

HAYFIELD HAWKS



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Hayfield Secondary School
7630 Telegraph Rd.
Alexandria, VA 22315
Course Catalog 2017-2018

Graduation Requirements for Students Who Entered the 9th Grade for the First Time Prior to 2011-2012

For more information, please visit <https://www.fcps.edu/academics/graduation-requirements-and-course-planning>, which includes more detailed information and tutorials about diploma types and graduation requirements.

STANDARD DIPLOMA

22 CREDIT DIPLOMA REQUIREMENTS FOR GRADUATION

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9th grade for the first time. The following applies to students who entered 9th grade prior to 2011-2012.

To graduate from high school, students shall meet the minimum requirements for the Standard Diploma as outlined below, including 22 standard credits, 6 of which must be verified credits. A **standard** credit is earned when a student passes a course. A **verified** credit is earned when a student passes a course and the associated end-of-course SOL test. In some cases, students may utilize substitute tests, certifications, or the appeal process to earn verified credits. State guidelines prescribe the number of verified credits required for graduation for students entering a Virginia public high school for the first time during the tenth grade or after. In 2013, the Virginia Board of Education voted to amend the graduation requirements for students with disabilities. The changes in graduation requirements provide eligible students with disabilities the opportunity to use credit accommodations to earn a Standard Diploma. Students must be found eligible for these accommodations. Consult your school counselor for specific information.

Students receive credit toward graduation for high school courses taken and passed in middle school. These courses count toward credits in the required sequences as well as toward the total number of credits required for graduation and calculation of the grade point average (GPA). **Middle school parents may request that grades for any high school credit-bearing course taken in the middle school be removed from the student's high school transcript, and therefore the student will not earn high school credit for the course. In addition, the student will not be eligible for a verified credit in any course which has been removed from the transcript. The request to remove a course from the transcript must be made in writing to the middle or high school the student will attend the following year, prior to the end of the first nine weeks. See current version of FCPS Regulation 2408.**

Standard Diploma Course Requirements (8 VAC 20-131-50)		
Subject Area	Standard Credits	Verified Credits
English	4	2
Mathematics ¹	3	1
Laboratory Science ^{2, 6}	3	1
History and Social Sciences ^{3, 6}	4	1
Health and Physical Education	2	
Fine Arts or Career and Technical Ed	1	
Electives ⁴	5	
Student Selected Test ⁵		1
Total Credits	22	6

¹Courses completed to satisfy this requirement shall be at or above the level of algebra and shall include at least two course selections from among Algebra I, Geometry, Algebra II, or other mathematics courses above the level of algebra and geometry. The Board of Education (Board) may approve additional courses to satisfy this requirement.

² Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines: earth sciences, biology, chemistry, or physics. The Board may approve additional courses to satisfy this requirement.

³ Courses completed to satisfy this requirement are U.S. and Virginia History, U.S. and Virginia Government, and World History/Geography I and World History/Geography II. AP World History satisfies the requirement for World History/Geography II.

⁴ Courses to satisfy this requirement shall include at least two sequential electives.

⁵ A student may utilize additional tests for earning verified credit in computer science, technology, career and technical education, or other areas as prescribed by the Board in 8 VAC 20-131-110.

⁶ Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association, or acquires a professional license in a career and technical educational field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for (i) the student selected verified credit and (ii) either a science or history and social sciences verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the Board as an additional test to verify student achievement.

ADVANCED STUDIES DIPLOMA

24 CREDIT DIPLOMA REQUIREMENTS FOR GRADUATION

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9th grade for the first time. The following applies to students who entered 9th grade prior to 2011-2012.

To graduate from high school with an Advanced Studies Diploma, students shall meet the minimum requirements as outlined below which include 24 credits, 9 of which must be verified credits. A **standard** credit is earned when a student passes a course. A **verified** credit is earned when a student passes a course and the associated end-of-course SOL test. In some cases, students may utilize substitute tests or certifications to earn verified credits. State guidelines prescribe the number of verified credits required for graduation for students entering a Virginia public high school for the first time during tenth grade or after. Consult your school counselor for specific information.

Students receive credit toward graduation for high school courses taken and passed in middle school. These courses count toward credits in the required sequences as well as toward the total number of credits required for graduation and calculation of the grade point average (GPA). **Middle school parents may request that grades for any high school credit-bearing course taken in the middle school be removed from the student's high school transcript, and therefore the student will not earn high school credit for the course. In addition, the student will not be eligible for a verified credit in any course which has been removed from the transcript. The request to remove a course from the transcript must be made in writing to the middle or high school the student will attend the following year prior to the end of the first nine weeks. See current version of FCPS Regulation 2408.**

Advanced Studies Diploma Course Requirements (8 VAC 20-131-50)		
Subject Area	Standard Credits	Verified Credits
English	4	2
Mathematics ¹	4	2
Laboratory Science ²	4	2
History and Social Science ³	4	2
World Language ⁴	3	
Health and Physical Education	2	
Fine Arts or Career and Technical Ed	1	
Electives	2	
Student Selected Test ⁵		1
Total Credits	24	9

¹ Courses completed to satisfy this requirement shall be at or above the level of algebra and shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Board of Education (Board) may approve additional courses to satisfy this requirement.

² Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics; or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board may approve additional courses to satisfy this requirement.

³ Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and World History/Geography I and World History/Geography II. AP World History satisfies the requirement for World History/Geography II.

⁴ Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.

⁵ A student may utilize additional tests for earning verified credit in computer science, technology, career or technical education or other areas as prescribed by the Board in 8 VAC 20-131-110.

MODIFIED STANDARD DIPLOMA

20 CREDIT DIPLOMA REQUIREMENT FOR GRADUATION

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9th grade for the first time. The following applies to students who entered 9th grade between 2000-2001 and 2012-2013.

The Modified Standard Diploma is intended for certain students who have a disability and are unlikely to meet the credit requirements for a Standard Diploma. Eligibility and participation in the Modified Standard Diploma program shall be determined by the student's Individual Education Program (IEP) team including the student, when appropriate, at any point after the student's eighth grade year. There are no verified credit requirements for the Modified Standard Diploma. Students pursuing the Modified Standard Diploma are required to meet literacy and numeracy requirements on the 8th grade English reading and mathematics Standards of Learning (SOL) tests. Students may substitute a higher level high school SOL test for the 8th grade SOL tests for the literacy and numeracy requirements.

A student who has chosen to pursue a Modified Standard Diploma shall also be allowed to pursue the Standard Diploma, or Advanced Studies Diploma. The student may not be excluded from courses and tests required to earn a Standard or Advanced Studies Diploma.

Modified Standard Diploma Course Requirements (8 VAC 20-131-50)	
Subject Area	Standard Credits
English	4
Mathematics ¹	3
Science ²	2
History and Social Sciences ³	2
Health and Physical Education	2
Fine Arts or Career and Technical Ed	1
Electives ⁴	6
Total Credits	20

¹ Courses completed to satisfy this requirement shall include content from among applications of algebra, geometry, personal finance, and probability and statistics in courses that have been approved by the Board of Education (Board).

² Courses completed shall include content from at least two of the following: applications of earth science, biology, chemistry, or physics in courses approved by the Board.

³ Courses completed to satisfy this requirement shall include one unit of credit in U.S. and Virginia History and one unit of credit in U.S. and Virginia Government in courses approved by the Board.

⁴ Courses to satisfy this requirement shall include at least two sequential electives in the same manner required for the Standard Diploma.

Graduation Requirements for Students Who Entered the 9th Grade for the First Time in 2011-2012 and 2012-2013

For more information, please visit <https://www.fcps.edu/academics/graduation-requirements-and-course-planning>, which includes more detailed information and tutorials about diploma types and graduation requirements.

STANDARD DIPLOMA

22 CREDIT DIPLOMA REQUIREMENTS FOR GRADUATION

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9th grade for the first time. The following applies to students who entered 9th grade in 2011-2012 and 2012-2013.

To graduate from high school, students shall meet the minimum requirements for the Standard Diploma as outlined below, including 22 standard credits, 6 of which must be verified credits. A **standard** credit is earned when a student passes a course. A **verified** credit is earned when a student passes a course and the associated end-of-course SOL test. In some cases, students may utilize substitute tests, certifications, or the appeal process to earn verified credits. State guidelines prescribe the number of verified credits required for graduation for students entering a Virginia public high school for the first time during the tenth grade or after. In 2013, the Virginia Board of Education voted to amend the graduation requirements for students with disabilities. The changes in graduation requirements provide eligible students with disabilities the opportunity to use credit accommodations to earn a Standard Diploma. Students must be found eligible for these accommodations. Consult your school counselor for specific information.

Students receive credit toward graduation for high school courses taken and passed in middle school. These courses count toward credits in the required sequences as well as toward the total number of credits required for graduation and calculation of the grade point average (GPA). **Middle school parents may request that grades for any high school credit-bearing course taken in the middle school be removed from the student's high school transcript, and therefore the student will not earn high school credit for the course. In addition, the student will not be eligible for a verified credit in any course which has been removed from the transcript. The request to remove a course from the transcript must be made in writing to the middle or high school the student will attend the following year, prior to the end of the first nine weeks.**

Standard Diploma Course Requirements (8 VAC 20-131-50)		
Subject Area	Standard Credits	Verified Credits
English	4	2
Mathematics ¹	3	1
Laboratory Science ^{2, 6}	3	1
History and Social Sciences ^{3, 6}	4	1
Health and Physical Education	2	
World Language, Fine Arts or Career and Technical Ed ⁷	2	
Economics & Personal Finance	1	
Electives ⁴	3	
Student Selected Test ⁵		1
Total Credits	22	6

¹ Courses completed to satisfy this requirement shall include at least two different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Board of Education (Board) shall approve additional courses to satisfy this requirement.

² Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines: earth sciences, biology, chemistry, or physics; or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board shall approve courses to satisfy this requirement.

³ Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and World History/Geography I and World History/Geography II. AP World History satisfies the requirement for World History/Geography II.

⁴ Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.

⁵ A student may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics, or other areas as prescribed by the Board in 8 VAC 20-131-110.

⁶ Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association, or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for (i) the student selected verified credit and (ii) either a science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the Board as an additional test to verify student achievement.

⁷ Pursuant to Section 22.1-253.13:4, Code of Virginia, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education.

ADVANCED STUDIES DIPLOMA

26 CREDIT DIPLOMA REQUIREMENTS FOR GRADUATION

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9th grade for the first time. The following applies to students who entered 9th grade in 2011-2012 and 2012-2013.

To graduate from high school with an Advanced Studies Diploma, students shall meet the minimum requirements as outlined below which include 26 credits, 9 of which must be verified credits. A **standard** credit is earned when a student passes a course. A **verified** credit is earned when a student passes a course and the associated end-of-course SOL test. In some cases, students may utilize substitute tests or certifications to earn verified credits. State guidelines prescribe the number of verified credits required for graduation for students entering a Virginia public high school for the first time during tenth grade or after. Consult your school counselor for specific information.

Students receive credit toward graduation for high school courses taken and passed in middle school. These courses count toward credits in the required sequences as well as toward the total number of credits required for graduation and calculation of the grade point average (GPA). **Middle school parents may request that grades for any high school credit-bearing course taken in the middle school be removed from the student's high school transcript, and therefore the student will not earn high school credit for the course. In addition, the student will not be eligible for a verified credit in any course which has been removed from the transcript. The request to remove a course from the transcript must be made in writing to the middle or high school the student will attend the following year prior to the end of the first nine weeks.**

Advanced Studies Diploma Course Requirements (8 VAC 20-131-50)		
Subject Area	Standard Credits	Verified Credits
English	4	2
Mathematics ¹	4	2
Laboratory Science ²	4	2
History and Social Sciences ³	4	2
World Language ⁴	3	
Health and Physical Education	2	
Fine Arts or Career and Technical Ed	1	
Economics & Personal Finance	1	
Electives	3	
Student Selected Test ⁵		1
Total Credits	26	9

¹ Courses completed to satisfy this requirement shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Board of Education (Board) shall approve courses to satisfy this requirement.

² Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics; or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board shall approve courses to satisfy this requirement.

³ Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and World History/Geography I and World History/Geography II. AP World History satisfies the requirement for World History/Geography II.

⁴ Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.

⁵A student may utilize additional tests for earning verified credit in computer science, technology, career or technical education, economics, or other areas as prescribed by the Board in 8 VAC 20-131-110.

MODIFIED STANDARD DIPLOMA

20 CREDIT DIPLOMA REQUIREMENT FOR GRADUATION

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9th grade for the first time. The following applies to students who entered 9th grade between 2000-2001 and 2012-2013.

The Modified Standard Diploma is intended for certain students who have a disability and are unlikely to meet the credit requirements for a Standard Diploma. Eligibility and participation in the Modified Standard Diploma program shall be determined by the student's Individual Education Program (IEP) team including the student, when appropriate, at any point after the student's eighth grade year. There are no verified credit requirements for the Modified Standard Diploma. Students pursuing the Modified Standard Diploma are required to meet literacy and numeracy requirements on the 8th grade English reading and mathematics Standards of Learning (SOL) tests. Students may substitute a higher level high school SOL test for the 8th grade SOL tests for the literacy and numeracy requirements.

A student who has chosen to pursue a Modified Standard Diploma shall also be allowed to pursue the Standard Diploma or Advanced Studies. The student may not be excluded from courses and tests required to earn a Standard or Advanced Studies Diploma.

Modified Standard Diploma Course Requirements (8 VAC 20-131-50)	
Subject Area	Standard Credits
English	4
Mathematics ¹	3
Science ²	2
History and Social Sciences ³	2
Health and Physical Education	2
Fine Arts or Career and Technical Ed	1
Electives	6
Total Credits	20

¹Courses completed to satisfy this requirement shall include content from among applications of algebra, geometry, personal finance, and probability and statistics in courses that have been approved by the Board of Education (Board).

²Courses completed shall include content from at least two of the following: applications of earth science, biology, chemistry, or physics in courses approved by the Board.

³ Courses completed to satisfy this requirement shall include one unit of credit in U.S. and Virginia History and one unit of credit in U.S. and Virginia Government in courses approved by the Board.

Declaration of Nondiscrimination

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 703-317-3000.

Graduation Requirements for Students Who Enter the 9th Grade for the First Time in 2013-2014 Through 2015-2016

For more information, please visit <https://www.fcps.edu/academics/graduation-requirements-and-course-planning>, which includes more detailed information and tutorials about diploma types and graduation requirements.

STANDARD DIPLOMA

22 CREDIT DIPLOMA REQUIREMENTS FOR GRADUATION

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9th grade for the first time. The following applies to students who enter 9th grade in 2013-2014 through 2015-2016.

To graduate from high school, students shall meet the minimum requirements for the Standard Diploma as outlined below, including 22 standard credits, 6 of which must be verified credits. A **standard** credit is earned when a student passes a course. A **verified** credit is earned when a student passes a course and the associated end-of-course SOL test. In some cases, students may utilize substitute tests, certifications, or the appeal process to earn verified credits. State guidelines prescribe the number of verified credits required for graduation for students entering a Virginia public high school for the first time during the tenth grade or after. In 2013, the Virginia Board of Education voted to amend the graduation requirements for students with disabilities. The changes in graduation requirements provide eligible students with disabilities the opportunity to use credit accommodations to earn a Standard Diploma. Students must be found eligible for these accommodations. Consult your school counselor for specific information.

Students receive credit toward graduation for high school courses taken and passed in middle school. These courses count toward credits in the required sequences as well as toward the total number of credits required for graduation and calculation of the grade point average (GPA). **Middle school parents may request that grades for any high school credit-bearing course taken in the middle school be removed from the student's high school transcript, and therefore the student will not earn high school credit for the course. In addition, the student will not be eligible for a verified credit in any course which has been removed from the transcript. The request to remove a course from the transcript must be made in writing to the middle or high school the student will attend the following year, prior to the end of the first nine weeks. See current version of FCPS Regulation 2408.**

Standard Diploma Course Requirements (8 VAC 20-131-50)		
Subject Area	Standard Credits	Verified Credits
English	4	2
Mathematics ¹	3	1
Laboratory Science ^{2, 6}	3	1
History and Social Sciences ^{3, 6}	4	1
Health and Physical Education	2	
World Language, Fine Arts or Career and Technical Ed ⁷	2	
Economics & Personal Finance	1	
Electives ⁴	3	
Student Selected Test ⁵		1
Career and Technical Education Credential ⁸		
Total Credits⁹	22	6

¹ Courses completed to satisfy this requirement shall include at least two different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Board of Education (Board) shall approve additional courses to satisfy this requirement.

² Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines: earth sciences, biology, chemistry, or physics; or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board shall approve courses to satisfy this requirement.

³ Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and World History/Geography I and World History/Geography II. AP World History satisfies the requirement for World History/Geography II.

⁴ Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.

⁵ A student may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics, or other areas as prescribed by the Board in 8 VAC 20-131-110.

⁶ Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association, or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for (i) the student selected verified credit and (ii) either a science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the Board as an additional test to verify student achievement.

⁷ Pursuant to Section 22.1-253.13:4, Code of Virginia, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education.

⁸ Students shall earn a career and technical education credential approved by the Board that could include, but not be limited to, the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia Workplace Readiness Assessment.

⁹ Students shall successfully complete one virtual course, which may be a noncredit-bearing course or elective credit bearing course that is offered online.

ADVANCED STUDIES DIPLOMA

26 CREDIT DIPLOMA REQUIREMENTS FOR GRADUATION

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9th grade for the first time. The following applies to students who enter 9th grade in 2013-2014 through 2015-2016.

To graduate from high school with an Advanced Studies Diploma, students shall meet the minimum requirements as outlined below which include 26 credits, 9 of which must be verified credits. A **standard** credit is earned when a student passes a course. A **verified** credit is earned when a student passes a course and the associated end-of-course SOL test. In some cases, students may utilize substitute tests or certifications to earn verified credits. State guidelines prescribe the number of verified credits required for graduation for students entering a Virginia public high school for the first time during tenth grade or after. Consult your school counselor for specific information.

Students receive credit toward graduation for high school courses taken and passed in middle school. These courses count toward credits in the required sequences as well as toward the total number of credits required for graduation and calculation of the grade point average (GPA). **Middle school parents may request that grades for any high school credit-bearing course taken in the middle school be removed from the student's high school transcript, and therefore the student will not earn high school credit for the course. In addition, the student will not be eligible for a verified credit in any course which has been removed from the transcript. The request to remove a course from the transcript must be made in writing to the middle or high school the student will attend the following year prior to the end of the first nine weeks. See current version of FCPS Regulation 2408.**

Advanced Studies Diploma Course Requirements (8 VAC 20-131-50)		
Subject Area	Standard Credits	Verified Credits
English	4	2
Mathematics ¹	4	2
Laboratory Science ²	4	2
History and Social Sciences ³	4	2
World Language ⁴	3	
Health and Physical Education	2	
Fine Arts or Career and Technical Ed	1	
Economics & Personal Finance	1	
Electives	3	
Student Selected Test ⁵		1
Total Credits⁶	26	9

¹ Courses completed to satisfy this requirement shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Board of Education (Board) shall approve courses to satisfy this requirement.

² Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics; or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board shall approve courses to satisfy this requirement.

³ Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and World History/Geography I and World History/Geography II. AP World History satisfies the requirement for World History/Geography II.

⁴ Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.

⁵ A student may utilize additional tests for earning verified credit in computer science, technology, career or technical education, economics, or other areas as prescribed by the Board in 8 VAC 20-131-110.

⁶ Students shall successfully complete one virtual course, which may be a noncredit-bearing course, or may be a course required to earn this diploma that is offered online.

Graduation Requirements for Students Who Enter the 9th Grade for the First Time in 2016-2017 and Beyond

For more information, please visit <https://www.fcps.edu/academics/graduation-requirements-and-course-planning>, which includes more detailed information and tutorials about diploma types and graduation requirements.

STANDARD DIPLOMA

22 CREDIT DIPLOMA REQUIREMENTS FOR GRADUATION

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9th grade for the first time. The following applies to students who enter 9th grade in 2016-2017 and beyond.

To graduate from high school, students shall meet the minimum requirements for the Standard Diploma as outlined below, including 22 standard credits, 6 of which must be verified credits. A **standard** credit is earned when a student passes a course. A **verified** credit is earned when a student passes a course and the associated end-of-course SOL test. In some cases, students may utilize substitute tests, certifications, or the appeal process to earn verified credits. State guidelines prescribe the number of verified credits required for graduation for students entering a Virginia public high school for the first time during the tenth grade or after. Eligible students with disabilities have the opportunity to use credit accommodations to earn a Standard Diploma. Students must be found eligible for these accommodations. Consult your school counselor for specific information.

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Standard Diploma Course Requirements (8 VAC 20-131-50)		
Subject Area	Standard Credits	Verified Credits
English	4	2
Mathematics ¹	3	1
Laboratory Science ^{2, 6}	3	1
History and Social Sciences ^{3, 6}	4	1
Health and Physical Education	2	
World Language, Fine Arts or Career and Technical Ed ⁷	2	
Economics & Personal Finance	1	
Electives ⁴	3	
Student Selected Test ⁵		1
Career and Technical Education Credential ⁸		
First Aid/CPR/AED Training ⁹		
Total Credits¹⁰	22	6

¹ Courses completed to satisfy this requirement shall include at least two different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Board of Education (Board) shall approve additional courses to satisfy this requirement.

² Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines: earth sciences, biology, chemistry, or physics; or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board shall approve courses to satisfy this requirement.

³ Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and World History/Geography I and World History/Geography II. AP World History satisfies the requirement for World History/Geography II.

⁴ Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.

⁵ A student may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics, or other areas as prescribed by the Board in 8 VAC 20-131-110.

⁶ Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association, or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for (i) the student selected verified credit and (ii) either a science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the Board as an additional test to verify student achievement.

⁷ Pursuant to Section 22.1-253.13:4, Code of Virginia, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education.

⁸ Students shall earn a career and technical education credential approved by the Board that could include, but not be limited to, the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia Workplace Readiness Assessment.

⁹ Students are required to be trained in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation.

¹⁰ Students shall successfully complete one virtual course, which may be a noncredit-bearing course or elective credit bearing course that is offered online.

ADVANCED STUDIES DIPLOMA

26 CREDIT DIPLOMA REQUIREMENTS FOR GRADUATION

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9th grade for the first time. The following applies to students who enter 9th grade in 2016-2017 and beyond.

To graduate from high school with an Advanced Studies Diploma, students shall meet the minimum requirements as outlined below which include 26 credits, 9 of which must be verified credits. A **standard** credit is earned when a student passes a course. A **verified** credit is earned when a student passes a course and the associated end-of-course SOL test. In some cases, students may utilize substitute tests or certifications to earn verified credits. State guidelines prescribe the number of verified credits required for graduation for students entering a Virginia public high school for the first time during tenth grade or after. Consult your school counselor for specific information.

Students receive credit toward graduation for high school courses taken and passed in middle school. These courses count toward credits in the required sequences as well as toward the total number of credits required for graduation and calculation of the grade point average (GPA). **Middle school parents may request that grades for any high school credit-bearing course taken in the middle school be removed from the student's high school transcript, and therefore the student will not earn high school credit for the course. In addition, the student will not be eligible for a verified credit in any course which has been removed from the transcript. The request to remove a course from the transcript must be made in writing to the middle or high school the student will attend the following year prior to the end of the first nine weeks. See current version of FCPS Regulation 2408.**

Advanced Studies Diploma Course Requirements (8 VAC 20-131-50)		
Subject Area	Standard Credits	Verified Credits
English	4	2
Mathematics ¹	4	2
Laboratory Science ²	4	2
History and Social Sciences ³	4	2
World Language ⁴	3	
Health and Physical Education	2	
Fine Arts or Career and Technical Ed	1	
Economics & Personal Finance	1	
Electives	3	
Student Selected Test ⁵		1
First Aid/CPR/AED Training ⁶		
Total Credits⁷	26	9

¹ Courses completed to satisfy this requirement shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Board of Education (Board) shall approve courses to satisfy this requirement.

² Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics; or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board shall approve courses to satisfy this requirement.

³ Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and World History/Geography I and World History/Geography II. AP World History satisfies the requirement for World History/Geography II.

⁴ Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.

⁵ A student may utilize additional tests for earning verified credit in computer science, technology, career or technical education, economics, or other areas as prescribed by the Board in 8 VAC 20-131-110.

⁶ Students are required to be trained in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation.

⁷ Students shall successfully complete one virtual course, which may be a noncredit-bearing course, or may be a course required to earn this diploma that is offered online.

POSTSECONDARY PLANNING

Each high school in Fairfax County Public Schools 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 and initiate a Student Learning 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.

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 transferrable 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** 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.

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, 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 and, where applicable, completing the externally moderated exam. For example, a final grade of "A" in an AP/IB course shall receive 5.0 quality points for purposes of calculating grade point average. The score on the externally moderated exam does not impact a student's GPA.

Honors courses in mathematics, science, English, social studies, designated Thomas Jefferson High School courses, courses taken in high school for dual enrollment credit with a post-secondary institution, 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 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 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: <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/she is passing the course. If a student drops a course during the:

1st quarter	No penalty—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-Paced Economics and Personal Finance 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](#) requiring parent/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 10 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 5 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+, 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 of and explanation to the student's parents 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 9 th 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 given in each fall and winter 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, Hindi, Italian, Japanese, Korean, Nepali, Pashto, Punjabi, Russian, Sanskrit, Somali, Spanish, Tagalog/Pilipino, Tamil, Telugu, Tigrinia, Twi, Urdu, or Vietnamese. Students who are successful on the exam receive two world languages credits which may be used to fulfill the world languages requirements/electives of the Advanced Studies or Standard Diplomas. In addition, middle school students in grades 6-8 enrolled in certain ESOL 5720-5730 courses may receive up to two world languages credits towards high school graduation requirements in the two-plus-two option for fulfilling the world languages requirement. High school students enrolled in ESOL 5720 courses may receive elective or up to two world languages credits toward high school graduation requirements in the two-

plus-two option for fulfilling the world languages requirement. For more information on the exam, go to: <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](#). 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 the Regulation 2408 and Virginia Board 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. 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. The college course(s) must match a course taught in FCPS and meet the requisite number of seat hours. For more information on concurrent enrollment and courses at area universities, please visit <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 even 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: <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 International Baccalaureate 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 IB program if the base school does not offer the desired program of study. For more information on the program, please visit the Advanced Academic Programs web site at <https://www.fcps.edu/academics/academic-overview/advanced-academic-programs>.

AP and IB courses are advanced-level courses with external exams. Students who take AP and IB courses are required to complete the corresponding examinations. For more information, see **Grade Point Average**.

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/co-requisites must be met. For more information on course sequencing, go to: <https://www.fcps.edu/academics/graduation-requirements-and-course-planning/high-school-course-sequencing>.

Advanced Placement

Centreville, Chantilly, Fairfax, Falls Church, Hayfield, Herndon, 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 required to complete the end-of-course AP exam. Students may receive college credit and/or placement based upon their exam grades. The AP program is offered in English, social studies, mathematics, science, world languages, and fine arts. 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 grade of 3 on each, are recognized by the College Board as *AP Scholars*. Further information about the AP program may be obtained by contacting the school counselor or AP coordinator at the participating school.

International Baccalaureate

Annandale, Edison, Lee, Marshall, Mount Vernon, Robinson, South Lakes, and Stuart High Schools offer the International Baccalaureate Diploma Program (IBDP). To qualify for the IB Diploma, students must select at least one subject from each of six IB subject groups, including English, world languages, mathematics, science, social studies, and 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 IB course are required to complete the end-of-course IB 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 IB courses in areas of academic strength and interest. IB diploma course students take one or more IB courses and the associated exam(s) and receive recognition for each IB exam with a score of “4” or better.

Lee, 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 Approaches to Learning course, and complete a reflective project related to their CTE course of study.

The IB program is offered in English, social studies, mathematics, science, world languages, fine arts, and other electives. IB courses are offered as open enrollment to all students committed to rigorous academic work. Further information about the IB program may be obtained by contacting the school counselor or IB coordinator at the participating school. Annandale, Edison, Lee, Mount Vernon, Robinson, South Lakes, and Stuart High Schools implement the IB Middle Years Program (IBMYP) in 9th and 10th grades. Students may choose to work toward the MYP certificate at authorized high schools, which requires the completion of a personal project at the end of 10th grade and success on the MYP 10th grade assessments.

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: <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 Tysons Corner Center, Fair Oaks Shopping Center, Spring Village Residential Construction Site, Fairfax County Fire and Rescue Academy, and the Fairfax County School of Practical Nursing located at the Plum Center for Lifelong Learning. Please visit the CTE website at <https://www.fcps.edu/academics/academic-overview/career-and-technical-education-cte>.

FCPS now 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 <https://www.fcps.edu/academics/high-school-academics-9-12/advanced-academics/dual-enrollment>.

STUDENT FEES

Courses that require a student fee for consumable materials have been designated in this catalog. The schedule of divisionwide student fees to be charged for any elective course can be found in [Notice 5922](#). Students eligible for the federal Free and Reduced Price meals program may have course and test fees 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: [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 <https://www.fcps.edu/academics/academic-overview/online-campus>.

The following courses are currently available online:

Algebra	Biology 1	Advanced Accounting
Algebra 1 Honors	Biology 1 Honors	Economics & Pers. Fin.
Geometry	Chemistry 1	Spanish 1
Geometry Honors	Chemistry 1 Honors	Spanish 2
Algebra 2	Physics 1	Spanish 3
Algebra 2 Honors	Geosystems	AP Spanish Language
Precalculus w/Trig	Oceanography	AP Spanish Literature
AP Calculus AB	World History & Geography 1	Korean 1
AP Statistics	World History& Geography 1 Honors	Korean 2
Creative Writing 1	World History & Geography 2	Korean 3
Creative Writing 2	World History & Geography 2 Honors	Korean 4
Creative Writing 2	AP World History *NEW*	Chinese 1 *NEW*
English 9	VA & US History	Physical Education 9
English 9 Honors	VA/U.S. History Honors	Physical Education 10
English 10	VA/U.S. Government	
English 10 Honors	VA/U.S. Government Honors	
English 11	VA/U.S. Government Dual Enrollment*	
English 11 Honors	AP US Government	
English 12	AP Macroeconomics/AP Microeconomics *NEW*	
English 12 Honors	Psychology	
English 12 Dual Enrollment*	AP Psychology	
AP English Language	AP US History	
AP English Literature		
Film Study *NEW*		

***Deadline for enrollment is March 24, 2017 for the SY 2017-18**

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 about CTE, please visit <http://www.fcps.edu/is/cte/index.shtml>.

2017-2018 HIGH SCHOOL CTE COURSE OFFERINGS

Business and Information Technology

Accounting (also in the Online Campus)
Business Cooperative Internship
Business Law
Business Management
Business Management – Virtual Enterprise
Design, Multimedia, and Web Technologies
IB Business Management
Office Administration
Principles of Business
Programming
Web Page Development

Family and Consumer Sciences

Child Development and Parenting
Culinary Arts
Early Childhood Careers
Fitness and Food
Gourmet and International Foods
Introduction to Interior Design
Life Planning
Teachers for Tomorrow

Health and Medical Sciences

See Academy Course Offerings

Marketing

Education for Employment
Entrepreneurship
Fashion Marketing

Marketing (continued)

Global Marketing
Introduction to Marketing
Marketing
Marketing Cooperative Internship
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
Basic Technical Drawing
Design and Technology
Electronics
Engineering Drawing
Geographic Information Systems
IB Design and Technology
STEM Advanced Electronics and Robotics
STEM Advanced Engineering
STEM Engineering

Trade and Industrial

Automotive Technology
Cosmetology
Criminal Justice

2017-2018 MIDDLE SCHOOL CTE COURSE OFFERINGS

Business and Information Technology

Computer Solutions
Digital Input Technologies
Keyboarding

Family and Consumer Sciences

Family and Consumer Sciences 6, 7, and 8

Technology and Engineering Education

Introduction to Technology
Engineering Design and Modeling 7
Engineering Simulation and Fabrication 8

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. Visit <http://www.fcps.edu/ada.shtml> for more information

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 <http://www.fcps.edu/is/cte/academies.shtml>.

2017-2018 HIGH SCHOOL ACADEMY COURSE OFFERINGS

CHANTILLY ACADEMY – A Governor’s STEM Academy (<http://www.fcps.edu/ChantillyAcademy/>)

Air Force JROTC	Cyber: Database Design & Management, Oracle	Exploring Health Sciences
Animal Science	Cyber: Network Administration	Exploring the Language of Medicine
Automotive Collision Service	Cyber: Routing and Switching, Cisco	Fire and Emergency Medical Sciences
Automotive Technology	Dental Careers	Geographic Information Systems
Carpentry	Early Childhood Careers	Medical Assistant
Cosmetology	Engineering Math	Pre-Calculus (Dual Enrollment) with Chantilly Academy course
Criminal Justice	Engineering Physics	Pharmacy Technician
Culinary Arts	English 12 (Dual Enrollment) with Chantilly Academy course	STEM Engineering
Cyber: Computer Systems Technology A+	Entrepreneurship	STEM Robotic Systems
		Teachers for Tomorrow

EDISON ACADEMY (<http://www.fcps.edu/EdisonAcademy/>)

Animal Science	Culinary Arts	Electrical Construction & Engineering
Automotive Collision Service	Cyber: Computer Systems Technology A+	Heating, Ventilation, AC, & Refrigeration
Automotive Technology	Cyber: Security+Capstone	Small Engine Repair
Cosmetology	Cyber: Database Design & Management, Oracle	Teachers for Tomorrow
Criminal Justice	Cyber: Network Administration	

FAIRFAX ACADEMY (<http://www.fcps.edu/FairfaxAcademy/>)

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

FALLS CHURCH ACADEMY – A Governor’s Health Sciences Academy (<http://www.fcps.edu/fallschurchacademy/>)

Biomedical Technician	Early Childhood Careers	Fire and Emergency Medical Sciences
Biotechnology Foundations	Exploring Health Sciences	Medical Assistant
Criminal Justice	Exploring the Language of Medicine	Pharmacy Technician
Dental Careers		911 Dispatch

MARSHALL ACADEMY – A Governor’s STEM Academy (<http://www.fcps.edu/MarshallAcademy/>)

Automotive Technology	Culinary Arts	Cyber: Security+ Capstone
Chinese	Cyber: Computer Systems Technology A+	Entrepreneurship
Cosmetology	Cyber: Network Administration	Geographic Information Systems
Criminal Justice	Cyber: Routing and Switching, Cisco	STEM Robotic Systems

WEST POTOMAC ACADEMY – A Governor’s Health Sciences Academy (<http://www.fcps.edu/WestPotomacAcademy/>)

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

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	SPRING VILLAGE RESIDENTIAL CONSTRUCTION SITE in Springfield, Virginia Construction Technologies	INOVA TRAINING FACILITY in Falls Church, Virginia Health Informatics
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BUSINESS & INFORMATION

TECHNOLOGY

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. The cooperative education (Business Cooperative Internship--679920) method 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. This course is also available online.

Industry certification may be available as part of this course.

INFORMATION SYSTEMS (661200)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Computer Solutions, Digital Input Technologies, or equivalent skill

Using project based learning, students apply problem-solving skills to real-life situations through word processing, spreadsheets, databases, multimedia presentations, integrated software activities and the use of the Microsoft Imagine Academy. Students work individually and in groups 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. The cooperative education (Business Cooperative Internship--679920) method 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 INFORMATION SYSTEMS (661300)

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

Prerequisite: Information Systems (661200), Computer Solutions (615030, 31, 32), Digital Input Technologies (660932) 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. The cooperative education (Business Cooperative Internship--679920) method 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. 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 0.5.

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. The cooperative education (Business Cooperative Internship--679920) method 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.

PROGRAMMING (664000)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Computer related course or equivalent skills

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 Java Script, C# and Python. Graphical User Interfaces may be used as students design and develop interactive multimedia applications. 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. The cooperative education (Business Cooperative Internship--679920) method 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. 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 0.5.

WEB PAGE DEVELOPMENT (663100)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Information Systems (661200) or equivalent skill

This course provides students the opportunity to study, develop and design sophisticated web pages in a client-based business environment. Basics of HTML, DHTML, scripting, and the use of authoring software are covered. Students are also provided instruction in preparing and editing Web page images, applying advanced design techniques and features, creating vector animations, and managing web site directory structures. Skill development will be achieved through hands-on activities that help students to design web pages for various audiences and uses. Upon successful completion of Web Page Development, students may elect to obtain industry-recognized professional certification by taking the Adobe Certified Expert (ACE) exams. The cooperative education (Business Cooperative Internship--679920) method 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 COOPERATIVE INTERNSHIP (679920)

Formerly Cooperative Office Education-COE

Grades: 10, 11, 12

Credit: one

Corequisite: Student must be concurrently enrolled in a business course.

Business Cooperative Internship allows students to apply what they have learned in the classroom to the real world. The internship experience combines a business course with employment in a business-related field that reflects the student's current career interests. The program offers valuable work experience, enhances employment skills, and develops marketable skills. This course, taken in conjunction with another business course, will earn one to two units of credit. Students who successfully complete 396 hours of supervised on-the-job training in a related occupation will earn one credit. Students who successfully complete 720 hours of supervised on-the-job training in a related occupation will earn two credits.

BUSINESS LAW (613232)

Grades: 9, 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)

Grades: 9, 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: COMPUTER SYSTEMS TECHNOLOGY 1 (862226)

Grades: 10, 11, 12

Credit: one

Prerequisite: Computer related course or equivalent skill

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. The cooperative education (Business Cooperative Internship--679920) method 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+ (862327)

Grades: 11, 12

Credit: two

Prerequisite: Computer Systems Technology 1

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

Building on the foundation of 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. The cooperative education (Business Cooperative Internship--679920) method 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

(666032)

Grades: 10, 11, 12

Credit: one

Prerequisite: Computer-related course or equivalent skill

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

This is an advanced information technology class that provides complete, hands-on computer training in data modeling and database application software with an emphasis on Oracle 9i. An example of an Oracle web site would be Amazon.com. Students taking this course will be prepared to take Oracle's Introduction to SQL (Structured Query Language) programming exam. Preparation for careers is a major component of this class. The cooperative education (Business Cooperative Internship--679920) method 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. 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 0.5.

CYBER: DATABASE DESIGN AND MANAGEMENT 2, ORACLE

(666232)

Grades: 11, 12

Credit: one

Prerequisite: Cyber: Database Design and Management 1, Oracle

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

This advanced information technology class offers supervised self-study opportunities for students interested in learning PL/SQL. Students who have previously passed the Oracle SQL exam and pass the PL/SQL exam will earn the Oracle Certified Associate (OCA) designation. The cooperative education (Business Cooperative Internship--679920) method 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. 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 0.5.

CYBER: NETWORK ADMINISTRATION 1 (665032)

Grades: 10, 11, 12

Credit: one

Prerequisite: Computer related course, Algebra 1, or equivalent skill

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

Cyber: Network Administration 1 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. Network Administration 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 Network Administration, students may elect to obtain industry-recognized professional certification. The cooperative education (Business Cooperative Internship--679920) method 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. 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 0.5.

CYBER: ROUTING AND SWITCHING 1A, CISCO (854232)
Grades: 10, 11, 12 **Credit: one-half**
Prerequisite: Computer related course 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. The cooperative education (Business Cooperative Internship--679920) method 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. 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 0.5.

CYBER: ROUTING AND SWITCHING 1B, CISCO (854332)
Grades: 10, 11, 12 **Credit: one-half**
Prerequisite: Cyber: Routing and Switching 1A, Cisco
Corequisite: 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. The cooperative education (Business Cooperative Internship--679920) method 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. 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 0.5.

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. The cooperative education (Business Cooperative Internship--679920) method 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. 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 0.5.

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 B of a full year course. Part B is taken in the spring semester. Students also register and take Cyber: Routing and Switching 2A, Cisco in the fall semester. This course is designed for students interested in pursuing a career in the computer industry. Students will install, configure, upgrade, diagnose, troubleshoot and perform preventive maintenance on computer motherboards, processors, and memory chips. Other areas of study will include basic networking, software operation of Windows and DOS, memory management, and preventive maintenance. The cooperative education (Business Cooperative Internship--679920) method 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. 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 0.5.

CYBER: SECURITY + CAPSTONE (667000)
Grades: 11, 12 **Credit: one**
Corequisite: Cyber Network Administration and Cyber Computer Systems Technology
Edison HS Academy, Marshall HS Academy - transportation may be provided

This course provides in depth instruction in the basics of network security. Instruction includes security objectives, security architecture, security models and security layers; risk management, network security policy, and security training. The purpose of this course is to instill the basics of network security, aka 'information assurance.' The cooperative education (Business Cooperative Internship--679920) method 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.

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 listening to and practicing oral presentations. (This is a Standards of Learning aligned course, which is tested in 11th grade.)

TRANSITIONAL ENGLISH 9 (113095)**Grades: 9****Credit: one**

Transitional English 9 is intended to be taken concurrently with English for Speakers of other Languages (ESOL) Level 4 to serve as a transition from ESOL to the mainstream English program. 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 listening to and practicing oral presentations. (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 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. With an emphasis on expository and analytic 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 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 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 themes of various works and analyzing expository materials to 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 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.

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 effect as they examine the ways literature helps make sense of the American experience. In nonfiction texts, students analyze patterns of rhetoric and organization to determine how rhetorical devices function to inform and persuade an audience. In addition to texts, students analyze and evaluate media messages to examine how the media strategically influences beliefs and behaviors. Through these varied, authentic texts, students build a sophisticated vocabulary by applying their knowledge of connotations, denotations, word origins, and structures. With an emphasis on persuasion, students apply their understanding of rhetoric to craft independent arguments in oral presentations and writing that reflect personal communication style appropriate to the audience and purpose. 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.

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 required to take the Advanced Placement examination in English Language and Composition, 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.

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

Students read and analyze a variety of literary texts within their historical context. Using 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 their oral communication skills to craft formal presentations and their listening skills to analyze the relationships among purpose, audience, and content of presentations.

ENGLISH 12 WITH SOL FOCUS (116060)**Grades: 12****Credit: one****Prerequisite: English 11**

This course is available for students who have earned English 11 credit, but who have not yet passed the EOC English: Reading test and/or the EOC English: Writing test. Students will complete the English 12 curriculum and receive additional support with skills needed for successful completion of the EOC English: Reading test and/or the EOC English: Writing test to earn the required verified credits.

Students are required to take the Standards of Learning End of Course Test.

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 use texts develop insight to our complex and changing world. In addition to print, students analyze and evaluate how media messages influence beliefs and behaviors across time, place, and culture. Through 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 use writing as a tool for personal inquiry and communication. Students also communicate through oral presentations and small-group collaborations specific to authentic situations. Throughout the course, they 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 studies 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 honing their narrative, persuasive, and research writing skills. Students who complete this course are prepared to take the Advanced Placement examination in English Literature and Composition, and may earn college credit if a qualifying score is achieved. Completion of this course fulfills the English 12 course requirement.

LITERACY ESSENTIALS (118000)**Grades: 9, 10, 11, 12****Credit: one**

This course is designed to provide direct, explicit and intensive reading and writing instruction to students who are two or more years below expected proficiency. Basic objectives of this course are focused on closing the gap between the students' present level of performance and the level of performance needed to successfully access the general curriculum.

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 understanding the content of mathematics, science, social studies, and English, and the communication skills appropriate across disciplines. **(This course may be assigned to students whose SOL score and/or grades indicate need for extra support.)**

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 or Developing Literacies. **(This course may be assigned to students whose SOL score and/or grades indicate need for extra support.)**

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 Developing Literacies, Expanding Literacies 1, Literacy LAB 1 or Literacy LAB 2. **(This course may be assigned to students whose SOL score and/or grades indicate need for extra support.)**

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)**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)**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)**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: 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.

PHOTOJOURNALISM 1 (121500)**Grades: 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)**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)**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, 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.

CREATIVE WRITING 2 (117200)**Grades: 10, 11, 12****Credit: one****Prerequisite: Creative Writing 1**

This course provides students an opportunity for further exploration of creative writing. Students continue to experiment with many forms of writing, with an emphasis on poetry, fiction, plays, and other forms of descriptive writing. Students hone their writing skills by attempting more advanced work while also working collaboratively with other students on revision and critique.

ADVANCED COMPOSITION 1 (117700)**Grades: 10, 11, 12****Credit: one**

This course provides students an in-depth study of writing in the academic disciplines. Students improve their writing through intense word study, critical reading, and analytical thinking. Students expand and refine their ability to write through analyzing and evaluating their own writing and that of others.

ADVANCED COMPOSITION 2 (117800)**Grades: 11, 12****Credit: one****Prerequisite: Advanced Composition 1**

This course provides students the opportunity for further exploration of academic writing. Students hone their writing skills by further analyzing published texts and attempting more advanced work while also collaborating with other students on revision and critique.

DEBATE (139500)**Grades: 9, 10, 11, 12****Credit: one**

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.

ADVANCED ORAL COMMUNICATION (130200)**Grades: 10, 11, 12****Credit: one****Prerequisite: Speech Communication, Forensics or Debate**

Advanced Oral Communication is a concentrated performance-based course providing students with an opportunity to broaden their expertise in competitive Forensics and Debate events. Through preparation, performance, and evaluation, students will sharpen skills in chosen areas of concentration such as interpretation, original speaking, and debate.

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

Throughout the course, students analyze the techniques filmmakers use to create visual stories in a variety of films from different time periods, genres, and cultures. In addition, students apply their film analysis skills to produce original works.

ENGLISH FOR SPEAKERS OF OTHER LANGUAGES

VIRGINIA AND UNITED STATES GOVERNMENT FOR ENGLISH LEARNERS (EIP 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.

ENGLISH 9 FOR ENGLISH LEARNERS (EIP LEVELS 1-3) (573090)

Grades: 9

Credit: one

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 (EIP LEVELS 1-3) (573190)

Grades: 10

Credit: one

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 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. With an emphasis on expository and analytic 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 LANG DEV (ELD - LEVEL 1) (572010)

Grades: 9, 10, 11, 12

Credit: one

English learners develop their English language proficiency and English literacy skills through a balanced literacy approach. 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 appropriate place and transition students through

the levels of the ELD courses. This course is aligned to the WIDA English language development (ELD) standards and the grade-level English standards of learning.

ENGLISH LANG DEV (ELD - LEVEL 2) (572050)

Grades: 9, 10, 11, 12

Credit: one

English learners develop their English language proficiency and English literacy skills through a balanced literacy approach. 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 appropriate place and transition students through the levels of the ELD courses. This course is aligned to the WIDA English language development (ELD) standards and the grade-level English standards of learning.

ENGLISH LANG DEV (ELD - LEVEL 3) (572090)

Grades: 9, 10, 11, 12

Credit: one

English learners develop their English language proficiency and English literacy skills through a balanced literacy approach. 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 appropriate place and transition students through the levels of the ELD courses. This course is aligned to the WIDA English language development (ELD) standards and the grade-level English standards of learning.

ENGLISH LANG DEV (ELD - LEVEL 4) (573000)

Grades: 9, 10, 11

Credit: one

This course is taken concurrently with Transitional English 9 or English 9. ESOL and English teachers work together to provide a comprehensive program based on the FCPS English 9 POS. Students read a variety of literature and relate life situations to literary themes. They continue to develop their reading and writing skills and study the structure of the English language through an integrated language arts curriculum. Students refine their listening and speaking skills through class discussions and oral presentations. This course may be repeated for elective credit.

ESOL INDIVIDUALIZED MATH 1 (312191)

Grades: 9, 10, 11

Credit: one

The course is designed for WIDA ELP Level 1 & 2 students with significant gaps in mathematics to support the development of the mathematics and language skills necessary for success in Algebra 1. Over the period of one year meeting daily, 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.

ESOL INDIVIDUALIZED MATH 2 (312190)

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 1. 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.

FAMILY & CONSUMER SCIENCES

INTRODUCTION TO CULINARY ARTS (825026)

Grades: 10, 11, 12
(Base school optional)

Credit: one

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

The course focuses on identifying and exploring the individual careers within the foodservice industry. Units of study include food science and technology, dietetics and nutrition services, diverse cuisines and service styles, current trends, food and beverage production and preparation, and food safety and sanitation.

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 1 (827527)

Grades: 11, 12
(Base school optional)

Credit: two

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

This course is dedicated to providing students with a working knowledge of classical culinary techniques. Through lecture, hands-on work and projects, the students will learn the skills needed for a career in the foodservice industry. Training in sanitation, hot food production, meat identification and fabrication, pantry, breakfast cookery, purchasing, and basic culinary skills is offered. Curriculum also includes culinary mathematics, field trips, and competitive events.

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. Please note that the Dual Enrollment option for this course carries an additional weight of 0.5.

CULINARY ARTS 2 (827627)

Grades: 11, 12

Credit: two

Prerequisite: Culinary Arts 1 (827527)
(Base school optional)

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

This course builds on the skills learned in Culinary Arts 1. Further advanced instruction in table service, baking, pastries, and management techniques is emphasized. Students create a plan for establishing a restaurant that includes menu selection and preparation, facilities design, and management components. Selected students may participate in internship activities as an option in cooperation with the local business community.

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. Please note that the Dual Enrollment option for this course carries an additional weight of 0.5.

CHILD DEVELOPMENT AND PARENTING (823200)

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

This course is designed to focus on analyzing parenting roles and responsibilities, ensuring a healthy start for mother and child, evaluating support systems that provide services for parents, and evaluating parenting practices that maximize human growth and development. Critical thinking, practical problem solving using case studies, and entrepreneurship opportunities within the area of parenting responsibilities and child development are emphasized. Teachers highlight the basic skills of mathematics, science, and technology when appropriate in the content.

Industry certification may be available as part of this course.

INTRODUCTION TO EARLY CHILDHOOD CAREERS (823426)

Grades: 10, 11, 12

Credit: one

(Base school optional)

Falls Church HS Academy, West Potomac HS Academy, Chantilly HS Academy - transportation may be provided

Students focus on the principles of child growth and development; development of self-concepts and building self-esteem; appreciation of diversity; learning experiences for children; principles of guiding children in a positive manner; healthy and safe environments; career development; and careers related to early childhood professionals through hands-on exploration, projects, and group learning.

Industry certification may be available as part of this course.

EARLY CHILDHOOD CAREERS 1 (828527)

Grades: 11, 12

Credit: two

(Base school optional)

Chantilly HS Academy, Falls Church HS Academy, West Potomac HS Academy - transportation may be provided

This course is designed to combine the study of child growth and development with participation in the planning and operation of a preschool laboratory for three- and four-year-olds. Opportunity is provided for students to prepare for careers involving child care by focusing on the planning, organizing, and conducting of meaningful play and learning activities; child monitoring and supervision; record keeping; and referral procedures. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of early childhood education are emphasized. Students prepare for continuing education leading to careers in early childhood fields (e.g., medical, social services, and 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 0.5.

EARLY CHILDHOOD CAREERS 2 (828627)

Grades: 11, 12

Credit: two

Prerequisite: Early Childhood Careers 1 (828527)

(Base school optional)

Chantilly HS Academy, Falls Church HS Academy, West Potomac HS Academy - transportation may be provided

This course offers classroom instruction and work based learning experiences through preschool laboratories. 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. Class instruction expands on the skills of Early Childhood Careers 1 and includes development of employment strategies. Individual projects and training plans are required for school laboratory work experiences.

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 0.5.

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 Career 2 course focus on technical skills identified as essential for careers in the fashion industry. Students build on existing skills in the areas of design concepts, sketching, pattern making, and garment construction to develop a fashion portfolio. Following the portfolio, a fashion line is executed from conception to completion. Opportunities for entrepreneurship within the field of fashion design are examined. Students will begin to develop a level of professionalism that is standard in the industry. (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.

GOURMET AND INTERNATIONAL FOODS (825900)**Grades: 10, 11, 12****Credit: one**

This course allows students to explore food safety and sanitation, prepare and experience the flavor of global cuisines, become skilled in food presentation, and learn about the diverse career opportunities related to the hospitality, tourism and recreation industry. Skills in mathematics, science, and technology will be reinforced throughout the curriculum.

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

FITNESS AND FOOD (822832)**Grades: 9, 10, 11, 12****Credit: one-half**

This course is designed to focus on making choices that promote wellness and good health; analyzing relationships between psychological and social needs, and food choices; choosing foods that promote wellness; obtaining and storing food for self and family; preparing and serving nutritious meals and snacks; selecting and using equipment for food preparation; and, identifying strategies to promote optimal nutrition and wellness of our society.

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

INTRODUCTION TO INTERIOR DESIGN (825432)**Grades: 9, 10, 11, 12****Credit: one-half**

This course focuses on the principles and elements of design, types of design and vocabulary, psychological and physiological aspects of color, decision-making skills, utilization of space, and development of artistic skills. The interior design component focuses on environmental components, lighting, accessories, energy conservation, furnishings, equipment selection and including the historical and cultural influences in the interior design industry. Career development and careers related to design are explored. Instructors emphasize the basic skills of mathematics, science, technology, and the arts when appropriate in the content.

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

TEACHERS FOR TOMORROW 1 (906226)**Grades: 11, 12****Credit: one****(Base school optional)**

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 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.

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 0.5.

TEACHERS FOR TOMORROW 2 (907226)**Grades: 11, 12****Credit: one**

Prerequisite: Teachers for Tomorrow 1 (906226)
(Base school optional)

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 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 teacher cadet classroom. The internships may involve the preschool level through grade 12.

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.

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.

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.

FINE ARTS MUSIC

BEGINNING 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.

INTERMEDIATE BAND (923315)

Level 1 **Credit: one**
Grades: 9, 10, 11, 12
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 **Credit: one**
Grades: 9, 10, 11, 12
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 **Credit: one**
Grades: 9, 10, 11, 12
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.

PERCUSSION ENSEMBLE (925015)

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

Corequisite: Schools may also require membership in an intermediate or advanced band, chorus or orchestra class. Participation in marching band may be required for wind and/or percussion students.

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

Prerequisite: Successful audition or permission of the instructor
Corequisite: Schools may require membership in an intermediate 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.

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.

INTERMEDIATE ORCHESTRA (923815)**Level 1****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****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 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 ORCHESTRA (923916)**Level 2****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.

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.

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 MIXED CHORUS (928515)**Grades: 9, 10, 11, 12****Credit: one**

Prerequisite: Beginning Chorus or successful audition

Intermediate level chorus will provide for the continued study of correct vocal production, sight-singing and development of musicianship through the study of 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 MIXED CHORUS (928915)**Level 1****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.

ADVANCED TREBLE CHORUS (928916)**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.

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. All students are required to take the Advanced Placement Music Theory exam.
This course requires a student materials fee as listed in FCPS Notice 5922.

GUITAR 1 (924515) **Credit: one**
Grades: 9, 10, 11, 12

Students learn the fundamentals of guitar. Guitar instruction emphasizes basic technique, reading, progressions, and music theory. Instructional literature is selected from classical and contemporary repertoire. Guest artists and field trips to performances and/or seminars may also be part of the curriculum.
This course requires a student materials fee as listed in FCPS Notice 5922.

GUITAR 2 (924516) **Credit: one**
Grades: 9, 10, 11, 12
Prerequisite: Successful audition or successful completion of Guitar 1 or permission of the instructor

Students continue to develop skills on the guitar. Guitar instruction emphasizes intermediate technique, reading, progressions, and music theory. Instructional literature is selected from classical and contemporary repertoire. Guest artists and field trips to performances and/or seminars may also be part of the curriculum.
This course requires a student materials fee as listed in FCPS Notice 5922.

GUITAR 3 (924517) **Credit: one**
Grades: 9, 10, 11, 12
Prerequisite: Successful audition or successful completion of Guitar 2 or permission of the instructor

Students continue to develop skills on the guitar. Guitar instruction emphasizes advanced technique, reading, progressions, and music theory. Instructional literature is selected from classical and contemporary repertoire. Guest artists and field trips to performances and/or seminars may also be part of the curriculum.
This course requires a student materials fee as listed in FCPS Notice 5922.

MUSIC AND COMPUTER TECHNOLOGY 1 (922527) **Credit: two**
Grades: 11, 12
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 web site.
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 0.5.

MUSIC AND COMPUTER TECHNOLOGY 2 (922627) **Credit: two**
Grades: 12
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 web site.
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 0.5.

PROFESSIONAL MUSICAL THEATRE AND ACTOR'S STUDIO 1 (143026) **Credit: one**
Grades: 10, 11, 12
Prerequisite: One of the following: Theatre Arts, Chorus, or Dance. Interview may be required.
Fairfax HS Academy - transportation may be provided

Students will study advanced performance techniques specific to both classic and modern American musical theatre including acting, body/stage movement, and singing technique. Students will explore the history of musical theatre as well as current topics related to auditioning and resume development. Students will participate in school-based performances that may be in conjunction with students from an advanced technical theatre course. For more information, visit the academy web site.
This course requires a student materials fee as listed in FCPS Notice 5922.

PROFESSIONAL MUSICAL THEATRE AND ACTOR'S STUDIO 2 (144027) **Credit: two**
Grades: 11, 12
Prerequisite: Professional Musical Theatre and Actor's Studio 1 or equivalent experience accepted.
Fairfax HS Academy - transportation may be provided

Students will continue to study advanced performance techniques specific to both classic and modern American musical theatre including acting, body/stage movement, and singing technique. Students will continue to explore the history of musical theatre as well as current topics related to auditioning and resume development. Students will participate in school-based performances that may be in conjunction with students from an advanced technical theatre course. For more information, visit the academy web site.
This course requires a student materials fee as listed in FCPS Notice 5922.

PROFESSIONAL MUSICAL THEATRE AND ACTOR'S STUDIO 3 (145027) **Credit: two**
Grades: 12
Prerequisite: Professional Musical Theatre and Actor's Studio 2 or teacher recommendation
Fairfax HS Academy - transportation may be provided

Students will expand and deepen their knowledge and skills developed in levels 1 and 2. Outside class projects such as auditioning for community, high school, semi-professional and professional theatres, scene directing, reviewing performances in the area, and interviewing area professionals will be required. In addition, in-class presentations on topics of interest or areas of expertise will be required. For more information, visit the academy web site.
This course requires a student materials fee as listed in FCPS Notice 5922.

FINE ARTS THEATRE ARTS

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.

THEATRE ARTS 2 (142000) Grades: 10, 11, 12

Credit: one

Prerequisite: Theatre Arts 1 and/or 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 and/or recommendation of the theatre arts 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 and/or recommendation of the theatre arts 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 1 (143511)

Grades: 9, 10, 11, 12

Credit: one

Prerequisite: Theatre Arts 1 and/or recommendation of theatre arts instructor.

Students explore various areas of technical theatre such as lighting, costumes, sound, scenery, makeup, properties, and theatre management. An analysis of dramatic literature leads students to an understanding of the design and production process. 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 a variety of theatre lab activities and practical projects. Emphasis is on script interpretation and execution of the design concept. Students will collaborate to effectively and safely create functional scenery, properties, lighting, sound, costumes and makeup, and to develop stage management, business and public relations 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 or recommendation of the instructor

Students exhibit independence, discipline, and commitment to the theatre process through their work on assigned projects. Advanced work in technical elements of production is augmented by special assignments and opportunities. 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 or permission of the instructor

Students will identify areas of special interest in technical theatre and initiate and complete major research or creative projects in theatre productions. Emphasis is placed on in-depth study and completion of projects, assumptions of leadership roles, and expansion of criteria for self-evaluation. 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.

ADVANCED TECHNICAL THEATRE 1 (143527)

Grades: 11, 12

Credit: two

Prerequisite: 11th or 12th grade standing, Technical Theatre 2, or permission of instructor

Fairfax HS Academy - transportation may be provided

Students will explore advanced topics specifically in theatrical design, including set, lighting, sound, costuming, and dramaturgy. Students will learn how to find inspiration for design; explore artistic elements such as color, line, texture, and shape; draft using an architect scale rule; understand and implement McCandless and additive/subtractive color theories; as well as research and effectively draw human figures. Students are given time to focus on design with the emphasis on taking these acquired skills back to their base school to employ them practically, and they will focus on the creation of a professional portfolio. For more information, visit the academy web site.

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

ADVANCED TECHNICAL THEATRE 2 (143567)**Grades: 12****Credit: two****Prerequisite: Advanced Technical Theatre 1****Fairfax HS Academy - transportation may be provided**

Students will explore advanced topics specifically in theatrical design, including set, lighting, sound, costuming, and dramaturgy. Students will learn how to find inspiration for design; explore artistic elements such as color, line, texture, and shape; draft using an architect scale rule; understand and implement McCandless and additive/subtractive color theories; as well as research and effectively draw human figures. Students are given time to focus on design with the emphasis on taking these acquired skills back to their base school to employ them practically, and they will focus on the creation of a professional portfolio. For more information, visit the academy web site.

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

PROFESSIONAL MUSICAL THEATRE AND ACTOR'S STUDIO 1 (143026)**Grades: 10, 11, 12****Credit: one****Prerequisite: One of the following: Theatre Arts, Chorus, or Dance.****Interview may be required.****Fairfax HS Academy - transportation may be provided**

Students will study advanced performance techniques specific to both classic and modern American musical theatre including acting, body/stage movement, and singing technique. Students will explore the history of musical theatre as well as current topics related to auditioning and resume development. Students will participate in school-based performances that may be in conjunction with students from an advanced technical theatre course. For more information, visit the academy web site.

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

PROFESSIONAL MUSICAL THEATRE AND ACTOR'S STUDIO 2 (144026)**Grades: 11, 12****Credit: one****Prerequisite: Professional Musical Theatre and Actor's Studio 1 or equivalent experience accepted.****Fairfax HS Academy - transportation may be provided**

Students will study advanced performance techniques specific to both classic and modern American musical theatre including acting, body/stage movement, and singing technique. Students will explore the history of musical theatre as well as current topics related to auditioning and resume development. Students will participate in school-based performances that may be in conjunction with students from an advanced technical theatre course. For more information, visit the academy web site.

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

PROFESSIONAL MUSICAL THEATRE AND ACTOR'S STUDIO 2 (144027)**Grades: 11, 12****Credit: two****Prerequisite: Professional Musical Theatre and Actor's Studio 1 or equivalent experience accepted.****Fairfax HS Academy - transportation may be provided**

Students will continue to study advanced performance techniques specific to both classic and modern American musical theatre including acting, body/stage movement, and singing technique. Students will continue to explore the history of musical theatre as well as current topics related to auditioning and resume development. Students will participate in school-based performances that may be in conjunction with students from an advanced technical theatre course. For more information, visit the academy web site.

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

PROFESSIONAL MUSICAL THEATRE AND ACTOR'S STUDIO 3 (145027)**Grades: 12****Credit: two****Prerequisite: Professional Musical Theatre and Actor's Studio 2 or teacher recommendation****Fairfax HS Academy - transportation may be provided**

Students will expand and deepen their knowledge and skills developed in levels 1 and 2. Outside class projects such as auditioning for community, high school, semi-professional and professional theatres, scene directing, reviewing performances in the area, and interviewing area professionals will be required. In addition, in-class presentations on topics of interest or areas of expertise will be required. For more information, visit the academy web site.

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

**FINE ARTS
VISUAL ARTS****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 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 & 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 as they relate to artistic expression and design. 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 understandings and skills by using creative processes. Develop an individual style and voice to communicate ideas. Articulate responses to personal and global 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
GENERAL (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, concentration, and breadth of experience 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.

DIGITAL ART & DESIGN 1 (918011)

Grades: 9, 10, 11, 12

Credit: one

Think creatively and solve visual problems to create personally expressive, original artworks using technology. Develop expertise in the use of computers, scanners, and digital cameras for artmaking. Use Adobe Photoshop, Adobe Illustrator, Bryce 3-D, and Adobe Flash in the areas of motion graphics/animation, graphic design, and digital imaging. 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)

Grades: 10, 11, 12

Credit: one

Prerequisite: Computer Graphics 1

Expand knowledge in the application of computer hardware and software to create personally expressive, original art. Solve complex visual problems within the areas of multimedia presentations, motion graphics/animation, graphic design, and digital imaging using Adobe Photoshop, Adobe Illustrator, Bryce 3-D, and Adobe Flash. 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)

Grades: 11, 12

Credit: one

Prerequisite: Computer Graphics 2

Expand knowledge and ability in the application of hardware and software to create personally expressive, original art. Create visual solutions using a variety of media, including motion graphics/animation, graphic design, game development, web design and print design. 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)**

Grades: 12

Credit: one

Prerequisite: Computer Graphics 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 to produce a portfolio of original artworks that shows evidence of expressive content, quality, concentration, and breadth of experience.

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 of the world. 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. 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

Develop a personal voice that integrates an in-depth exploration of film and digital processes. Explore various career paths in photography such as Photojournalism, Commercial and Fine Art Photography. Apply professional exhibition techniques to present own 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, concentration, and breadth of experience.

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

**ADVANCED PLACEMENT ART: DRAWING PORTFOLIO
(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, concentration in an area of visual interest or problem solving, 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 Studio Art. Advanced Placement college credit and/or placement may be awarded if a qualifying exam score is achieved. All students are required to take Advanced Placement Art: Studio Art Drawing exam.

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

ADVANCED PLACEMENT ART: 2-D DESIGN PORTFOLIO (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, concentration in an area of visual interest or problem solving, 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 Studio Art. Advanced Placement college credit and/or placement may be awarded if a qualifying exam score is achieved. All students are required to take the Advanced Placement Art: 2-D Design exam.

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

GENERAL

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 DE (6120DE)

Grades: 11, 12 **Credit: one/weighted +.5**

This course provides the opportunity for students to earn credit for Economics 110 and 120 (Consumer Economics and Survey of Economics) through Northern Virginia Community college. During the first semester, students enroll in Economics 110 to gain an understanding of the American economic system, their role as a consumer and how to apply the principles of economic analysis to practical problems encountered in everyday life. During second semester, students enroll in Economics 120 to extend their understanding of the workings of the American economic systems. To enroll in this course, students must meet the college's admission criteria and pay tuition for the course. For more information about dual enrollment courses, visit FCPS.edu and search for dual enrollment.

Industry certification may be available as part of this course.

SELF-DIRECTED ONLINE ECONOMICS AND PERSONAL FINANCE -- 8TH PERIOD (6120VV)

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

This is a self-directed online course available on FCPS 24/7 with no teacher direction or assistance. It is a pass/fail, 8th period online course which requires a fee. 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. Students also learn how to navigate the financial decisions they must face and to make informed decisions related to career exploration, budgeting, banking, credit, insurance, spending, taxes, savings, investing, buying/leasing a vehicle, and living independently. Understanding basic economic principles and developing sound financial literacy skills provide

the basis for responsible citizenship, financial solvency, and career success. Beginning with students entering ninth grade in fall 2013, this course satisfies the graduation requirement for a virtual course.

Industry certification may be available as part of this course.

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.

ARMY JUNIOR RESERVE OFFICERS' TRAINING CORPS (AJROTC) (791312)

Leadership Education and Training 1 (LET 1)

Grades: 9, 10, 11, 12

Credit: one

This course is the first in a sequence that combines the development of critical thinking, planning, communication, and organizational skills with a study of the fundamental aspects of American citizenship, map reading, first aid, physical fitness, and an overview of American history. Students learn of the dangers of substance abuse and the importance of goal-setting. Additionally, they have the opportunity to study Army customs, consumer education and budgeting, ceremonial drill, and current events. This program is only offered on-site at West Potomac, Hayfield, Edison, and South Lakes High Schools and Lake Braddock Secondary. Students may be granted pupil placement if course enrollment is desired. Army JROTC program provides a four-year, sequential program of instruction that emphasizes academic preparation, citizenship, leadership, and character development for all students in grades 9 - 12. The sequence of courses is progressive and builds upon the previous year's curriculum.

Industry certification may be available as part of this course.

ARMY JUNIOR RESERVE OFFICERS' TRAINING CORPS (AJROTC) (791612)

Leadership Education and Training 2 (LET 2)

Grades: 10, 11, 12

Prerequisite: LET 1

Credit: one

This full-year course builds upon the skills and knowledge taught in LET 1. Students continue their study of citizenship by examining ethical behavior and the principles of participatory democracy. They develop team-building skills while learning the fundamentals of drill. Students study leadership and management qualities, first aid skills, intermediate map-reading skills, American history and different aspects of technology and communication. This program is only offered on-site at West Potomac, Hayfield, Edison, and South Lakes High Schools and Lake Braddock Secondary. Students may be granted pupil placement if course enrollment is desired. Army JROTC program provides a four-year, sequential program of instruction that emphasizes academic preparation, citizenship, leadership, and character development for all students in grades 9 - 12. The sequence of courses is progressive and builds upon the previous year's curriculum.

Industry certification may be available as part of this course.

ARMY JUNIOR RESERVE OFFICERS' TRAINING CORPS (AJROTC) (791812)

Leadership Education and Training 3 (LET 3)

Grades: 11, 12

Prerequisite: LET 2

Credit: one

LET 3 students begin to apply leadership and leadership assessment principles, heighten their communication skills, and assist in teaching basic military skills such as map reading, first aid, and drill. Students are given the opportunity to solve different types of problems and supervise subordinates. This program is only offered on-site at West Potomac, Hayfield, Edison, and South Lakes High Schools and Lake Braddock Secondary. Students may be granted pupil placement if course enrollment is desired. Army JROTC program provides a four-year, sequential program of instruction that emphasizes academic preparation, citizenship, leadership, and character development for all students in grades 9 - 12. The sequence of courses is progressive and builds upon the previous year's curriculum.

Industry certification may be available as part of this course.

ARMY JUNIOR RESERVE OFFICERS' TRAINING CORPS

(AJROTC) (791912)

Leadership Education and Training 4 (LET 4)

Grades: 12

Prerequisite: LET 3

Credit: one

LET 4 gives students the opportunities to lead, supervise, teach and coach younger students. They apply previously learned knowledge and principles of communication, leadership, ethical reasoning, and decision-making. Students enhance their knowledge of American history and learn to market themselves for a job. This program is only offered on-site at West Potomac, Hayfield, Edison, and South Lakes High Schools and Lake Braddock Secondary. Students may be granted pupil placement if course enrollment is desired. Army JROTC program provides a four-year, sequential program of instruction that emphasizes academic preparation, citizenship, leadership, and character development for all students in grades 9 - 12. The sequence of courses is progressive and builds upon the previous year's curriculum.

Industry certification may be available as part of this course.

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.

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.

LEADERSHIP TRAINING 1 (980800)

Grades: 9, 10, 11, 12

Credit: one

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 course work is designed.

HEALTH & MEDICAL SCIENCES

ANIMAL SCIENCE 1 (831027)

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 laboratory animals.

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

ANIMAL SCIENCE 2 (831127)

Grades: 11, 12

Credit: two

Prerequisite: Animal Science 1 (831027)

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

Course content progresses from Animal Science 1 and includes more in-depth instruction and skill training necessary for a variety of high-tech animal science employment opportunities. Students continue to work with laboratory animals and have the opportunity to observe or participate at selected animal care facilities, such as veterinary clinics and grooming facilities, throughout the community.

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 (834426)

Grades: 11, 12

Credit: one/weighted +.5

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. Please note that the Dual Enrollment option for this course carries an additional weight of 0.5.

BIOMEDICAL TECH (834727)

Grades: 11, 12

Credit: two/weighted +.5

Falls Church HS Academy, West Potomac HS Academy - transportation may be provided

Students gain foundational knowledge and skills appropriate for a variety of medical-related career paths in the field of biotechnology. They are introduced to diagnostic and therapeutic laboratory procedures that support bioscience research and practice, and they investigate safety, quality assurance, and ethical concerns associated with the field of biomedical technology.

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 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.

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.

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.

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 0.5.

FIRE AND EMERGENCY MEDICAL SCIENCES 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, Chantilly 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, Fire and Emergency Medical Sciences 2 for the spring semester. Fire and Emergency Medical Sciences prepares the student to enter the workforce or pursue further education in the field of Emergency Medical Services (EMS) and Fire Science. The principles and practices of emergency response and firefighting 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. 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 0.5.

FIRE AND EMERGENCY MEDICAL SCIENCES 2 (833426)
Grades: 11, 12 **Credit: one**
Prerequisite: Fire & Emergency Medical Sciences 1 (833326)
Falls Church HS Academy, West Potomac HS Academy, Chantilly 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, Fire and Emergency Medical Sciences 1 for the fall semester. Fire and Emergency Medical Sciences prepares the student to enter the workforce or pursue further education in the field of Emergency Medical Services (EMS) and Fire Science. The principles and practices of emergency response and firefighting 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. 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 0.5.

911 DISPATCHER (833726)
Grades: 10, 11, 12 **Credit: one**
Falls Church HS Academy, West Potomac HS Academy - transportation may be provided

Emergency Medical Telecommunications is designed to develop entry-level skills needed in a telecommunication environment for rescue, fire, and police. The course provides the beginning telecommunicator with an understanding of situations encountered in an emergency communications environment. Upon completion, the student will be able to: summarize issues involving the 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.

FIREFIGHTING 1 (870527)
Grades: 12 **Credit: two**
Prerequisite: Fire/EMS 1/2 strongly recommended. Students MUST be at least 16 years old (40-1.79.1 Code of Virginia) by the first day of the course offering.
Parents and students are required to attend an orientation session with the instructor prior to the beginning of the course. Enrollment also requires parental consent.
Fairfax County Fire Training 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. 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 0.5.

FIREFIGHTING 2 (870627)
Grades: 12 **Credit: two**
Prerequisite: Fire/EMS 1/2 strongly recommended. Students MUST be at least 16 years old (40-1.79.1 Code of Virginia) by the first day of the course offering.
Parents and students are required to attend an orientation session with the instructor prior to the beginning of the course. Enrollment also requires parental consent.
Fairfax County Fire Training 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. 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 0.5.

HEALTH INFORMATICS (832026)

Grades: 9, 10, 11, 12

Credit: one

INOVA Training Facility and Lee High School Only
 Falls Church HS Academy - transportation may be provided

Health Informatics offers an overview of the field of health informatics by providing students with the fundamental knowledge of the concepts of health informatics and how technology can be used in the delivery of health care. Students are provided a broad exposure to the field of Health Informatics in topics including networking, information systems, security, and HIPAA.

Industry certification may be available as part of this course.

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.

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 NOCTI's medical assisting assessment. A potential to earn the Certified Clinical Medical Assistant (CCMA) credential may be available to students. Students must purchase uniforms and 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 TECHNICIAN 1 (830526)

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, Chantilly 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 Virginia Pharmacy Technician Certification 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 Pharmacy.

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

PHARMACY TECHNICIAN 2 (830626)

Grades: 12

Credit: two

Prerequisite: Pharmacy Technician 1
 Falls Church HS Academy, West Potomac HS Academy, Chantilly 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 Virginia Pharmacy Technician Certification 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 Pharmacy.

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 - 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.

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 0.5.

PHYSICAL THERAPY/OCCUPATIONAL THERAPY 2 (836627)

Grades: 11, 12

Credit: two

Prerequisite: Physical Therapy/Occupational Therapy 1 (836527)
 West Potomac 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.

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 0.5.

PRACTICAL NURSING 1 (835726)**Grades: 11, 12****Credit: one/weighted +.5****Prerequisite: Biology 1 and Algebra 1. Exploring Health Sciences and Exploring the Language of Medicine are recommended but not required.****Plum Center - transportation may be provided**

This is part one (fall semester) of a two-part, full-year course. Students must also register for part two, Practical Nursing 2 for the spring semester. 11th grade students who complete Practical Nursing 1 and 2 in their junior year will be eligible to enroll in the Patient Care Technician course during their 12th grade year. This course offers preclinical nursing instruction during the student's senior year of high school. Foundations of nursing including communication, anatomy and physiology, and medical math, are the main units of focus. 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 electing to enroll in the post-secondary clinical level participate in the summer clinical are eligible to take the Certified Nursing Assistant (CNA) exam. 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. Eligibility for acceptance into nursing program includes strong algebra and biology grades, attendance, and student statement/essay. Successful completion of the Practical Nursing 1 and 2 courses allows students to take a nine-month, full-time postgraduate clinical internship program. The postgraduate clinical internship curriculum enables students to demonstrate advanced nursing competencies. Students successfully completing the post-secondary course are eligible to sit for the Virginia Practical Nursing Licensing Exam (NCLEX) 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 2 (835826)****Grades: 11, 12****Credit: one/weighted +.5****Prerequisite: Practical Nursing 1 (835726)****Plum Center - transportation may be provided**

This is part two (spring semester) of a two-part, full-year course. Students must also register for part one, Practical Nursing 1 for the fall semester. This course offers preclinical nursing instruction during the student's senior year of high school. Foundations of nursing including communication, anatomy and physiology, and introduction to pharmacology, are the main units of focus. 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 electing to enroll in the post-secondary clinical level participate in the summer clinical are eligible to take the Certified Nursing Assistant (CNA) exam. 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. Successful completion of the Practical Nursing 1 and 2 courses allows students to take a nine-month, full-time postgraduate clinical internship program. The postgraduate clinical internship curriculum enables students to demonstrate advanced nursing competencies. Students successfully completing the post-secondary course are eligible to sit for the Virginia Practical Nursing Licensing Exam (NCLEX) 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.**HEALTH and PHYSICAL EDUCATION****HEALTH AND PHYSICAL EDUCATION 9 (730000)****Grades: 9****Credit: one**

Students gain knowledge and skills in a variety of individual, dual, and team sports/activities to develop competencies to promote an active lifestyle. Students begin to apply personal fitness planning concepts to individualized plans. One quarter of the course includes instruction in the health education topics of alcohol, tobacco, and other drug use prevention; emotional and social health; personal health; injury and violence prevention; disease prevention; human growth and development; and cardiopulmonary resuscitation, automated external defibrillation (CPR and AED) and first aid.

HEALTH AND PHYSICAL EDUCATION 10 (740500)**Grades: 10****Credit: one****Prerequisite: Successful completion of Health and Physical Education, grade 9**

Students demonstrate competency in a lifetime sport or activity and demonstrate personal fitness planning. One quarter of the course includes instruction in the health education topics of personal and community health, nutrition, human growth and development, and injury and violence prevention. One quarter of the course includes the classroom component of driver education. The 90-minute Parent/Teen Traffic Safety Presentation (Partners 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.

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 team sports/activities and participate in individualized personal fitness plans to promote an active lifestyle. Activities are designed for the student's present level of performance and directed to improve deficit areas and 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 team sports/activities and participate in individualized personal fitness plans to promote an active lifestyle. Activities are designed for the student's present level of performance and directed to improve deficit areas and 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.

PERSONAL FITNESS - LEVEL 1 (764011)**Grades: 10, 11, 12****Credit: one****Prerequisite: Successful completion of Health and Physical Education, grade 9**

Students study and apply concepts related to 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 may not take this course in lieu of the grade 9 or grade 10 Health and Physical Education requirements.

PERSONAL FITNESS - LEVEL 1 (764061)**Grades: 10, 11, 12****Credit: one-half****Prerequisite: Successful completion of health and physical education, grade 9.**

Students study and apply concepts related to 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 may not take this course in lieu of the grade 9 or grade 10 Health and Physical Education requirements.

PERSONAL FITNESS - LEVEL 1 (764062)**Grades: 10, 11, 12****Credit: one-half****Prerequisite: Successful completion of health and physical education, grade 9.**

Students study and apply concepts related to 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 may not take this course in lieu of the grade 9 or grade 10 Health and Physical Education requirements.

PERSONAL FITNESS - LEVEL 2 (764063)**Grades: 11, 12****Credit: one-half****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.

PERSONAL FITNESS - LEVEL 2 (764064)**Grades: 11, 12****Credit: one-half****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.

FITNESS INSTRUCTOR (764013)**Grades: 12****Credit: one****Prerequisite: Successful completion of health and physical education grades 9 and 10. Personal Fitness – Level 1 and/or teacher recommendation.**

Personal Fitness 3 extends and enriches student's 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.

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 medical professions, anatomy and physiology of skeletal and muscular systems, kinesiology, types of injuries, injury prevention and nutrition. Students may not take this course in lieu of the grade 9 or grade 10 Health or Physical Education requirements.

MARKETING**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. Marketing Cooperative 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.

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 field trips. 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. Marketing Cooperative 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. Marketing Cooperative 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.**ADVANCED SPORTS AND ENTERTAINMENT MARKETING (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 the course are studied. Classroom instruction will be reinforced through the use of case studies, guest lecturers, and field trips. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Marketing Cooperative 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)****Grades: 9, 10, 11, 12****Credit: one**

In this specialized course, students gain 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. Marketing Cooperative 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. Marketing Cooperative 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.**ENTREPRENEURSHIP 1 (909326)****Grades: 11, 12****Credit: one****(Base school optional)****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 field trips. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Marketing Cooperative 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. Please note that the Dual Enrollment option for this course carries an additional weight of 0.5.**ENTREPRENEURSHIP 2 (909416)****Grades: 12****Credit: one****Prerequisite: Entrepreneurship 1 (909326)****(Base school optional)****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. Marketing Cooperative 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. Please note that the Dual Enrollment option for this course carries an additional weight of 0.5.

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 technique 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 field trip experiences. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Marketing Cooperative 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. The cooperative education (Marketing Cooperative Internship) method 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. The cooperative education (Marketing Cooperative Internship) method 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.

MARKETING COOPERATIVE INTERNSHIP (CO-OP) (819920)

Grades: 10, 11, 12

Credit: one

Corequisite: Student must be concurrently enrolled in a Marketing or EFE course.

The Marketing Cooperative Internship (Co-op) option enhances classroom instruction by providing practical work experience that is relevant to students' career goals. Students enrolled in Co-op attend at least one marketing or EFE class and work a minimum of 396 hours (10 hours per week) in an approved, supervised marketing-related, part-time job for one credit.

MARKETING COOPERATIVE INTERNSHIP (CO-OP) (819921)

Grades: 10, 11, 12

Credit: two

Corequisite: Student must be concurrently enrolled in a Marketing or EFE course.

The Marketing Cooperative Internship (Co-op) option enhances classroom instruction by providing practical work experience that is relevant to students' career goals. Students enrolled in Co-op attend at least one marketing or EFE class and work a minimum of 720 hours (20 hours per week) in an approved, supervised marketing-related, part-time job for two credits.

MATHEMATICS

ALGEBRA 1 / PART 1 (313100)

Grades: 9, 10

Credit: one

Prerequisite: Middle School Mathematics

Algebra 1 / Part 1 extends 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 linear equations and inequalities, linear relations and functions, measures of central tendency (mean, median, mode), data analysis and review of middle school objectives as needed. Algebra 1 / Part 1 includes approximately sixty percent of the Virginia Standards of Learning for Algebra 1. Students who began 9th grade during the 2009-2010 school year or earlier must pass Algebra 1 to receive mathematics graduation credit for Algebra 1 / Part 1. This course will not count towards a mathematics graduation credit for students who start 9th grade during the 2010-2011 school year or later.

ALGEBRA 1 (313000)

Grades: 8, 9, 10, 11

Credit: one

Prerequisite: Mathematics 7 and/or Mathematics 8

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. Emphasis is placed on making connections in algebra to geometry and statistics. Calculators and computer technologies are integral tools. Graphing calculators are an essential tool for every student to explore graphical, numerical, and symbolic relationships.

Students are required to take the Standards of Learning End of Course Test.

ALGEBRA 1 HONORS (313036)**Grades: 7, 8, 9****Credit: one/weighted +.5****Prerequisite: Mathematics 7 and/or Mathematics 8**

The depth and level of understanding expected in Algebra I Honors is beyond the scope of Algebra I. Students are expected to master algebraic mechanics and understand the underlying theory, as well as apply the concepts to real-world situations in a meaningful way. Students extend knowledge and understanding of the real number system and its properties through the study of variables, expressions, equations, inequalities, and the analysis of data from real world phenomena. Emphasis is placed on algebraic connections to arithmetic, geometry, and statistics. Calculators and computer technologies are integral tools. Graphing calculators are an essential tool for every student to explore graphical, numerical, and symbolic relationships. Topics include linear equations and inequalities, systems of linear equations, relations, functions, polynomials, and statistics. **Students are required to take the Standards of Learning End of Course Test.**

GEOMETRY / PART 1 (314481)**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. Calculators, computers, graphing utilities, dynamic geometry software, and other appropriate technology tools will be used to assist in teaching and learning. This course includes an integrated review of algebraic topics needed in geometry. Students who began 9th grade during the 2009-2010 school year or earlier must pass Geometry to receive mathematics graduation credit for Geometry / Part 1. This course will not count towards a mathematics graduation credit for students who start 9th grade during the 2010-2011 school year or later.

GEOMETRY / PART 2 (314581)**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. Calculators, computers, graphing utilities, dynamic geometry software, and other appropriate technology tools will be used to assist in teaching and learning. 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.

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. Calculators, computers, graphing utilities, dynamic geometry software, and other appropriate technology tools will be used to assist in teaching and learning. **Students are required to take the Standards of Learning End of Course Test.**

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. Calculators, computers, graphing utilities, dynamic geometry software, and other appropriate technology tools will be used to assist in teaching and learning. **Students are required to take the Standards of Learning End of Course Test.**

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, especially graphing calculators, are integral to the course.

Students are required to take the Standards of Learning End of Course Test.

ALGEBRA 2 STRATEGIES (011035)**Grades: 9, 10, 11, 12****Credit: one****Corequisite: Algebra 2**

This course is designed for students enrolled in Algebra 2 who would benefit from extended work building foundational Algebra skills. Students will explore the mathematics process goals in-depth while building algebraic proficiencies. The materials in this course support the core curriculum instructed in Algebra 2. Algebra 2 strategies is to be taken concurrently with Algebra 2. **(This course may be assigned to students whose SOL score and/or gradess indicate need for extra support.)**

ALGEBRA 2 HONORS (313536)**Grades: 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, especially graphing calculators, are integral to the course.

Students are required to take the Standards of Learning End of Course Test.

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.

successfully complete this course and the AP statistics examination may receive credit and/or advanced placement for a one-semester college statistics course. Content of this course corresponds to the syllabus of the College Board Advanced Placement Statistics Program. All students are required to take the Advanced Placement exam.

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.

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 on communication as a tool to analyze, justify and describe computational work. All students are required to take the Advanced Placement exam.

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, especially graphing calculators, are integral to the course.

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. All students are required to take the Advanced Placement exam.

PRECALCULUS WITH TRIGONOMETRY HONORS (316036)**Grades: 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, especially graphing calculators, are integral to the course.

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. This course prepares students for the Calculus AB Advanced Placement examination, for which placement and/or credit may be awarded at the college level, if a qualifying score is obtained. Content of this college-level course corresponds to the syllabus of the College Board Calculus AB Advanced Placement Program. All students are required to take the Advanced Placement exam.

PROBABILITY AND STATISTICS (319062)**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. Students are expected to develop and present professional quality statistical analyses. Course content includes theory of probability, description of statistical measurements, sampling and experimental design, probability distributions, and statistical inference.

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. This course prepares students for the Calculus BC Advanced Placement examination, for which placement and/or credit may be awarded at the college level, if a qualifying score is obtained. Content of this college-level course corresponds to the syllabus of the College Board Calculus BC Advanced Placement Program. All students are required to take the Advanced Placement exam.

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. Students who

MULTIVARIABLE CALCULUS (317860)**Grades: 11, 12** **Credit: one-half/weighted +1.0**
Prerequisite: AP Calculus BC or IB Mathematics HL II

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.

MATRIX ALGEBRA (319800)**Grades: 11, 12** **Credit: one-half/weighted +1.0**
Prerequisite: AP Calculus AB or AP Calculus BC or IB Mathematics HL II

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.

ENGINEERING MATHEMATICS (316326)**Grades: 10, 11, 12** **Credit: one**
Prerequisite: Algebra 2
Corequisite: Precalculus with Trigonometry

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.

SCIENCE**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 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.

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 activities 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. Major topics of study include molecular biology, cells, genetics, organisms, evolution and ecology. In comparison to Biology 1, students will investigate some topics at a deeper level including biotechnology, health and environmental issues. Students, either independently or in teams 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.

CHEMISTRY 1 (441000)**Grades: 10, 11, 12** **Credit: one**
Prerequisite: One laboratory science course, 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.

CHEMISTRY 1 HONORS (441036)**Grades: 10, 11, 12** **Credit: one/weighted +.5**
Prerequisite: One laboratory science course, Algebra 1
Corequisite: Algebra 2

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

Students are required to take the Standards of Learning End of Course Test.

GEOSYSTEMS (422000)**Grades: 11, 12** **Credit: one**
Prerequisite: Biology 1 and Chemistry 1

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), Global Positioning System (GPS), image processing software, and probeware.

Students are required to take the Standards of Learning End of Course Test.

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 inter-relationships. Students explore concepts with the same tools professional scientists use including computers, Geographic Information Systems (GIS), Global Positioning System (GPS), image processing software, and probeware. Students will investigate some topics at a deeper level and will participate in an externally-moderated experimental/research project either independently or in teams.

Students are required to take the Standards of Learning End of Course Test.

ACTIVE PHYSICS (451050)**Grades: 10, 11, 12** **Credit: one**
Prerequisite: One laboratory science course

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.

PHYSICS 1 (451000)**Grades: 11, 12****Credit: one****Prerequisite: Two laboratory science courses**

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: Two laboratory science courses****Corequisite: Precalculus with Trigonometry**

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 independently or in teams, will be involved in an externally-moderated experimental/research project.

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. This course does not count as one of the science credits for the standard diploma. It can be used as the fourth science credit for an advanced studies diploma if the student has already taken three science courses from three different disciplines.

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 required to take the Advanced Placement exam for which college credit and/or placement may be given if a qualifying score is achieved.

ADVANCED PLACEMENT CHEMISTRY (447004)**Grades: 11, 12****Credit: one/weighted +1.0****Prerequisite: Chemistry 1****Corequisite: Recommended: Physics or Precalculus with Trigonometry**

Advanced Placement Chemistry represents a full year (two semesters) of college chemistry. The purpose of this course is to prepare students to take the Advanced Placement examination, for which college credit and/or placement may be given if a qualifying score is achieved. 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. Students are required to take the Advanced Placement exam.

OCEANOGRAPHY (425000)**Grades: 11, 12****Credit: one****Prerequisite: Two laboratory science courses**

Oceanography explores geophysical and biological factors and covers topics such as the geology and geography of ocean basins, physical properties of sea water, marine chemistry, marine biology, salinity and density circulation in the oceans, waves, and tides. The course is designed to be a survey of oceanography concepts. This course does not count as one of the science credits for the standard diploma. It can be used as the fourth credit for an advanced studies diploma, if the student has already taken three science courses from three different disciplines.

ASTRONOMY (426000)**Grades: 11, 12****Credit: one****Prerequisite: Two laboratory science courses**

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 does not count as one of the science credits for the standard diploma. It can be used as the fourth credit for an advanced studies diploma, if the student has already taken three science courses from three different disciplines.

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 required to take the Advanced Placement exam, and may be given college credit and/or placement if a qualifying score is achieved.

ADVANCED PLACEMENT PHYSICS 1 (457300)**Grades: 11, 12****Credit: one/weighted +1.0****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 required to take the Advanced Placement exam for which college credit and/or placement may be given 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 AP Physics sequence. The second year builds on the six big ideas that are developed in the first year of the 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 required to take the Advanced Placement exam for which college credit and/or placement may be given if a qualifying score is achieved.

ADVANCED PLACEMENT PHYSICS C - MECHANICS AND ELECTRICITY AND MAGNETISM (457004)

Grades: 11, 12 **Credit: one/weighted +1.0**

Prerequisite: Physics 1 or other advanced physics course

Corequisite: AP Calculus AB or BC

Advanced Placement Physics is a second-level course which surveys a broad selection of physics topics 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, electricity, and magnetism. AP Physics C serves as the foundation in physics for students who wish to pursue physical science or engineering degrees. Students are required to take both the Mechanics Advanced Placement exam and the Electricity and Magnetism Advanced Placement exam and may be given college credit and/or placement if a qualifying score is achieved.

ADVANCED PLACEMENT PHYSICS C - MECHANICS (457504)

Grades: 11, 12 **Credit: one/weighted +1.0**

Prerequisite: Physics 1 or other advanced physics course

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 required to take the Mechanics Advanced Placement exam and may be given college credit and/or placement if a qualifying score is achieved.

ENGINEERING PHYSICS (452026)

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

Corequisite: Physics 1 (451000); Algebra Option: Co-enrollment in or completion of Algebra 2 (313500); Calculus Option: Co-enrollment in a calculus-based mathematics course (316308, 316508, or equivalent)

This course may be used to satisfy one credit toward the science, elective, fine arts, or career and technical education requirement of the standard or advanced studies diploma. The course is the second year of the two-year college preparatory, laboratory-based Engineering Physics sequence; and is designed for students anticipating careers in the physical sciences, engineering, technology, medicine, or other research, and experimentation disciplines. The course begins with a review of mathematical and basic physics and engineering concepts to assure that all students are brought to a consistent level of preparedness. Curriculum topics include universal concepts, inquiry processes, fundamental constants, special relativity, rotational dynamics, waves and vibrations, energy conversion, transducers, electromagnetic radiation, optical measurements, and exponential behavior. These topics are addressed in the context of mechanical, fluid, electrical, thermal, and aerospace systems. Students complete approximately 50 hours of laboratory experimentation and participation in advanced technology competitions. The course may include curriculum-related field trips and college-oriented information seminars. Individual academies apply the curriculum in the manner that best fits local facilities and opportunities. Participating students may compete for a limited number of industry internships.

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.

SOCIAL STUDIES

WORLD HISTORY AND GEOGRAPHY 1 (221900)

Grades: 9 **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.

WORLD HISTORY AND GEOGRAPHY 1 HONORS (221936)

Grades: 9 **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.

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. This course prepares students to take the Advanced Placement examination in Human Geography, for which college credit and/or placement is given if a qualifying score is achieved. All students are required to take the Advanced Placement Human Geography exam.

WORLD HISTORY AND GEOGRAPHY 2 (222100)

Grades: 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.

WORLD HISTORY AND GEOGRAPHY 2 HONORS (222136)

Grades: 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.

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

Advanced Placement World History is designed to develop greater understanding of the evolution of global processes and contacts, in interaction with different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. Focused primarily on the past fifteen hundred years of the global experience, the course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage prior to 600. All students are required to take the Advanced Placement World History exam. This course may be used to satisfy the World History and Geography I requirement or to satisfy the World History and Geography II requirement. Note: When taken as a World History and Geography I or II substitute course, the appropriate World History and Geography SOL Test is required. The SOL Test is not given when AP World is taken as an elective.
Students are required to take the Standards of Learning End of Course Test.

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.

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.

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. This course prepares students to take the Advanced Placement examination in American History for which college credit and/or placement may be given if a qualifying score is made. All students are required to take the Advanced Placement exam. The course is equal to a full-year introductory college course. Completion of this course fulfills the graduation requirement for one credit in Virginia and United States History.
Students are required to take the Standards of Learning End of Course Test.

ADVANCED PLACEMENT US HISTORY (AMERICAN CIVILIZATION) (231905)
Grades: 11 **Credit: one/weighted +1.0**

In this class blocked with AP English Language and Composition, students consider the ways literature reflects history and the human experience as they refine their awareness of language and the writer's craft. They make connections between history and literature while examining the American experience. Students acquire conceptual knowledge and strengthen critical thinking skills by studying the political, economic, social, and cultural growth of the United States. Students study primary documents and engage in research and writing. They study traditional and contemporary American beliefs, values and characteristics. In this course, students receive one credit in Advanced Placement United States History and one credit in AP Language and Composition (119667). All students are required to take the Advanced Placement exam.
Students are required to take the Standards of Learning End of Course Test.

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 (244504)
Grades: 12 **Credit: one/weighted +1.0**

In this study of American government, students interpret national, state, and local government and politics through an examination of both general concepts used to interpret U.S. politics and the analysis of specific examples. This course prepares students to take the Advanced Placement examination for which college credit and/or placement may be given if a qualifying score is made. Completion of this course fulfills the graduation requirement for one credit in Virginia and United States Government. All students are required to take the Advanced Placement exam.

ADVANCED PLACEMENT COMBINED US AND COMPARATIVE GOVERNMENT (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 for which college credit and/or placement may be given if qualifying scores are made. Completion of this course fulfills the graduation requirement for one credit in Virginia and United States Government. All students in this course are required to take both AP (US and Comparative) Government exams.

**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. All students are required to take both Advanced Placement examinations in Macro and Micro Economics, for which college credit and/or placement may be given if a qualifying score is achieved. This course fulfills the Economic and Personal Finance and virtual graduation requirements.

PSYCHOLOGY (290000)

Grades: 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. College credit and/or placement may be given if a qualifying score is made on the Advanced Placement examination. The rigorous course syllabus and college level texts both suggest that students who enroll should be highly motivated and intellectually curious. All students are required to take the Advanced Placement exam.

SOCIOLOGY (250000)

Grades: 10, 11, 12

Credit: one

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.

WORLD RELIGIONS (295060)

Grades: 10, 11, 12

Credit: one

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.

TECHNOLOGY AND ENGINEERING EDUCATION

BASIC TECHNICAL DRAWING (843500)

Grades: 9, 10, 11, 12

Credit: one

Students develop basic skills in drawing and study careers related to drafting through the use of Computer-Assisted Drafting (CAD) and other software applications to gain an understanding of the technical drawing processes. This course is recommended for students interested in technical drawing, interior design, fashion design, decorating, construction, architecture, or engineering careers. 2D and 3D CAD certifications may be available.

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 0.5.

ENGINEERING DRAWING (843600)

Grades: 10, 11, 12

Credit: one

Prerequisite: Basic Technical Drawing (843500)

Students gain an understanding of technical drawing careers in modern industry. The course includes engineering-drafting problems, use of Computer-Assisted Drafting (CAD) equipment, and drafting skills and techniques. Students use Autodesk Inventor software and specifications along with other resource materials. Students interested in engineering or related careers will benefit from this course. 3D parametric modeling is introduced. Industry certification in Autodesk Inventor may be available.

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 0.5.

ADVANCED DRAWING (843800)

Grades: 11, 12

Credit: one

Prerequisite: Engineering Drawing (843600) or Architectural Drawing (843700)

Students use a graphic language for product design and technical illustration. They increase their understanding of drawing techniques learned in the prerequisite courses. Students will research design-related fields while identifying the role of advanced drawing and design in manufacturing and construction industry processes. They apply the design process, analyze design solutions, reverse engineer products, create 3-D solid models using Computer-Assisted Drafting (CAD), construct physical models, and create multimedia presentations of finished designs. Students will complete a work portfolio based on a chosen graphic project using advanced software such as Autodesk Inventor, Revit and 3D Studio Max.

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

DESIGN AND TECHNOLOGY (840300)

Grades: 9, 10, 11, 12

Credit: one

Design and Technology is designed as a foundation high school course in technology education. Students use core technology knowledge to solve open-ended problems and create systems. Laboratory activities engage students in the design process through projects that integrate mathematics, science, and other core subjects. Working in groups, students build and control systems in the development of technology.

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

GEOGRAPHIC INFORMATION SYSTEMS 1 (842326)

Grades: 11, 12

Credit: one

Chantilly HS Academy - transportation may be provided

This course will introduce students to the theory, vocabulary, and concepts behind these and other applications of GIS, while providing students the opportunity to develop basic skills to apply GIS in a variety of contexts. Students will receive instruction in geographic information systems, global positioning systems, remote sensing, digital imaging processing simulator, Geodesy, automated cartography, land surveying, and navigation. Fundamentally, these technologies will enable students to explore and analyze the natural and human-made world, from local to global and beyond. Students will use various tools, processes, and techniques to create, store, access, manipulate, and revise data to solve human challenges. These experiences will employ real-world spatial analysis models and guidelines for integrating, interpreting, analyzing, and synthesizing data.

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. Please note that the Dual Enrollment option for this course carries an additional weight of 0.5.

ENGINEERING PHYSICS (452026)

Grades: 11, 12

Credit: one

Corequisite: Physics 1 (451000); Algebra Option: Co-enrollment in or completion of Algebra 2 (313500); Calculus Option: Co-enrollment in a calculus-based mathematics course (316308, 316508, or equivalent)

This course may be used to satisfy one credit toward the science, elective, fine arts, or career and technical education requirement of the standard or advanced studies diploma. The course is the second year of the two-year college preparatory, laboratory-based Engineering Physics sequence; and is designed for students anticipating careers in the physical sciences, engineering, technology, medicine, or other research, and experimentation disciplines. The course begins with a review of mathematical and basic physics and engineering concepts to assure that all students are brought to a consistent level of preparedness. Curriculum topics include universal concepts, inquiry processes, fundamental constants, special relativity, rotational dynamics, waves and vibrations, energy conversion, transducers, electromagnetic radiation, optical measurements, and exponential behavior. These topics are addressed in the context of mechanical, fluid, electrical, thermal, and aerospace systems. Students complete approximately 50 hours of laboratory experimentation and participation in advanced technology competitions. The course may include curriculum-related field trips and college-oriented information seminars. Individual academies apply the curriculum in the manner that best fits local facilities and opportunities. Participating students may compete for a limited number of industry internships.

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.

STEM ENGINEERING (845060)

Grades: 10, 11, 12

Credit: one/weighted +.5

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 problem based learning projects 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, computer simulations, scientific analysis, oral and written 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. Students integrate mathematics, science, and technical writing with technology instruction to solve engineering-based problems.

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

STEM ROBOTICS SYSTEMS 1 (842560)

Grades: 10, 11, 12

Credit: one/weighted +.5

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.

STEM ROBOTICS SYSTEMS 2 (842760)

Grades: 12

Credit: one/weighted +.5

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

Students develop and in-depth understanding of automation and its application 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.

TRADE AND INDUSTRIAL**AUTOMOTIVE TECHNOLOGY 1 (850626)**

Grades: 9, 10, 11

Credit: one

Prerequisite: Algebra 1 (Base school optional)

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 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.

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 0.5.

AUTOMOTIVE TECHNOLOGY 2 (850727)

Grades: 11, 12

Credit: two

Prerequisite: Automotive Technology 1 (850626) (Base school optional)

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 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. 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 TECHNOLOGY 3 (850827)**Grades: 12****Credit: two****Prerequisite: Automotive Technology 2 (850727)
(Base school optional)****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 National Automotive Technicians Education Foundation (NATEF). 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.

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 National Automotive Technicians Education Foundation (NATEF) 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. Please note that the Dual Enrollment option for this course carries an additional weight of 0.5.

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 the National Automotive Technicians Education Foundation (NATEF) 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. Please note that the Dual Enrollment option for this course carries an additional weight of 0.5.

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 the National Automotive Technicians Education Foundation (NATEF) 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. Please note that the Dual Enrollment option for this course carries an additional weight of 0.5.

CARPENTRY 1 (860126)**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, ceiling, 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.

**CONSTRUCTION TECH 1 - SPRING VILLAGE RESIDENTIAL
CONSTRUCTION SITE (851561)****Grades: 10, 11, 12****Credit: one****Spring Village Residential Construction Site - transportation may be
provided**

Through a partnership with the Foundation of Applied Technical Education, Inc. (FATE), students have an opportunity to build a single-family home in Springfield, Virginia. This specialized course curriculum is developed by the National Association of Home Builders (NAHB). All aspects of new home construction will be addressed during the course. Students will work directly on concrete installation, framing, ceramic tile, kitchen installation, bathroom installations, hardwood floors, electrical, plumbing, HVAC, landscape, and other areas of new home construction. Theoretical and physical aspects of the construction industry are explored in order for students to establish career goals in the industry.

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

CONSTRUCTION TECH 1 - SPRING VILLAGE RESIDENTIAL CONSTRUCTION SITE (851562)

Grades: 10, 11, 12

Credit: two

Spring Village Residencial Construction Site - transportation may be provided

Through a partnership with the Foundation of Applied Technical Education, Inc. (FATE), students have an opportunity to build a single-family home in Springfield, Virginia. This specialized course curriculum is developed by the National Association of Home Builders (NAHB). All aspects of new home construction will be addressed during the course. Students will work directly on concrete installation, framing, ceramic tile, kitchen installation, bathroom installations, hardwood floors, electrical, plumbing, HVAC, landscape, and other areas of new home construction. Theoretical and physical aspects of the construction industry are explored in order for students to establish career goals in the industry.

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

CONSTRUCTION TECH 2 - SPRING VILLAGE RESIDENTIAL CONSTRUCTION SITE (851662)

Grades: 11, 12

Credit: two

Prerequisite: Construction Technologies 1 (851561)

Spring Village Residencial Construction Site - transportation may be provided

Through a partnership with the Foundation of Applied Technical Education, Inc. (FATE), students have an opportunity to build a single-family home in Springfield, Virginia. This specialized course curriculum is developed by the National Association of Home Builders (NAHB). All aspects of new home construction will be addressed during the course. Students will work directly on concrete installation, framing, ceramic tile, kitchen installation, bathroom installations, hardwood floors, electrical, plumbing, HVAC, landscape, and other areas of new home construction. Theoretical and physical aspects of the construction industry are explored in order for students to establish career goals in the industry.

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

COSMETOLOGY 1 (852728)

Grades: 10, 11, 12

Credit: three

Base school optional

Chantilly HS Academy, Edison HS Academy, Hayfield Secondary, Marshall HS Academy, Chantilly HS Academy, Edison HS Academy, Hayfield Secondary, Marshall HS Academy - transportation may be provided

In this introductory course, students study hair, skin, and nails and their related care. Students are grounded in theory as they prepare to practice procedures in a clinical lab setting or classroom, using manikins for manipulative skill practice. The first-year course emphasizes personal safety, professionalism, and sanitation and disinfection of equipment and facilities. Students develop skills in shampooing and conditioning hair, as well as styling and cutting hair. Students learn about the characteristics of hair, product selection, and basic elements that determine hair growth, health, and appearance. In addition to up-to-date skills in hair styling and cutting, permanent waving, coloring, scalp and facial treatment, and manicuring, students will begin licensure preparation as prescribed by the Virginia Board of Cosmetology.

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

COSMETOLOGY 2 (852827)

Grades: 11, 12

Credit: two

Prerequisite: Cosmetology 1 (852727)

BASE SCHOOL OPTIONAL

Chantilly HS Academy, Edison HS Academy, Hayfield Secondary, Marshall HS Academy, Chantilly HS Academy, Edison HS Academy, Hayfield Secondary, Marshall HS Academy - transportation may be provided

In this continuing course, students build on their theoretical foundation of general sciences and practices in cosmetology to increase proficiency in haircutting and styling with attention to professionalism, client consultation,

safety, and infection control. Students are trained in safe chemical processes related to permanent waves, relaxers, lightening, and coloring hair. In addition, students learn to care for skin, hands, and feet, developing experience in providing facials, manicures, pedicures, and nail enhancements. Students use a laboratory setting for the study of skin, hair, nails and cosmetic chemistry. Through laboratory experiences, students will develop advanced skills and knowledge in all phases of salon industry. Students complete the required cosmetology competencies determined by the Virginia Board of Cosmetology in preparation for the Virginia Cosmetology State Board Exam to qualify as a licensed cosmetologist. Students in this course will have the opportunity to take the Virginia Cosmetology State Board Exam 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 Cosmetology.

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)

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. 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 0.5.

CRIMINAL JUSTICE 2 (870327)

Grades: 11, 12

Credit: two

Prerequisite: Criminal Justice 1 (870226)

(Base school optional)

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. 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 0.5.

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.

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. Please note that the Dual Enrollment option for this course carries an additional weight of 0.5.

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: 10, 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. Dual enrollment credits with approved colleges or universities may be available through this course.

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.

PROFESSIONAL TELEVISION 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.

PROFESSIONAL TELEVISION 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.

PROFESSIONAL TELEVISION 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., internship, 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

ARABIC 1 (501000)
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 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 1 (501026)
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 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.

E-CLASSROOM ARABIC 1 (501062)
Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: None
Enrollment in this course must be approved by the Director of Student Services

In this electronic classroom course, 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. Schools must have a facilitator on hand to proctor tests, ensure students are on task, and forward information to the instructor. Schools must provide adequate study area for distance learning students.

ARABIC 2 (502000)
Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: Arabic 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.

ARABIC 2 (502026)
Grades: 9, 10, 11, 12 **Credit: one**
Fairfax 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.

E-CLASSROOM ARABIC 2 (502062)
Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: Level 1 or equivalency test.
Enrollment in this course must be approved by the Director of Student Services

In this electronic classroom course, 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. Schools must have a facilitator on hand to proctor tests, ensure students are on task, and forward information to the instructor. Schools must provide adequate study area for distance learning students.

ARABIC 3 (503000)
Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: Arabic 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.

ARABIC 3 (503026)**Grades: 9, 10, 11, 12****Credit: one****Fairfax 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.

E-CLASSROOM ARABIC 3 (503062)**Grades: 9, 10, 11, 12****Credit: one****Prerequisite: Level 2 or equivalency test****Enrollment in this course must be approved by the Director of Student Services**

In this electronic classroom 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. Schools must have a facilitator on hand to proctor tests, ensure students are on task, and forward information to the instructor. Schools must provide adequate study area for distance learning students.

ARABIC 4 (504000)**Grades: 10, 11, 12****Credit: one****Prerequisite: Arabic 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.

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: 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****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 (517004)**Grades: 11, 12****Credit: one/weighted +1.0****Prerequisite: French 4 or equivalency test**

The purpose of this course is to prepare students to take the Advanced Placement Language examination given each spring, for which placement and/or credit may be awarded at the college level if a qualifying score is obtained. 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 nontechnical 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. All students are required to take the Advanced Placement French Language exam.

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)**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.

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.

JAPANESE 3 (593000)**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.

LATIN 2 (532000)**Grades: 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.

JAPANESE 4 (594000)**Grades: 10, 11, 12****Credit: one****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.

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.

JAPANESE 5 (595000)**Grades: 11, 12****Credit: one/weighted +.5****Prerequisite: Level 4 or equivalency test**

Students study selected upper level POS themes and topics using more sophisticated communication skills in all four areas - listening, speaking, reading, and writing - with emphasis on the ability to interact orally and in writing. They participate in in-depth studies of major literary works and historical events and learn to recognize the various themes and conflicts involved. Students express abstract ideas while discussing literature, history, and current events.

LATIN 4 (534000)**Grades: 11, 12****Credit: one****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.

ADVANCED PLACEMENT JAPANESE LANGUAGE (597004)**Grades: 11, 12****Credit: one/weighted +1.0****Prerequisite: Japanese 4 or equivalency test**

The purpose of this course is to prepare students to take the Advanced Placement Language examination given each spring, for which placement and/or credit may be awarded at the college level if a qualifying score is obtained. 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 nontechnical 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. All students are required to take the Advanced Placement Japanese Language exam.

LATIN 5 (535000)**Grades: 11, 12****Credit: one/weighted +.5****Prerequisite: Latin 4 or equivalency test**

Students continue their study of Latin prose and/or poetry, improving their reading proficiency as they deepen their understanding of more complex syntax. Analysis of the Latin texts as literature is emphasized. Students also develop a greater appreciation of the social and political context in which the various works were written as well as their influence upon later literature.

presentations. They are also able to describe, summarize and discuss selected upper level POS themes and topics.

ADVANCED PLACEMENT LATIN (537004)

Grades: 11, 12 **Credit: one/weighted +1.0**
Prerequisite: Latin 3, Latin 4, or equivalency test

The purpose of this course is to prepare students to take the Advanced Placement examination, for which placement and/or credit may be awarded at the college level if a qualifying score is obtained. 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. All students are required to take the Advanced Placement Latin exam.

SPANISH 5 (555000)

Grades: 11, 12 **Credit: one/weighted +.5**
Prerequisite: Spanish 4, or Advanced Placement Language, or equivalency test

Students study selected upper level POS themes and topics using more sophisticated communication skills in all four areas - listening, speaking, reading and writing - with emphasis on the ability to interact orally and in writing. They participate in in-depth studies of major literary works and historical events and learn to recognize the various themes and conflicts involved. Students express abstract ideas while discussing literature, history, and current events.

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.

ADVANCED PLACEMENT SPANISH LANGUAGE (557004)

Grades: 11, 12 **Credit: one/weighted +1.0**
Prerequisite: Spanish 4 or equivalency test

The purpose of this course is to prepare students to take the Advanced Placement Language examination given each spring, for which placement and/or credit may be awarded at the college level if a qualifying score is obtained. 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 nontechnical 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. All students are required to take the Advanced Placement Spanish Language exam.

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.

CHINESE 1 (581026)

Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: none
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. This course is only offered at Fairfax Academy and Marshall Academy.

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.

CHINESE 2 (582026)

Grades: 9, 10, 11, 12 **Credit: one**
Prerequisite: Chinese 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. This course is only offered at Fairfax Academy and Marshall Academy.

SPANISH 4 (554000)

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

CHINESE 3 (583026)**Grades: 9, 10, 11, 12****Credit: one****Prerequisite: Chinese 2 or equivalency test****Marshall HS Academy, Fairfax HS Academy, Fairfax 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.

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.

CHINESE 4 (584026)**Grades: 10, 11, 12****Credit: one****Prerequisite: Chinese 3 or equivalency test****Marshall HS Academy, Fairfax 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.

KOREAN 4 (588526)**Grades: 9, 10, 11, 12****Credit: one****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.

KOREAN 1 (587026)**Grades: 9, 10, 11, 12****Credit: one****Prerequisite: none****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 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.

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.

KOREAN 2 (587526)**Grades: 9, 10, 11, 12****Credit: one****Prerequisite: Korean 1 or equivalency test****Fairfax 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.

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.)

KOREAN 3 (588026)**Grades: 9, 10, 11, 12****Credit: one****Prerequisite: Korean 2 or equivalency test****Fairfax 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

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.

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.

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.

REINFORCING FOUNDATIONS (781800)

Grades: 10, 11, 12

Credit: one

Reinforcing Foundations is a one credit elective course designed to provide support to tenth, eleventh, and/or twelfth grade high school special education students who have not yet passed the eighth grade English: Reading/Literature and Research and Mathematics Standard of Learning tests and may be pursuing a modified standard diploma or a special diploma. This course will include skill work in reading comprehension, research, literature, computation, estimation, measurement, patterns, and basic algebra. This course may be taught for elective credit for three years, as appropriate. Students may be awarded a half-credit upon completion of a full semester of placement in Reinforcing Foundations. Such a decision is made by the school counselor in conjunction with the special education department chair.