9 (2 credits)
 - 573091 572011
- ESOL Level 2 – English 9 (2 credits)
 - 573092 572051
- ESOL Level 3 – English 9 (2 credits)
 - 573093 572091

ESOL Level 4 – English 9 (2 credits)

- 113094 573011
- 244090 US/VA Gov’t – Level 1
- 244091 US/VA Gov’t – Level 2
- 221994 World History 1 (ESOL)
- 312190 Pre-Algebra (ESOL)
- 313191/313091 Alg. 1 Part 1/Algebra 1
- 312192/ 312193 Math Readiness/ Pre-Alg.
- 312196/312192 Numeracy/MathReadiness
- 313094 Algebra 1 (ESOL)
- 314394 Geometry (ESOL)
- 426590 Environmental Science (ESOL)
- 431090 Biology (ESOL)
- 451059 Active Physics (ESOL)
- 661190 Digital Applications
- 788990 Strat. for Success – Level 1
- 788991 Strat. for Success – Level 2

Electives

Business and Information Technology

- 611500 Principles of Business
- 613232 Business Law **S (blocked)**
- 613632 Business Mgmt. **S (blocked)**
- 630200 Cybersecurity Fundamentals
- 632000 Accounting
- 661200 Information Systems
- 663000 Design/MultiMedia/Web Tech
- 664000 Programming

English

- 117100 Creative Writing
- 120000 Journalism 1 – Newspaper
- 121500 Photojournalism 1 - Yearbook
- 144600 Film Study
- 118100 Literacy Lab 1
- 130032 Speech **S**
- 139532 Debate **S**

Social Studies

- 237100 African American History
- 982200 Combating Intolerance

Health and Physical Education

- 763000 Sports Medicine
- 751050 YOGA

Music

- 923215 Beginning Band \$
- 923315 Intermediate Band \$ ♪
- 924015 Jazz Ensemble 1- after school \$ ♪
- 925015 Percussion Ensemble \$ ♪
- 923715 Beginning Orchestra \$
- 923815 Intermediate Orchestra \$ ♪
- 926015 Mixed Chorus \$
- 929615 Show Chorus \$ ♪

Theatre Arts

- 141000 Theater Arts 1 \$
- 143511 Tech Theatre 1

Visual Arts

- 912000 Studio Art 1 \$
- 919711 3D Studio Art 1 \$
- 915311 Calliope - Literary Magazine
- 918011 Digital Art and Design 1 with Animation \$
- 919311 Photography 1 \$
- 122000 Broadcast Journalism 1-TV News\$

General

- 612000 Econ and Personal Finance
- 612036 Econ and Personal Finance Hon
- 788900 Strategies for Success
- 980800 Leadership Training - SGA (requires application)
- 928800 AVID (requires application)

Marketing

- 811000 Intro. To Marketing
- 814000 Fashion Marketing 1

Mathematics

- 318400 Computer Science (Prerequisite – Alg.1 and Geometry)

Technology and Engineering Education

- 848700 Aerospace 1
- 840300 STEM Design

World Languages

- 512000 French 2
- 521000 German 1
- 522000 German 2
- 531000 Latin 1
- 532000 Latin 2
- 551000 Spanish 1
- 552000 Spanish 2
- 553000 Spanish 3
- 551100 Span. for Fluent Speakers 1
- 552100 Span. for Fluent Speakers 2
- 553100 Span. For Fluent Speakers 3
- 591000 Japanese 1
- 592000 Japanese 2
- 599000 American Sign Language 1
- 587000 Korean 1

Academy Courses

- 791311 JFROTC – Chantilly Academy
- 501026 Arabic – Fairfax Academy
- 581026 Chinese – Fairfax Academy
- 598026 Vietnamese – Falls Church Acad.
- 833827 Health Informatics – Falls Church
- 932326 Hip Hop – Fairfax Academy
- 931126 Dance – Fairfax Academy
- 932126 Broadway Theatre – Fairfax Acad.
- 143062 Musical Theatre – Fairfax Acad.

\$ = Materials fee required
 ♪ = Placement in these classes will be determined by audition.
 S = Semester class

Alternative Courses

1. _____
2. _____
3. _____

10th, 11th, & 12th graders
Classes of 2022, 23, 24
Student Label

WESTFIELD HIGH SCHOOL

10TH, 11TH, 12TH GRADE COURSE SELECTION SHEET 2021-22

STUDENT NAME _____ **GRADE** _____
STUDENT CELL PHONE _____ **E-MAIL** _____

To Parent/Guardian:

- Students must select 7 credits. All courses are 1 credit unless indicated with an "S" or semester course or if it is labeled for 2 periods. The semester courses are a half credit. They must be matched with another semester course.
- Students must hand write alternate courses as back up choices.
- These are the courses that your student selected for the 2021-2022 school year. Please review these selections to be sure that they satisfy graduation requirements, as well as academic needs, career interests, and personal goals.
- Students applying for academy courses must select the academy course on this form and complete the separate academy application.
- Prior to June 11, change requests should be made with high school counselors and will be honored only if class space permits. After June 11, schedule changes will be made only to correct errors in placement, or to resolve conflicts with classes.

ENGLISH

- 113000 English 9
- 113036 English 9 Honors
- 114000 English 10
- 114036 English 10 Honors
- 115000 English 11
- 115036 English 11 Honors
- 119605 AP English 11/Lang/Comp
- 116000 English 12
- 116036 English 12 Honors
- 119504 AP English 12/Lit/Comp
- 144600 Film Study
- 144700 Film Study 2
- 120000 Journalism 1/Newspaper 1
- 121000 Journalism/ Newspaper 2
- 121100 Journalism/ Newspaper 3
- 121200 Journalism/ Newspaper 4
- 122000 Broadcast Journalism 1 - TV News
- 122012 Broadcast Journalism 2 - TV News
- 122013 Broadcast Journalism 3 - TV News
- 122014 Broadcast Journalism 4 - TV News
- 117100 Creative Writing
- 121500 PhotoJournalism 1/Yearbook 1
- 121600 PhotoJournalism 2/Yearbook 2
- 121700 PhotoJournalism 3/Yearbook 3
- 121714 PhotoJournalism 4/Yearbook 4
- 118100 Literacy Lab 1
- 118200 Literacy Lab 2
- 118300 Literacy Lab 3
- 130032 Speech S & 139532 Debate S

SOCIAL STUDIES

- 221900 World History & Geography 1
- 221936 World History/Geo 1 Honors
- 222100 World History & Geography. II
- 222136 World History/Geog. 2 Honors
- 231904 AP US History
- 234004 AP World History
- 236000 US & Virginia History
- 236036 US & Virginia History Honors
- 237100 African American History
- 239904 AP European History
- 244000 US/VA Government
- 244036 US/VA Government Honors
- 244504 AP Government
- 244567 AP US & Comparative Gov't
- 221204 AP Human Geography
- 280404 AP Micro/Macro Economics
- 290000 Psychology
- 290204 AP Psychology
- 982200 Combating Intolerance
- 295000 Philosophy S \$
- 295062 World Religions S
- 250032 Sociology S \$
- 299632 Current Affairs S

MATH

- 313000 Algebra 1
- 313100 Algebra 1 Part 1
- 314300 Geometry
- 314336 Geometry Honors
- 313400 Algebra, Functions & Data Ana
- 313500 Algebra 2
- 313536 Algebra 2 Honors
- 316000 Precalculus w/Trig
- 316036 Precalculus w/Trig Honors
- 317004 AP Calculus AB
- 317704 AP Calculus BC
- 317860 Multivariable Calculus S
- 319800 Matrix Algebra S
- 319204 AP Statistics
- 318400 Computer Science
- 318505 AP Computer Science A
- 318507 AP Computer Science Principles
- 319062 Probability & Statistics
- 319910 Applied Calculus

Block Classes

- 315432 Discrete S
- 315032 Trigonometry S

SCIENCE

- 431000 Biology
- 431036 Biology Honors
- 437004 AP Biology
- 441000 Chemistry 1
- 441036 Chemistry Honors
- 447004 AP Chemistry
- 457504 AP Physics C & M
- 451050 Active Physics
- 451000 Physics 1
- 451036 Physics 1 Honors
- 457306 AP Physics 1
- 422000 Geosystems
- 422036 Geosystems Honors
- 427004 AP Environmental Science
- 426000 Astronomy
- 433000 Human Anatomy/Physiology
- 435000 Genetics and Biotech

WORLD LANGUAGES

- 512000 French 2
- 513000 French 3
- 514000 French 4
- 521000 German 1
- 522000 German 2
- 523000 German 3
- 524000 German 4
- 527004 AP German
- 531000 Latin 1
- 532000 Latin 2
- 533000 Latin 3
- 534000 Latin 4
- 537004 AP Latin
- 551000 Spanish 1
- 552000 Spanish 2
- 553000 Spanish 3

- 554000 Spanish 4
- 557004 AP Spanish Language
- 551100 Spanish/Fluent Speakers 1
- 552100 Spanish/Fluent Speakers 2
- 553100 Spanish/Fluent Speakers 3
- 591000 Japanese 1
- 592000 Japanese 2
- 593000 Japanese 3
- 594000 Japanese 4
- 597004 AP Japanese Language
- 599000 Am Sign Language 1
- 599500 Am Sign Language 2
- 599700 Am Sign Language 3
- 599800 Am Sign Language 4
- 587000 Korean 1
- 587500 Korean 2
- 588026 Korean 3

HEALTH & PHYSICAL EDUCATION

- 730000 Health/PE 9
- 740500 Health/PE 10/Driver's Ed
- 764011 Personal Fitness 1
- 764012 Personal Fitness 2
- 751000 Personal Fitness 3 WT
- 751050 YOGA
- 763000 Sports Medicine
- 764060 Fitness Instructor

ART

- 915311 Calliope 1 – Literary Mag
- 915411 Calliope 2 – Literary Mag
- 915511 Calliope 3 – Literary Mag
- 912000 Studio Art 1 \$
- 912000 JUNIOR/SENIOR ART 1 \$
- 913000 Studio Art 2 \$
- 914000 Studio Art 3 \$
- 914700 Art 4 Portfolio Prep-General \$
- 915104 AP Art History \$
- 915004 AP Art – Drawing \$
- 914804 AP Art – 2-D Design \$
- 914961 AP Art – 3-D Design \$
- 918011 Digital Art and Design & Animation 1 \$
- 918111 Digital Art and Design & Animation 2 \$
- 918211 Digital Art and Design & Animation 3 \$
- 919911 Digital Art and Design 4 \$
- 918100 Animation \$
- 919311 Photography 1 \$
- 919411 Photography 2 \$
- 919511 Photography 3 \$
- 919914 Photography 4 Portfolio Prep \$
- 919711 3D Studio Art 1 \$
- 919712 3D Studio Art 2 \$
- 919713 3D Studio Art 3 \$
- 919714 3D Studio Art 4 \$
- 919765 Jewelry – 3D Studio Art \$ S1
- 919766 Jewelry – 3D Studio Art \$ S2

BUSINESS

- 611500 Principles of Business
- 613232 Business Law S
- 613632 Business Mgmt. S

- 630200 Cyber Security Fundamentals
- 632000 Accounting
- 632100 Adv. Accounting
- 661200 Information Systems
- 661300 Advanced Info Systems
- 663000 Design/MultiMedia/Web Tech
- 664000 Programming
- 664100 Advanced Programming
- 984200 Internship

GENERAL

- 612000 Economics/Personal Finance
- 612036 Economics/Person Fin Honors
- 6120SD EPF – 8th Pd Self Directed\$
- 612015 EPF Summer – Seniors Only
- 788900 Strategies for Success
- 980760 Peer Helping 1 ♣
- 980800 Leadership Training 1 ♣
- 980812 Leadership Training 2 ♣
- 980813 Leadership Training 3 ♣
- 980814 Leadership Training 4 ♣
- 982800 AVID
- 984200 Internship
- 011550 Independent Study

MARKETING

- 812000 Marketing 1
- 813000 Advanced Marketing
- 814000 Fashion Marketing 1
- 814500 Fashion Marketing 2
- 817500 Sports/Entertain Marketing
- 817700 Adv. Sports/Entertain. Marketing
- 819920 Marketing Coop (1pd)
- 819921 Marketing Coop (2pd)
- 909300 Entrepreneurship 1
- 9093DE Entrepreneurship 1 Dual Enroll.
- 984200 Internship

TECHNOLOGY & ENGINEERING EDUCATION

- 840300 STEM Design
- 840500 STEM Pre-Engineering
- 845060 STEM Engineering
- 845360 STEM Adv. Engineering
- 848700 Aerospace Science 1
- 848800 Aerospace Science 2
- 870200 Criminal Justice 1
- 870327 Criminal Justice 2 (2 periods)

MUSIC

- 922500 Music Theory
- 922604 AP Music Theory \$
- 923215 Band \$
- 923315 Band (Concert) \$ ♪
- 923415 Band (Symphonic) \$ ♪
- 923416 Band 2 (Wind Sym) \$ ♪
- 924015 Jazz Level 1 – after school \$♪
- 924016 Jazz Level 2 – in school \$♪
- 925015 Percussion Ensemble \$ ♪
- 923715 Beginning Orchestra \$
- 923816 Intermediate Orchestra (Concert) \$ ♪
- 923915 Advanced Orchestra (Chamber) \$ ♪
- 923932 Advanced Orchestra-after school \$♪
- 926015 Mixed Chorus \$
- 926016 Treble Chorus (Treble) \$
- 928915 Adv. Mix Chorus (8th Period)\$♪
- 928916 Adv. Treble (Bel Canto) \$♪
- 929615 Show Choir \$ ♪
- 926017 Basso Chorus (Troubadours) \$

THEATRE ARTS

- 143060 Intro. to Musical Theatre
- 141000 Theatre Arts 1 \$
- 142000 Theatre Arts 2 \$
- 143000 Theatre Arts 3 \$
- 144000 Theatre Arts 4 \$
- 143511 Technical Theatre 1 \$
- 143512 Technical Theatre 2 \$
- 143513 Technical Theatre 3 \$
- 143514 Technical Theatre 4 \$

SPECIAL EDUCATION

- 788980 Strategies for Success
- 781580 Personal Development
- 118080 Developmental Reading
- 312180 Individualized Mathematics
- 312080 Personal Living & Finance
- 313181 Algebra 1, Pt 1 (SC)
- 313071 Algebra 1 (TT)
- 313081 Algebra 1 (SC)
- 313151 Alg 1Pt1 block w/Alg1 (TT)
- 313051 Alg 1 block w/Alg1 Pt 1 (TT)
- 314481 Geometry 1 Part 1 (SC)
- 314371 Geometry (TT)
- 314381 Geometry (SC)
- 313571 Algebra 2 (TT)
- 313581 Algebra 2 (SC)
- 313471 Alg, Functions, & Data (TT)
- 313481 Alg, Functions, & Data (SC)
- 430080 Biology 1 Part 1 (SC)
- 431071 Biology (TT)
- 431081 Biology (SC)
- 451051 Active Physics (TT)
- 451081 Active Physics (SC)
- 422071 Geosystems (TT)
- 422081 Geosystems (SC)
- 441071 Chemistry (TT)
- 441081 Chemistry (SC)
- 113071 English 9 (TT)
- 113081 English 9 (SC)
- 114071 English 10 (TT)
- 114081 English 10 (SC)
- 115071 English 11 (TT)
- 115081 English 11 (SC)
- 116071 English 12 (TT)
- 116081 English 12 (SC)
- 221971 World History & Geo 1 (TT)
- 221981 World History & Geo 1 (SC)
- 222171 World History & Geo 2 (TT)
- 222181 World History & Geo 2 (SC)
- 236071 US History (TT)
- 236081 US History (SC)
- 244071 US VA Government (TT)
- 244081 US VA Government (SC)
- 612071 Economics & Pers Fin (TT)
- 612081 Economics & Pers Fin (SC)
- 908561 Ed for Empl 1 (WAT) – 1cr
- 908562 Ed for Empl 1 (WAT) – 2cr
- 908761 Ed for Empl 2 (WAT) – 2cr
- 908552 EFEO – 2cr
- 908553 EFEO – 3cr
- 770002 Adapted PE

ESOL

- English 9 Level 1 573091 572011
- English 9 Level 2 573092 572051
- English 9 Level 3 573093 572091
- English 9 Level 4 113094 573011
- English 10 Level 1 573191 572012
- English 10 Level 2 573192 572052
- English 10 Level 3 573193 572092
- English 10 Level 4 573012 114069
- English 11 Level 3 115090 572093
- English 11 Level 4 115094 573013
- 244090 US/VA Gov't – Level 1
- 244091 US/VA Gov't – Level 2
- 221994 World History 1 (ESOL)
- 313191/313091 Alg. 1 Part 1/Algebra 1
- 312192/ 312193 Math Readiness/ Pre-Alg.
- 312196/312192 Numeracy/ Math Readiness
- 313094 Algebra 1 (ESOL)
- 314394 Geometry (ESOL)
- 431090 Biology (ESOL)
- 426590 Environmental Science (ESOL)
- 451090 Active Physics (ESOL)
- 573290 Academic Lit. Mixed
- ELD 572050
- 788990 Strat. For Success – Level 1
- 788991 Strat. for Success – Level 2
- 661190 Digital Applications

ONLINE CAMPUS:

Chantilly Academy

- Air Force JROTC
- Auto Collision
- Auto Tech
- Carpentry
- Cisco
- Comp Systems Tech - A+
- Cosmetology
- Culinary Arts
- Dental Careers
- Engineering Math
- Engineering Physics
- Engineering Systems
- Exploring Health Sciences
- Exploring Lang of Medicine
- Medical Assistant
- Network Administration
- Oracle
- Pharmacy Technician
- Robotics
- Teachers for Tomorrow
- Security and Capstone
- Veterinary Science

Fairfax Academy

- Arabic
- Broadway Dance
- Chinese
- Dance
- Fashion Design
- Hip Hop Dance
- Korean
- Music and Computer Tech
- Professional Music, Theatre & Actor's Studio
- Professional Photo Studio
- Professional TV Production
- Social Media Marketing

Falls Church Academy

- Biotechnology Foundations
- Medical Billing/ Coding
- Emergency Medical Tech.
- Health Informatics
- Vietnamese

Miscellaneous

- 911 Dispatcher
- Classroom on the Mall
- Construction Tech
- Electrical Construction
- Early Childhood
- Fire Fighting
- Heating/Ventilation
- Physical Therapy
- Practical Nursing

\$=Materials Fee Req.

S=Semester Course ♣= Application Req

*= No Credit

♪=Audition Req.

ALTERNATIVE COURSES

1. _____
2. _____
3. _____