



RICHMOND PUBLIC SCHOOLS
PROGRAM OF STUDIES
GRADES 9-12 2019-2020

RICHMOND PUBLIC SCHOOLS

Dear High School Students of Richmond City Public Schools,

We are pleased to present the SY19-20 High School Program of Studies. This document is a guide to understand the many learning paths and course offerings available to all high school students of Richmond Public Schools and describes those options will prepare you to graduate from high school and ready for the post-secondary path of your choosing. It is our belief that all students have infinite potential; accordingly, it is our vision that every RPS student not only graduates on-time, but has made concrete plans to enroll in college, enlist in national service, or accept a job offer that leads to a living wage.

Indeed, we have high expectations for you to leave high school college career and civic-ready, and we believe you will exceed our expectations by taking an active role in your high-school learning experiences. To enable you to meet these high standards, RPS provides many choices and paths for you to explore the world of academics and career. And to better support you on your journey in planning for your future, this guide is provided as a tool to enable you to embrace learning, to excel in your work and readiness for a career and education beyond high school, and to own your future.

You are encouraged to work with your family, teachers, and school counselor(s) to make decisions appropriate for achieving individual academic and career goals. We continue to explore ways to introduce more rigor, relevancy, diversity, and specialization to all school course offerings. Additionally, school counselors will be able to fully explain courses that are contained in this guide.

How you spend your time in high school will impact your future and ability to achieve your goals; therefore, we urge you to take full advantage of the courses that are provided in this guide as well opportunities as in the classroom. Student success is the division's greatest responsibility and Richmond Public Schools is committed to the success and continued development of each and every one of you.

With gratitude,



Jason Kamras
Superintendent

School Board

Dawn Page (District 8), Board Chair
Elizabeth Doerr (District 1), Vice Chair
James Scott Barlow (District 2)
Kenya Gibson (District 3)
Jonathan Young (District 4)
Patrick Sapini (District 5)
Felicia Cosby (District 6)
Cheryl Burke (District 7)
Linda Owen (District 9)

Table of Contents

Introduction & Overview of High School Options	5
About this Guide	5
Profile of a Virginia Graduate	5
High Schools Available to Richmond City Public Schools Students	6
Comprehensive High Schools	6
Specialty Schools	6
Regional Schools	6
Overview of Academic Programs	7
General Academic Program Offerings	7
Career & Technical Education Pathways at the Richmond Technical Center	7
Advanced Placement (AP)	7
Special Programs within Schools	8
The Governor’s Career and Technical Academy for STEM in RPS	8
International Baccalaureate Diploma Programme at Thomas Jefferson High School	8
Early College Academy at J. Sargent Reynolds Community College	8
Summer Residential Governor’s School for Interdisciplinary Studies	8
Alternative Education Offerings	9
Aspire Academy at Richmond Alternative Center	9
Spartan Academy at Richmond Alternative Center	10
Performance Learning Center at the Richmond Technical Center (RTC)	10
Graduation & Post-Secondary Preparation	10
Academic & Career Plan	10
Future Centers	11
Graduation Requirements	11
RPS Supported Substitute Tests for Verified Credits	12
Graduation Course Requirements for Students Entering the Ninth Grade for the First Time in 2018-2019 and Beyond	14
Graduation Course Requirements for Students Entering the Ninth Grade for the First Time in 2011-2012 through 2017-2018	17
Diploma Seals	20
Post-Secondary Assessments	23
Course Listings	25
Applied Studies	25
Career and Technical Education	30
Agricultural Education	30
Business and Information Technology	31
Career Connections	36
Family and Consumer Services	36
Health and Medical Sciences	38
Marketing	42
Military Science	44

Technology Education	44
Trade and Industrial	46
Dual Enrollment	51
Dual Enrollment at J. Sargeant Reynolds	51
J. Sargeant Reynolds Early College Academy	53
English Language Arts	56
English Language Learners	60
Fine Arts	62
Health and Physical Education	67
History and Social Sciences	68
International Baccalaureate	71
Mathematics	78
Science	83
World Languages	86
CTE Industry Credentials	108
Virtual Course Offerings	112
Edgenuity	112
Virtual Virginia	114
Addenda – Academic Guidelines, Practices, and Procedures for High School	115
Academic and Career Planning and Opportunities	115
Academic and Career Plans and Diploma Type	115
Course Selection Process	115
Add/Drop Procedures	115
Waiver from Taking a Full Load of Coursework	116
Access to Courses	116
Transfer Students	116
Transcript Evaluation, Translation of Grades & GPA Calculations	116
Mid-Year Transfer of Grades (to be developed 2020)	116
Out of District Grade Translation (to be developed 2020)	116
Concurrent Enrollment	116
Eligibility for Early College Academy and Concurrent Enrollment	117
Early College Academy Course Sequence	117
Eligibility and Selection for Summer Residential Governor's School for Interdisciplinary Studies	117
Evaluation of Academic Performance and Progress to Graduation	119
Grading Scale, Grade Point Average & Course Weights	119
Attendance and Impact on Grades	119
Promotion, Class Cohort and Year of Graduation Designation	119
Remediation & Repeating Coursework	120
Academic Integrity	120
Distinctions for Academic Performance	121
Honor Roll	121

Class Rank, Valedictorian & Salutatorian	121
Scholastic Standout	121
School/Family Communication of Student Progress	122
Report Cards and Progress Reports	122
Online Access	122
Process for Challenging Grades/Teacher Grade Changes	122
Student Support Programs	123
Homebound Instruction	123
Overview of Homebound Services	123
Overview of Home-based Services	123
Special Education Services	123
Programming	123
Students with Significant Cognitive Impairments	124
Section 504 of the Rehabilitation Act of 1973	124
Credit Accommodations	124
English Language Learners	125
Definition of an English Language Learner	125
High School Scheduling	125
Gifted & Talented Services	125
Regulations Governing Educational Services for Gifted Students	125
Student Activities & Eligibility	126
VHSL Eligibility	126

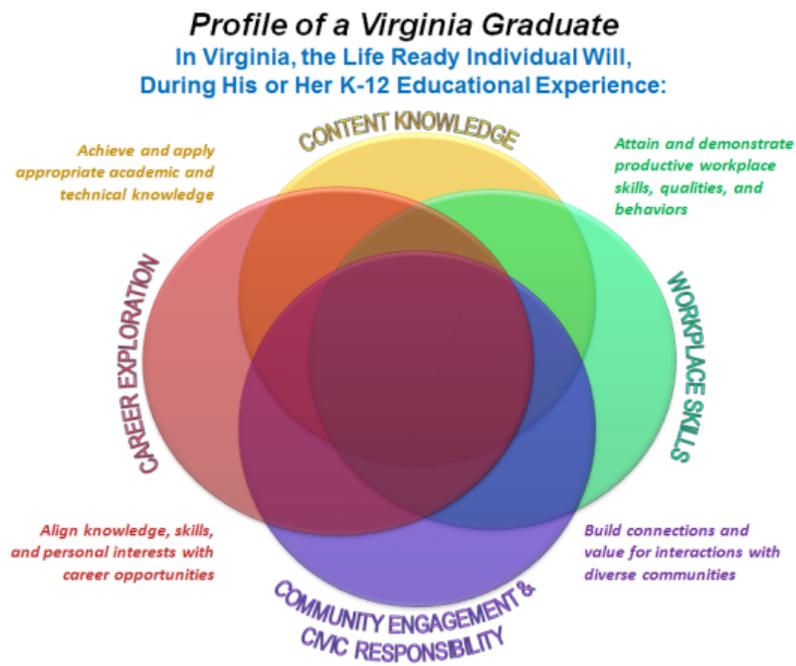
Introduction & Overview of High School Options

About this Guide

This guide is organized in sections as outlined in the table of contents on the previous pages. It begins by outlining the expectations we have for the skills you will acquire by the time you graduate from high school, details the high school options and special programs within RPS that are available to you, then explains graduation requirements and diploma options, followed by a listing of courses available to you in 2019-20. Additional information is found in the addenda at the end of the document.

Profile of a Virginia Graduate

The aim of graduating from high school is not simply to earn a diploma, but to be prepared for your future. To that end, the state of Virginia has a defined vision for all graduates that describes the knowledge, skills, experiences, and attributes that students must attain to be successful in college and/or the work force, and to be "life ready." A "life-ready" Virginia graduate must achieve and apply content knowledge, demonstrate productive workplace skills, qualities, and behaviors, engage as a responsible and responsive citizen, and use their learning to explore career opportunities. The learning experiences you have in RPS are designed to align to this vision.



High Schools Available to Richmond City Public Schools Students

RPS is proud to offer many unique options for students in choosing their high school and in designing their high school experience.

Comprehensive High Schools

RPS offers students a comprehensive high school experience across the city. Our comprehensive high schools offer a full range of coursework, including advanced opportunities, as well as the opportunity to explore a wide range of electives, clubs, and athletics. Students have access to the following schools based on their enrollment zone, and may also apply and attend schools outside their enrollment zone through the open-enrollment lottery:

- Armstrong High School (Grades 9-12)
- Huguenot High School (9-12)
- John Marshall High School (9-12)
- Thomas Jefferson High School (9-12)
- George Wythe High School (9-12)

Specialty Schools

RPS specialty schools are available to all RPS students through an application process determined by each school. These schools may have additional graduation requirements. Please refer to the school counselor at each school for more information about any school-specific practices.

Franklin Military Academy (Grades 6-12)

Franklin Military Academy is a premier secondary school that promotes the potential of each student through a rigorous academic program, community involvement, and leadership opportunities within a military structure.

Open High School (Grades 9-12)

Open High School develops responsible, creative, independent, and college/career ready students who value intellectual inquiry, compassion, and social responsibility in a global society by leading students to pursue challenging academic goals, participate in shared decision-making, and form partnerships with the community.

Richmond Community High School (Grades 9-12)

Richmond Community High School is a college preparatory educational opportunity for culturally diverse, gifted, and talented students to excel both individually and in a global society.

Regional Schools

Regional Governor's schools and CODE RVA are available to all RPS students through an application process determined by each school. Once admitted, students should refer to the school's program of study and graduation requirements, as those are unique to these schools.

Appomattox Regional Governor's School for the Arts and Technology VPA and CTA (Grades 9-12)

Appomattox Regional Governor's School nurtures gifted and talented creative thinkers, leaders, artists, innovators, and pioneers in the fine, performing, and technological arts.

CODE RVA (Grades 9-12)

Code RVA Regional High School provides an innovative learning environment that uses blended and project-based learning to develop students' self-management skills while integrating academic content, agile workplace

methodologies, and internship experiences that provide a pipeline of critical thinkers prepared to enter college or Richmond's growing tech sector.

Maggie L. Walker Governor's School for Government and International Studies (Grades 9-12)

Maggie L. Walker Governor's School provides broad-based educational opportunities that develop gifted students' understanding of world cultures and languages as well as the ability to lead, participate in, and contribute to a rapidly changing global society.

Overview of Academic Programs

General Academic Program Offerings

Every RPS high school offers a course of study that enables students to meet the graduation requirements for the Advanced Studies, Standard, or Applied Studies Diplomas while also providing opportunities to explore coursework beyond those requirements. This course of study includes access to robust career and technical offerings, including those that reflect the modern era, as well as advanced courses that provide the opportunity for all students to have the opportunity to earn credit towards a post-secondary degree or industry certification. All students are encouraged to take advantage of this diverse array of offerings as they explore their interests and prepare for their future.

As part of Virginia graduation requirements for the Advanced Studies and Standard diploma, every student must complete at least one additional experience, which could include: completing an AP, honors, or IB course, or earn a career and technical education credential approved by the RPS School Board. RPS offers students many options to fulfill this requirement through the opportunities outlined below.

Career & Technical Education Pathways at the Richmond Technical Center

In addition to the Career and Technical Education (CTE) courses offered at each RPS comprehensive high schools, all students may enroll in CTE courses that result in an industry credential and/or certification at the Richmond Technical Center (RTC) while still attending the majority of their courses at their home high school. RTC provides unique and meaningful hands-on learning opportunities that allow students to explore a passion while earning high school as well as college credit. The staff at RTC works in partnership with colleges and businesses/industries to provide entry-level experience that allows training and certification in preparation for active contribution to the global community. By enrolling in a CTE course or program, students learn the technical applications of many occupations while preparing for higher education or entry-level employment. Students can deeply study areas including Business and Information Technology, Family and Consumer Sciences, Health and Medical Sciences, Marketing, Technology, Engineering Education, and Trade and Industrial Education. Courses offered at RTC are available for all students.

Advanced Placement (AP)

RPS offers a wide range of Advanced Placement (AP) courses to all students at every high school. Though typically taken in 11th and 12th grade, students may enroll in these courses at any grade level so long as they meet course-specific prerequisites. All students who take an AP course are expected to take the AP exam at the end of the course; RPS will cover the cost of the exam. Students earning a qualifying score may earn college credit and, in some cases, the exams can be used as a substitute for the Standards of Learning (SOL) assessments. Institutions of higher learning have the opportunity to submit a waiver permitting them to award credit to students who score a 3 or higher on an AP exam. As a result, all students may not receive a college credit at all institutions of higher learning with such a score.

Special Programs within Schools

The Governor's Career and Technical Academy for STEM in RPS

The Governor's Career and Technical Academy for Science, Technology, Engineering, and Mathematics (STEM) offers RPS students a rigorous academic and technical program of study in two career pathways (Engineering and Technology and Therapeutic Services). Courses emphasize in-depth understanding, connect new ideas to prior knowledge, encourage exploration, and help students construct meaning from the course content.

The pathways are a combination of academic and technical study that integrate classroom and real-world learning. Hands-on project-based instruction is used in middle, summer, and high school program components.

Academy coursework, teacher professional development, academic support, career and college development activities, along with parent and community involvement create a community of STEM learners. The Academy raises student aspirations and attracts more students to postsecondary education in preparation for technical careers.

International Baccalaureate Diploma Programme at Thomas Jefferson High School

The International Baccalaureate (IB) Programme is a rigorous college preparatory program that is housed in Lucille Brown Middle School and Thomas Jefferson High School (TJHS). Students in grades six through ten are considered a part of the IB Middle Years Programme (IBMYP), and students in 11th and 12th grades are considered a part of the IB Diploma Programme (IBDP).

IBDP is designed as an academically rigorous and balanced program of education provided in 11th and 12th grade that prepares students for success at the university level and in life. Students participating in IBDP are expected to pursue the IB Diploma, complete all program requirements, and sit for the year-end examinations. Students earning a qualifying score may earn college credit and, in some cases, the exams can be used as a substitute for the SOL assessments. Students enter the IBDP program in 11th grade, and if not already a TJHS student, they can apply to attend TJHS through the specialty school application process that begins each fall. There is no cost to students for participating in this program.

Early College Academy at J. Sargent Reynolds Community College

The J. Sargent Reynolds Community College (JSRCC) Early College Academy (ECA) provides RPS high school students the opportunity to earn an Associate Degree while completing requirements for their high school diploma concurrently.

Students can apply to the JSRCC ECA program in the 10th grade through their school counseling office. Once accepted, students begin college coursework for the Associate Degree during their 11th and 12th grade year at the Downtown Campus of JSRCC (700 E. Jackson Street, Richmond, VA 23219). Classes are taught by JSRCC professors and are held in the morning Monday through Friday, after which students return to their school for the remainder of their high school classes. Transportation to and from the Reynolds campus and on-site breakfast is provided by RPS. The cost of this program is provided by RPS at no charge to students; however, students will be responsible for covering the cost of courses that have to be retaken due to failure to complete the course successfully.

Summer Residential Governor's School for Interdisciplinary Studies

The Summer Residential Governor's Schools (SRGS) offered by the Virginia Department of Education (VDOE) provide accelerated and highly motivated high school 11th and 12th graders rigorous and concentrated educational experiences in visual and performing arts; humanities; mathematics, science, and technology; or through mentorships in marine science, medicine, and health sciences, or engineering. Schools are provided by the commonwealth of Virginia; RPS students may apply to attend.

Each SRGS focuses on one special area of interest. Students live on a college or university campus for up to four weeks each summer. During this time, students are involved in classroom and laboratory work, field studies, research, individual and group projects and performances, and seminars with noted scholars, visiting artists, and other professionals. In the three mentorships, students are selected to work side-by-side with research scientists, physicians, and a variety of other professionals. A director and a student-life staff provide supervision of students 24 hours a day, throughout the program.

Nominations may be made by teachers, school counselors, peers, or by the students themselves. The RPS selection committee chooses the nominees and forwards the nominees to a state committee.

Consideration is given to students' academic records, test scores, extra-curricular activities, honors, and awards, creativity, original essays, and teacher recommendations. Students applying for the Visual and Performing Arts Summer Residential Governor's School participate in a statewide adjudication where they audition or present portfolios for review before a pair of professionals in the specific arts field. Because of the limited number of residential placements available, not all students who are nominated by their schools can be accepted for participation.

2019 Academic Programs (2020 locations to be confirmed Fall 2020)

- Agriculture – Virginia Tech, Blacksburg, VA
- Humanities – Radford University, Radford VA
- Mathematics, Science & Technology – University of Lynchburg, Lynchburg VA
- Medicine & Health Sciences – Virginia Commonwealth University, Richmond, VA
- Engineering – Christopher Newport University, Newport News, VA
- Marine Science – Christopher Newport University, Newport News, VA

2019 Visual & Performing Arts Programs (All located at Radford University, Radford, VA)

- Dance
- Instrumental Music
- Vocal Music
- Theatre
- Visual Arts

Alternative Education Offerings

Aspire Academy at Richmond Alternative Center

Aspire Academy is a non-traditional high school program located at the Richmond Technical Center (2020 Westwood Avenue, Richmond VA 23230). Aspire Academy provides students who are at risk of not graduating high school on time due to being over-age/under-credited. Aspire Academy affords students the opportunity to accelerate coursework, so they are able to obtain a high school diploma through a modified school schedule and blended-learning model, once they have met all graduation requirements.

Additionally, students also receive social/emotional supports as appropriate from the school social worker, therapeutic day treatment counselor, and/or mentor. Based on a review of the student's academic record and progress towards graduation, they may also have the option of enrolling in CTE courses, allowing them the opportunity to earn an industry certification in select areas.

Students can obtain admission to Aspire Academy through one of several routes, based on availability:

- A recommendation to apply made by the school counselor and/or principals
- A recommendation for placement by the Alternative Placement Review Committee

Spartan Academy at Richmond Alternative Center

Spartan Academy serves as a school to support students with academic, attendance, and behavior challenges. Students are either recommended for placement through a panel processor principal's referral. Students are considered for the transition back to their home school after a minimum period of 90 days. The transition occurs twice a year – once at the end of each semester. RPS has partnered with Camelot Educational Services to support the needs of our students. Spartan Academy uses norms to operate the program and leverages positive norms and positive student culture from the group to maintain a positive learning culture. All students are expected to promote a positive normative environment at Spartan Academy.

Performance Learning Center at the Richmond Technical Center (RTC)

The Performance Learning Center (PLC) at the Richmond Technical Center is a small, non-traditional high school geared towards students who are not succeeding in a traditional school setting.

The PLC incorporates Communities in Schools' (CIS) caring philosophy and approach that combines strong personal relationships between staff and students with an intense focus on academic achievement. A Services Coordinator, who is a CIS staff member, helps students with non-academic issues that may affect their ability to learn. The PLC serves high school students who are not succeeding in a traditional school setting and who typically lack interest in a traditional school environment and are seeking another learning option. Candidates for the PLC program are students who experience poor academic achievement, are chronically late or absent from school, and/or are at high risk of dropping out of school.

Students seeking to complete their high school degree at PLC should get a referral from the last high school they attended. The referral should include SOL scores, transcripts, report cards, and any other documentation pertaining to high school credits already earned. Adults seeking to complete their diploma requirements must be residents of the City of Richmond and will need to provide an official transcript from the last high school they attended. PLC nor RTC do not award the high school diploma; instead, students receive diplomas from their zoned comprehensive high school.

All students referred to the PLC program must apply for admission and interview with a selection panel. During the selection process, students will be given the Basic Assessment Skills Inventory (BASI) test. Students must perform at the 8th-grade reading level on the BASI test to be admitted to the program. All applications must be sent to the PLC office. The PLC-RTC Academic Coordinator will contact each student regarding the application process.

Graduation & Post-Secondary Preparation

All RPS students should graduate from high school with exciting, promising, and concrete plans for their post-secondary life, with plans to either enroll in college, enlist in national service, and/or have a viable offer of employment to earn a living wage. Essential to this goal is that students engage with their families and counselors to plan an academic path that aligns to their post-secondary plans and do so in a way that ensures they have options from which they are prepared to choose. This is the heart of conversations in high school among educators, students, and families.

Academic & Career Plan

An essential step for every student in preparing for their future is completing an academic and career plan. This plan should be initially created in middle school and updated on an annual basis as part of monitoring progress towards high school graduation and preparation for post-secondary plans. Completing and updating an academic and career plan is required for every student. The purpose of this process is to:

- Assess personal interests as they relate to career decisions;
- Establish short-term and long-term education/career goals;
- Formulate thoughtful educational plans that reflect rigorous academics in their chosen career directions;

- Participate in electives, extra-curricular activities, and community service projects supporting their career directions; and
- Identify experiences such as internships or cooperative work experiences during grades 11 and/or 12 that align to student's goals.

As students mature and develop new skills, they may modify their career plan to reflect their new interests and goals. The career interest inventories and activities the students complete during middle and high school utilize the 16 career clusters from the VDOE.

Future Centers

In addition to the annual counseling and planning that occurs throughout the Academic and Career Planning process, each comprehensive high school has a Future Center open to all students. The Future Centers offer an exciting opportunity aimed at increasing the number of RPS graduates accessing quality post-secondary opportunities by providing a strong system of support, information, and assistance to students and families. The long-term vision of the Future Centers is to provide meaningful non-financial and financial support to all RPS high school students, before, during, and after graduation, to bolster students' long-term educational and economic success after high school. This is a collaborative initiative between the City of Richmond (via the Mayor's Office of Community Wealth Building), RPS, and the Richmond Public Schools Education Foundation.

Graduation Requirements

Students in Virginia have the option to earn an Advanced Studies or Standard Diploma. Some students with disabilities may qualify for credit accommodations towards the Standard Diploma. Additionally, certain students who have Individualized Education Plans may meet the eligibility criteria for an Applied Studies Diploma.

It is the choice of every student and family to decide whether to pursue an Advanced Studies or Standard Diploma.

This section outlines the graduation requirements at a glance. Students and families are encouraged to visit the [VDOE website](#) and contact their school counselor for more information.

To graduate with an Advanced Studies or Standard Diploma, students must earn standard units of credit in specific content areas, as well as verified units of credit in specific content areas. Students earn standard credits by successfully completing required and elective courses. Students earn verified credits by successfully completing required courses and passing associated end-of-course SOL tests or other assessments approved by the State Board of Education. There are additional requirements for graduation, such as earning an industry credential or earning credits in sequential electives. Refer to the details below, based on the year of entry into high school for specific requirements.

Standard Credits are earned by earning a passing grade in a state or locally approved course. The majority of courses offered by RPS are equal to 1.0 course credit, though select courses may be offered that earn 2.0 course credits or a 0.5 course credit.

Verified Credits are earned by passing a SOL assessment after successfully completing a qualifying course. Students in such situations can retake the SOL test following a period of time after receiving remediation.

In certain situations, students may be eligible to earn a **Locally-Awarded Verified Credit (LAVC)** after having failed a SOL exam twice but earning a score in the range of 375-399 on at least one administration. Please see the Addendum of this document for more information on eligibility and process for earning LAVCs.

As permitted by the Standards for Accrediting Public Schools (8VAC20-131-110), the Virginia Board of Education has approved various "substitute" tests and set the minimum score that must be achieved to award verified credit to

students. The tests listed in this document are approved by the Virginia Board of Education as substitute tests, and a verified credit can be awarded when the student achieves at least the minimum score required for a Pass/Proficient rating adopted by the Virginia Board of Education.

While students may submit other tests on the state-approved substitute test list for verified credit with proper documentation, RPS does not cover the cost or administration of those tests. RPS provides students the following substitute tests and supports the cost and administration of these tests for use as a substitute to the SOL test to earn a verified credit. In the Course Descriptions section of this document, courses that may result in a verified credit as a result of a student earning a minimum score on a substitute test include “(Eligible for Verified Credit)” under the course title.

RPS Supported Substitute Tests for Verified Credits

English End-of-Course Substitute Tests

<i>SOL Test</i>	<i>Substitute Test</i>
Writing	AP English Language & Composition+
Writing	AP Literature & Composition+
Writing	IB English Language A: Literature & Language (HL)+
Writing	IB English Language A: Literature (SL)+
Writing	SAT Writing and Literacy AND Essay Writing Test
Writing	Test of English as a Foreign Language (TOEFL) Internet-based Test (iBT) Writing Sub-Score+
Reading	AP English Language & Composition+
Reading	AP Literature & Composition+
Reading	IB English Language A: Literature & Language (SL)+
Reading	IB English Language A: Literature & Language (HL)+
Reading	IB English Language A: Literature (SL)+
Reading	IB English Language A: Literature (HL)+
Reading	PSAT/NMSQT
Reading	SAT Reading Test
Reading	Test of English as a Foreign Language (TOEFL) Internet-based Test (iBT) Reading Subtest+
Reading	ACT WorkKey Reading for Information++

+Students may use this test to earn two verified credits in English

++May only be used for “term-grads” who have attempted the SOL at least twice.

Mathematics End-of-Course Substitute Tests

<i>SOL Test</i>	<i>Substitute Test</i>
Algebra I	AP Calculus+
Algebra I	IB Math Studies (SL)+
Algebra I	IB Mathematics (SL)+
Algebra I	IB Mathematics (HL)+
Algebra I	PSAT/NMSQT
Algebra I	SAT Math Test
Algebra II	AP Calculus+
Algebra II	IB Math Studies (SL)+
Algebra II	IB Mathematics (SL)+
Algebra II	IB Mathematics (HL)+
Geometry	AP Calculus+
Geometry	IB Math Studies (SL)+

Geometry	IB Mathematics (SL)+
Geometry	IB Mathematics (HL)+

+Students may use this test to earn two verified credits in mathematics

History & Social Science End-of-Course Substitute Tests

<i>SOL Test</i>	<i>Substitute Test</i>
VA & US History	AP US History
VA & US History	IB US History (HL)
World History and Geography to 1500	AP World History
World History and Geography to 1500	AP European History
World History and Geography 1500-Present	IB History of Europe
World History and Geography 1500-Present	AP World History
World Geography	AP Human Geography
World Geography	IB Geography Test

Science End-of-Course Substitute Tests

<i>SOL Test</i>	<i>Substitute Test</i>
Earth Science	IB Environmental Systems and Society (SL)
Earth Science	AP Environmental Science
Biology	AP Biology
Biology	IB Biology (HL)
Biology	IB Biology (SL)
Chemistry	AP Chemistry
Chemistry	IB Chemistry (HL)
Chemistry	IB Chemistry (SL)

Graduation Course Requirements for Students Entering the Ninth Grade for the First Time in 2018-2019 and Beyond

Advanced Studies Diploma Requirements: Coursework & Verified Credits

Subject Areas	Course Credits	Verified Credits	Notes
English	4	2	Students are required to earn one verified credit in reading and one in writing.
Mathematics	4	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 Virginia Board of Education shall approve courses to satisfy this requirement. Per the Standards of Quality, certain computer science courses credit earned by students may be considered a mathematics course credit based on guidelines outlined by the Virginia Board of Education.
Laboratory Science	4	1	Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: Earth Sciences, Biology, Chemistry, or Physics or completion of the sequence of science courses required for the International Baccalaureate Diploma and shall include interdisciplinary courses that incorporate Standards of Learning content from multiple academic areas. The Virginia Board of Education shall approve additional courses to satisfy this requirement. Per the Standards of Quality, certain computer science courses credit earned by students may be considered a science course credit based on guidelines outlined by the Virginia Board of Education.
History & Social Sciences	4	1	Courses completed to satisfy this requirement shall include Virginia and U.S. History, Virginia and U.S. Government, and two courses in either world history or geography or both. The board shall approve additional courses to satisfy this requirement.
World Language	3	0	Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.
Health & Physical Education	2	0	
Fine Arts or Career & Technical Education	1	0	Per the Standards of Quality, a computer science course credit earned by students may be considered a career and technical credit.
Economics & Personal Finance	1	0	
Electives	3	0	Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.
Total	26	5	

Advanced Studies: Additional Requirements for Graduation

- **Advanced Placement, Honors, or International Baccalaureate Course or Career and Technical Education Credential** - In accordance with the Standards of Quality, students shall either (i) complete an Advanced Placement, honors, or International Baccalaureate course or (ii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the Advanced Studies Diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.
- **Virtual Course** - Students shall successfully complete one virtual course, which may be a non-credit-bearing course or a required or elective credit-bearing course that is offered online.
- **Training in emergency first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators (AED)** - Students shall be trained in emergency first aid, CPR, and the use of AED, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an IEP or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in [8VAC20-131-420 B](#).
- **Demonstration of the five Cs** - Students shall acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication, and citizenship in accordance with the Profile of a Virginia Graduate approved by the board.

Standard Diploma Requirements: Coursework & Verified Credits

Subject Areas	Course Credits	Verified Credits	Notes
English	4	2	Students are required to earn one verified credit in reading and one in writing.
Mathematics	3	1	Courses completed to satisfy this requirement shall include at least two different course selections from among: Algebra I, Geometry, Algebra Functions, and Data Analysis, Algebra II, or other mathematics courses approved by the Virginia Board of Education to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit.
Laboratory Science*	3	1	<p>Courses completed to satisfy this requirement shall include course selection from at least two different science disciplines: Earth Sciences, Biology, Chemistry, or Physics, or completion of the sequence of science courses required for the International Baccalaureate Diploma and shall include interdisciplinary courses that incorporate Standards of Learning content from multiple academic areas. The Virginia Board of Education shall approve courses to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a science course credit</p> <p>*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 either a laboratory 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.</p>

History & Social Sciences*	3	1	<p>Courses completed to satisfy this requirement shall include Virginia and U.S. history, Virginia and U.S. government, and one course in either world history or geography or both. The Virginia Board of Education shall approve courses to satisfy this requirement.</p> <p>*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 either a laboratory 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.</p>
Health & Physical Education	2	0	
Fine Arts or Career & Technical Education	1	0	Per the Standards of Quality, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education. Per the Standards of Quality, a computer science course credit earned by students may be considered a career and technical credit.
Economics & Personal Finance	1	0	
Electives	4	0	Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.
Total	22	5	

Additional Requirements for Graduation

- **Advanced Placement, Honors, or International Baccalaureate Course or Career and Technical Education Credential** - In accordance with the Standards of Quality, students shall either (i) complete an Advanced Placement, honors, or International Baccalaureate course or (ii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the Advanced Studies Diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.
- **Virtual Course** - Students shall successfully complete one virtual course, which may be a non-credit-bearing course or a required or elective credit-bearing course that is offered online.
- **Training in emergency first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators (AED)** - Students shall be trained in emergency first aid, CPR, and the use of AED, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an IEP or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in [8VAC20-131-420 B](#).
- **Demonstration of the five Cs** - Students shall acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication, and citizenship in accordance with the Profile of a Virginia Graduate approved by the board.

Graduation Course Requirements for Students Entering the Ninth Grade for the First Time in 2011-2012 through 2017-2018

Advanced Studies Diploma Requirements: Coursework & Verified Credits

Subject Areas	Course Credits	Verified Credits	Notes
English	4	2	Students are required to earn one verified credit in reading and one in writing.
Mathematics	4	2	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 Virginia Board of Education shall approve courses to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit.
Laboratory Science	4	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 Virginia Board of Education shall approve additional courses to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a science course credit.
History & Social Sciences	4	2	Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and two courses in either world history or geography or both. The board shall approve additional courses to satisfy this requirement.
World Language	3	0	Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.
Health & Physical Education	2	0	
Fine Arts or Career & Technical Education	1	0	Per the Standards of Quality, a computer science course credit earned by students may be considered a career and technical education course credit.
Economics & Personal Finance	1	0	
Electives	3	0	
Student Selected Test	0	1	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 8VAC20-131-110 .
Total	26	9	

Additional Requirements for Graduation

- **Virtual Learning** - Students shall successfully complete one virtual course, which may be a non-credit-bearing course, or may be a course required to earn this diploma that is offered online.
- **Training in emergency first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators (AED)** - Beginning with first-time ninth-grade students in the 2016–2017 school year, students shall 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. Students with an IEP or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in [8VAC20-131-420 B](#).

Standard Diploma Requirements: Coursework & Verified Credits

Subject Areas	Course Credits	Verified Credits	Notes
English	4	2	Students are required to earn one verified credit in reading and one in writing.
Mathematics	3	1	Courses completed to satisfy this requirement shall include at least two different course selections from among: Algebra I, Geometry, Algebra Functions and Data Analysis, Algebra II, or other mathematics courses above the level of Algebra II. The board shall approve courses to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit.
Laboratory Science	3	1	<p>Courses completed to satisfy this requirement shall include course selections from at least two different science disciplines: Earth Sciences, Biology, Chemistry, or Physics, or completion of the sequence of science courses required for the International Baccalaureate Diploma. The board shall approve courses to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a science course credit.</p> <p>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 either a laboratory 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.</p>
History & Social Sciences	2	1	<p>Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and one course in either world history or geography or both. The board shall approve courses to satisfy this requirement.</p> <p>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</p>

			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 either a laboratory 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.
Health & Physical Education	2	0	
Fine Arts or Career & Technical Education	1	0	Pursuant to §22.1-253.13:4 of the Code of Virginia, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education. Per the Standards of Quality, a computer science course credit earned by students may be considered a career and technical education course credit.
Economics & Personal Finance	1	0	
Electives	4	0	Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.
<i>Student Selected Test</i>	0	1	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 8VAC20-131-110 .
Career & Technical Education Credential	0	0	Students shall earn a career and technical education credential approved by the Board of Education, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the standard diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.
Total	22	6	

Additional Requirements for Graduation:

- **For students entering the ninth-grade class for the first time in 2013-2014 and beyond:** Students shall successfully complete one virtual course, which may be a noncredit-bearing course or a required or elective credit-bearing course that is offered online.
- **For students entering the ninth-grade class for the first time in 2016-2017 and beyond:** Students shall 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. Students with an Individualized Education Program (IEP) or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in [8VAC20-131-420 B](#).

Diploma Seals

Students meeting specific requirements for graduation and demonstrating exemplary performance may receive diploma seals for recognition. VDOE makes available to local school divisions the seals listed below.

Updated information on available diploma seals, requirements, and ordering is now available in [Superintendent's Memo #055-19](#) and [Attachment A: Class of 2019 Diploma Seal Request Form](#). Students meeting specific requirements for graduation and demonstrating exemplary performance may receive diploma seals for recognition ([8VAC20-131-50](#) and [8VAC20-131-51](#) of the [Standards of Accreditation](#)).

GOVERNOR'S SEAL

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

BOARD OF EDUCATION SEAL

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

BOARD OF EDUCATION'S CAREER & TECHNICAL EDUCATION SEAL

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

- Earn a Standard or Advanced Studies Diploma and complete a prescribed sequence of courses in a career and technical education concentration or specialization that they choose and maintain a "B" or better average in those courses

OR

- Pass an examination or an occupational competency assessment in a career and technical education concentration or specialization that confers certification or occupational competency credential from a recognized industry, trade or professional association

OR

- Acquire a professional license in that career and technical education field from the Commonwealth of Virginia.

BOARD OF EDUCATION'S DIPLOMA SEAL FOR SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM)

The Board of Education's STEM Seal shall be awarded to students who earn either a Standard Diploma or an Advanced Studies Diploma, satisfy all Math and Science requirements for the Advanced Studies diploma with a "B" average or better in all course work, successfully complete a 50 hour or more work-based learning opportunity in a STEM area, satisfy all requirements for a Career and Technical Education concentration, (a concentration is a coherent sequence of two or more state-approved courses as identified in the course listing within the [CTE Administrative Planning Guide](#)), and pass one of the following: a Board of Education CTE STEM-H credential examination, or an examination approved by the Board that confers a college-level credit in a STEM field.

BOARD OF EDUCATION'S ADVANCED MATHEMATICS & TECHNOLOGY SEAL (available for students entering high school prior to 2018-2019)

The Board of Education's Advanced Mathematics & Technology Seal is awarded to students who earn either a Standard or Advanced Studies Diploma and 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 either pass an examination in a career and technical education field that confers certification from a recognized industry, trade or professional association or acquire a professional license in a career and technical education field from the Commonwealth of Virginia or pass an examination approved by the board that confers college-level credit in a

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

BOARD OF EDUCATION'S EXCELLENCE IN CIVICS EDUCATION SEAL

The Board of Education's Excellence in Civics Education Seal is awarded to students who meet each of the following four criteria:

1. Satisfy the requirement to earn a Standard Diploma or an Advanced Studies Diploma and complete Virginia & United States History and Virginia & United States Government courses with a grade of "B" or higher, have good attendance and no disciplinary infractions as determined by local school board policies, and complete 50 hours of voluntary participation in community service or extracurricular activities, such as:
 - 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; participating in Junior Reserve Officer Training Corps (JROTC);
 - c. participating in political campaigns, government internships, Boys State, Girls State, or Model General Assembly; or
 - d. 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. Have good attendance and no disciplinary infractions as determined by local school board policies.

BOARD OF EDUCATION'S SEAL OF BILITERACY

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

1. Pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level
2. Demonstrate proficiency at the intermediate-mid level or higher in one or more languages other than English as demonstrated through an assessment from a list approved by the Superintendent of Public Instruction. American Sign Language qualifies as a language other than English.

BOARD OF EDUCATION'S SEAL FOR EXCELLENCE IN SCIENCE AND THE ENVIRONMENT

The Board of Education's Seal for Excellence in Science and the Environment is awarded to students who enter the ninth grade for the first time in the 2018-2019 year and thereafter, and meet each of the following criteria:

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

State Assessment Program

End-of-course SOL tests that are available are listed in the chart below. All students enrolled in a course that has a SOL test must take the test until they have met their verified credit requirement for that subject area and met the federal accountability requirements.

END-OF-COURSE STANDARDS OF LEARNING TESTS AVAILABLE FOR EARNING VERIFIED CREDITS			
ENGLISH*	MATHEMATICS	LABORATORY SCIENCE	SOCIAL STUDIES
Reading	Algebra I	Earth Science	World History to 1500 A.D.
Writing	Geometry**	Biology***	World History from 1500 A.D.
	Algebra II	Chemistry	World Geography
			Virginia and U.S. History

**Students should have completed course instruction in the SOL for English 9, 10, and 11 before attempting the EOC Reading and Writing tests.*

***Students who completed Algebra I in middle school will take the Geometry or the Algebra II SOL EOC test in high school to meet federal accountability requirements; those that take Geometry in middle school will take Algebra II SOL EOC test in high school to meet federal accountability requirements.*

****All students who take Biology will take the Biology SOL EOC test to meet federal accountability requirements even if they have already met the requirement for Verified Credits in Science.*

Student-Selected Verified Credit

A student-selected test for verified credit may come from any end of course SOL test that is not already satisfying a required verified credit or from tests in computer science, technology, or other areas as prescribed by the Virginia Board of Education. (See the [Substitute Tests section](#) of the VDOE website)

Student-selected tests may also come from the successful completion of a CTE concentration sequence (equivalent to two 36-week courses) in combination with a passing score on a Virginia Board of Education approved industry credential. (See [Virginia Board of Education Approved Industry Certifications section](#) of the VDOE website)

One student-selected verified credit may be awarded for passing one certification or licensure examination when the student earns one standard unit of credit in a CTE concentration.

Two student-selected verified credits may be awarded for students who complete a CTE concentration and pass two certifications or licensure examinations. In accordance with [8VAC20-131-50. B](#), requirements for the Standard Diploma (effective for students entering 9th grade prior to the 2018-2019 school year), the CTE industry certification verified credit requirement must first be substituted for the student-selected test. The second industry certification may be substituted for either a laboratory science or history and social sciences verified credit. Any one certification or licensure examination identified in this document will satisfy the Standard Diploma graduation requirement for the CTE credential. Per [8VAC20-131-50. C](#), students pursuing the Advanced Studies Diploma 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 [8VAC20-131-110](#).

In accordance with [8VAC20-131-51. B](#), requirements for the Standard Diploma (effective with the students who enter the ninth grade in the 2018-2019 school year and beyond), students who complete a CTE program sequence and pass more than one industry certification may substitute it for either a laboratory 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 Virginia Board of Education as an additional test to verify student achievement.

Credit Accommodations

Certain students with disabilities under the Individuals with Disabilities Education Act (IDEA) or Section 504 of the Rehabilitation Act of 1973 may be eligible for credit accommodations. Credit accommodations provide alternatives for students with disabilities in earning the standard and verified credits required to graduate with a Standard Diploma. Credit accommodations for the Standard Diploma shall be determined by the student's Individualized Education Program (IEP) or Section 504 team, including the student where appropriate, at any point after the student's eighth grade year. The school must secure the informed written consent of the parent/guardian and the student, as appropriate, to choose credit accommodations after review of the student's academic history and full disclosure of the student's options.

Students must meet the following criteria to be eligible to receive credit accommodations for the Standard Diploma:

- Student must have a current IEP or Section 504 plan with standards-based content goals.
- Student has a disability that precludes him or her from achieving and progressing commensurate with grade level expectations but is learning on grade level content.
- Student needs significant instructional supports to access grade level SOL content and to show progress.
- Based on multiple objective measures of past performance, student might not be expected to achieve the required standard and verified units of credit within the standard time frame.

Applied Studies Diploma (Other)

For students for whom a Standard Diploma or Advanced Studies Diploma is not a viable option, a student with a disability may pursue an Applied Studies Diploma if designated through a student's IEP.

Additional information regarding graduation requirements can be found at the VDOE website:

- [Advanced Studies Diploma](#)
- [Standard Diploma](#)
- [Applied Studies](#)
- [Credit Accommodations](#)
- [General Education Development Certificates \(GED\)](#)
- [Diploma Seals](#)

Post-Secondary Assessments

RPS provides access to certain assessments needed for an array of post-secondary preparation and enrollment. The following tests are available to students of RPS either as a requirement for high school graduation, college admissions and/or placement, scholarships, industry credentials, or NCAA Eligibility.

RPS provides and supports the administration of the following assessments for all students:

PSAT/NMSQT

The Preliminary SAT/National Merit Scholarship Qualifying Test is a co-sponsored program by the College Board and National Merit Scholarship Corporation (NMSC). The PSAT is a standardized test that provides first-hand practice for the

SAT. It also gives students a chance to enter the National Merit Scholarship program. The PSAT measures critical reading skills, critical reasoning skills, math problem-solving skills and writing skills. These are skills that students acquire over many years, both in and out of school, and do not require recall of specific facts. RPS expects all students in the 10th grade to take the PSAT and provides the exam free of charge to students. RPS encourages students in the 11th grade to take the PSAT again as preparation for the SAT.

Beginning in SY2019-20, all RPS high school students will take the PSAT annually in grades 9, 10, and 11 at no cost to students. The PSAT will enable students and families to understand their progress towards college and career readiness.

SAT

The Scholastic Aptitude Test (SAT) is a standardized test designed to assess a high school student’s readiness for post-secondary opportunities. The SAT is also used by many college/universities as part of their application process. Though traditionally taken only by students who plan to attend college, RPS provides the SAT during the school day each spring for every 11th-grade student. All 11th-graders are expected to take the exam, as the results provide important information to RPS as to the readiness of our students for their future.

ACT

The ACT is a national college admissions examination that consists of subject area tests in English, Mathematics, Reading, and Science. The ACT with writing includes the four subject area tests plus a 40-minute writing test. The exams are curriculum-based achievement tests that measure what a student has learned in school. ACT results are accepted by all four-year colleges and universities in the United States.

ASVAB (Armed Services Vocational Battery)

RPS encourages and supports students in taking the ASVAB, which is required for enlisting in national military service.

Summary of College and Career Readiness Assessments

Grade Level	Fall	Spring
9th	PSAT 8/9 (All students)	
10th	PSAT 10 (All students)	
11th	PSAT/NMSQT (All students)	SAT School Day (All students)
12th	ACT* SAT*	ACT* SAT*

*If students choose to take the ACT or the SAT more than once, in addition to the test administered on the SAT School Day, that cost will be incurred by the student and the student is responsible for registration (their counselor can provide fee waivers and registration support).

Course Listings

Richmond Public Schools believes all coursework should be challenging and relevant for students and all students should have access to rigorous programs. In addition to our standard courses, we offer courses that have increased levels of rigor that include Honors, International Baccalaureate (IB), Dual Enrollment (DE), and Advanced Placement (AP). Courses such as IB, DE, and AP have specific rigorous curriculum determined by external organizations. Honors level courses have a similar curriculum as our standard courses, though students should expect the following aspects that increase the rigor: increased complexity in texts, increased analysis in oral and written communication, in-depth investigations, advanced research expectations, and incorporation of independent study. Advanced courses, including Honors classes are open and available to all students. Advanced courses, such as IB, AP and DE, have distinct descriptions herein.

Applied Studies

Applied Studies English 9 (Course Number – B01009-I; VA Assignment Code – N/A)

0 Credit

This course is reduced in depth and complexity for students who are unable to participate in the general education classes due to the severity of their disabilities. This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will include engagement with texts including building, demonstrating understanding and utilizing various texts to solve problems and meet the needs of adult life. Applied Studies English Course curricula will provide for a differentiated learning sequence that increases in depth and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Applied Studies English 10 (Course Number – B01009-II; VA Assignment Code – N/A)

0 Credit

This course is reduced in depth and complexity for students who are unable to participate in the general education classes due to the severity of their disabilities. This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will include engagement with texts including building, demonstrating understanding and utilizing various texts to solve problems and meet the needs of adult life. Applied Studies English Course curricula will provide for a differentiated learning sequence that increases in depth and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Applied Studies English 11 (Course Number – B01009-III; VA Assignment Code – N/A)

0 Credit

This course is reduced in depth and complexity for students who are unable to participate in the general education classes due to the severity of their disabilities. This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will include engagement with texts including building, demonstrating understanding and utilizing various texts to solve problems and meet the needs of adult life. Applied Studies English Course curricula will provide for a differentiated learning sequence that increases in depth and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Applied Studies English 12 (Course Number – B01009-IV; VA Assignment Code – N/A)

0 Credit

This course is reduced in depth and complexity for students who are unable to participate in the general education classes due to the severity of their disabilities. This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will include engagement with texts including building, demonstrating understanding and utilizing various texts to solve problems and meet the needs of adult life. Applied Studies English Course curricula will provide for a differentiated learning sequence that increases in depth

and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Reading Comprehension I (Course Number – B01067-I; VA Assignment Code – N/A) [To be developed for SY2020-21]

0 Credit

This course is designed to provide direct, explicit and intensive reading instruction to students who are reading two or more years below grade level. Basic objectives of this reading course are focused on closing the gap between the student's present level of performance and the level of performance needed to successfully access the general education curriculum. Instructional targets consist of increasing students decoding, fluency, and comprehension skills when reading fiction and nonfiction text.

Graduation Requirements: N/A

Prerequisites: None

Reading Comprehension II (Course Number – B01067-II; VA Assignment Code – N/A) [To be developed for SY2020-21]

0 Credit

This course is designed to offer continued instruction in decoding, fluency, and comprehension skills to assist students in closing the gap between their present level of performance and the level of performance needed to successfully access the general education curriculum. Emphasis will be placed on the expansion of vocabulary and fluent reading across all content areas.

Graduation Requirements: N/A

Prerequisites: None

Applied Studies Mathematics 9 (Course Number – B02002-I; VA Assignment Code – N/A)

0 Credit

This course is reduced in depth and complexity for students who are unable to participate in the general education classes due to the severity of their disabilities. This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will include the utilization of mathematical concepts to coordinate and plan daily activities as well as using mathematical concepts to accomplish tasks and solve real-world problems. Applied Studies Math Course curricula

will provide for a differentiated learning sequence that increases in depth and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Applied Studies Mathematics 10 (Course Number – B02002-II; VA Assignment Code – N/A)

0 Credit

This course is reduced in depth and complexity for students who are unable to participate in the general education classes due to the severity of their disabilities. This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will include the utilization of mathematical concepts to coordinate and plan daily activities as well as using mathematical concepts to accomplish tasks and solve real-world problems. Applied Studies Math Course curricula will provide for a differentiated learning sequence that increases in depth and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Applied Studies Mathematics 11 (Course Number – B02002-III; VA Assignment Code – N/A)

0 Credit

This course is reduced in depth and complexity for students who are unable to participate in the general education classes due to the severity of their disabilities. This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will include the utilization of mathematical concepts to coordinate and plan daily activities as well as using mathematical concepts to accomplish tasks and solve real-world problems. Applied Studies Math Course curricula will provide for a differentiated learning sequence that increases in depth and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Applied Studies Mathematics 12 (Course Number – B02002-IV; VA Assignment Code – N/A)**0 Credit**

This course is reduced in depth and complexity for students who are unable to participate in the general education classes due to the severity of their disabilities. This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will include the utilization of mathematical concepts to coordinate and plan daily activities as well as using mathematical concepts to accomplish tasks and solve real-world problems. Applied Studies Math Course curricula will provide for a differentiated learning sequence that increases in depth and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Applied Studies Science 9 (Course Number – B03239-I; VA Assignment Code – N/A)**0 Credit**

This course is reduced in depth and complexity for students who are unable to participate in the general education classes due to the severity of their disabilities. This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will include the use of classification methods to organize information, conservation of natural resources and application of scientific knowledge across multiple areas of scientific inquiry. Applied Studies Science Course curricula will provide for a differentiated learning sequence that increases in depth and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Applied Studies Science 10 (Course Number – B03239-II; VA Assignment Code – N/A)**0 Credit**

This course is reduced in depth and complexity for students who are unable to participate in the general education classes due to the severity of their disabilities. This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will

include the use of classification methods to organize information, conservation of natural resources and application of scientific knowledge across multiple areas of scientific inquiry. Applied Studies Science Course curricula will provide for a differentiated learning sequence that increases in depth and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Applied Studies Science 11 (Course Number – B03239-III; VA Assignment Code – N/A)**0 Credit**

This course is reduced in depth and complexity for students who are unable to participate in the general education classes due to the severity of their disabilities. This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will include the use of classification methods to organize information, conservation of natural resources and application of scientific knowledge across multiple areas of scientific inquiry. Applied Studies Science Course curricula will provide for a differentiated learning sequence that increases in depth and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Applied Studies Science 12 (Course Number – B03239-IV; VA Assignment Code – N/A)**0 Credit**

This course is reduced in depth and complexity for students who are unable to participate in the general education classes due to the severity of their disabilities. This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will include the use of classification methods to organize information, conservation of natural resources and application of scientific knowledge across multiple areas of scientific inquiry. Applied Studies Science Course curricula will provide for a differentiated learning sequence that increases in depth and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Applied Studies History and Social Science 9 (Course Number – B04439-I; VA Assignment Code – N/A)

0 Credit

This course is reduced in depth and complexity for students who are unable to participate in the general education classes due to the severity of their disabilities.

This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will include understanding of basic values principles and operation of government and other organizations. Additional focus areas for instruction will include, economics, civil and legal rights, map skills and interpersonal communication and relationships. Applied Studies History/Social Science Course curricula will provide for a differentiated learning sequence that increases in depth and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Applied Studies History and Social Science 10 (Course Number – B04439-II; VA Assignment Code – N/A)

0 Credit

This course is reduced in depth and complexity for students who are unable to participate in the general education classes due to the severity of their disabilities.

This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will include understanding of basic values principles and operation of government and other organizations. Additional focus areas for instruction will include, economics, civil and legal rights, map skills and interpersonal communication and relationships. Applied Studies History/Social Science Course curricula will provide for a differentiated learning sequence that increases in depth and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Applied Studies History and Social Science 11 (Course Number – B04439-III; VA Assignment Code – N/A)

0 Credit

This course is designed for students who are expected to meet grade level curriculum standards in Health and Physical Education 9 but who are unable to participate in the general education classes due to the severity of their disabilities. This course will follow the description for general education Health and Physical Education 9 as closely as possible while meeting the student's identified

education classes due to the severity of their disabilities.

This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will include understanding of basic values principles and operation of government and other organizations. Additional focus areas for instruction will include, economics, civil and legal rights, map skills and interpersonal communication and relationships. Applied Studies History/Social Science Course curricula will provide for a differentiated learning sequence that increases in depth and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Applied Studies History and Social Science 12 (Course Number – B04439-IV; VA Assignment Code – N/A)

0 Credit

This course is reduced in depth and complexity for students who are unable to participate in the general education classes due to the severity of their disabilities.

This course will be aligned to the competencies in the Applied Studies Curriculum Map while meeting the student's identified learning needs according to the individualized education program (IEP). Instruction will include understanding of basic values principles and operation of government and other organizations. Additional focus areas for instruction will include, economics, civil and legal rights, map skills and interpersonal communication and relationships. Applied Studies History/Social Science Course curricula will provide for a differentiated learning sequence that increases in depth and complexity each year based on individual student progress and data.

Graduation Requirements: N/A

Prerequisites: None

Adaptive Health and Physical Education 9 (Course Number – 08049-I; VA Assignment Code – N/A)

0 Credit

This course is designed for students who are expected to meet grade level curriculum standards in Health and Physical Education 9 but who are unable to participate in the general education classes due to the severity of their disabilities. This course will follow the description for general education Health and Physical Education 9 as closely as possible while meeting the student's identified

learning needs according to the individualized education program (IEP).

Graduation Requirements: N/A

Prerequisites: None

Adaptive Health and Physical Education 10 (Course Number – 08049-II; VA Assignment Code – N/A)

0 Credit

This course is designed for students who are expected to meet grade level curriculum standards in Health and Physical Education 10 but who are unable to participate in the general education classes due to the severity of their disabilities. This course will follow the description for general education Health and Physical Education 10 as closely as possible while meeting the student's identified learning needs according to the individualized education program (IEP).

Graduation Requirements: N/A

Prerequisites: None

Communication Instruction (Course Number – 22252; VA Assignment Code – N/A) [To be developed for SY2020-21]

0 Credit

This course is designed to assist students with communicating thoughts and ideas to others. Emphasis will be placed on the development of listening, speaking, reading, and writing skills. In addition students will have an opportunity to learn, practice, and refine the skills, knowledge, and attitudes identified as necessary for self-advocacy and determination students.

Graduation Requirements: N/A

Prerequisites: None

Community Living Skills (Course Number – 22251; VA Assignment Code – N/A) [To be developed for SY2020-21]

0 Credit

This course is designed for students to explore independent living and workplace skills by identifying individual assets, interests, aptitudes, talents, and current occupational abilities. Through practical experiences related to daily living and work, students determine strategies to improve their assets and ways to emphasize their strengths at home, school, and in the workplace

Graduation Requirements: N/A

Prerequisites: None

Cooperative Work Experience CO-WEP I (Course Number – 19154-I; VA Assignment Code – N/A) [To be developed for SY2020-21]

0 Credit

This course is designed for students to gain entry-level skills for employment. Students will develop work competencies through career exploration, decision making, and preparation for employment in a combination of classroom instruction and work experiences. Work experiences will be within the school or community site and will be planned, supervised, and evaluated by the CO-WEP Teachers.

Graduation Requirements: N/A

Prerequisites: None

Cooperative Work Experience CO-WEP II (Course Number – 19154-II; VA Assignment Code – N/A) [To be developed for SY2020-21]

0 Credit

This course is designed for students to examine employment regulations, employee-employer expectations, and continue to develop overall skills that are needed to obtain and retain employment. Students will participate in classroom instruction and complete supervised on-the-job training at work sites located within the community. Students will be supervised, and evaluated by the CO-WEP teacher.

Graduation Requirements: N/A

Prerequisites: None

Multi-Sensory Structured Language I (Course Number – B01068-I; VA Assignment Code – N/A)

0 Credit

This course is designed for students whose decoding and word recognition skills test below grade level, but who are able to comprehend grade level material when it is read aloud and discussed in general education classes. Reading fluency and word analysis will be emphasized using multi-sensory methods. Students will practice skills learned using select contact materials.

Graduation Requirements: N/A

Prerequisites: None

Multi-Sensory Structured Language II (Course Number – B01068-II; VA Assignment Code – N/A)

0 Credit

This course is designed for students whose decoding and word recognition skills are two or more years below grade

level, but who are able to comprehend grade level material when it is read aloud and discussed. Word analysis will be taught using multi-sensory methods. Students will practice skills learned using selected content materials. Students enrolled in this course should have successfully completed Multisensory Structured Language I.

Graduation Requirements: N/A

Prerequisites: None

Social Development Instruction (Course Number – 22253; VA Assignment Code – N/A)

0 Credit

This course is designed to provide instruction in the areas of time management, study and communication skills. Emphasis will be placed on building peer relationships, self-management, self-advocacy, and academic skills.

Graduation Requirements: N/A

Prerequisites: None

Career and Technical Education

Agricultural Education

Horticulture Sciences (Course Number – 18052-I; VA Assignment Code – 8034)

1 Credit

Through laboratory activities, students apply scientific principles to the field of horticulture, including the areas of floriculture, landscape design, greenhouse operation, nursery plant production, and turf management. They practice safety, develop leadership traits, use plant-growing media, and identify, propagate, and grow horticultural plants in the greenhouse and land laboratory.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Greenhouse Plant Production and Management (Course Number – 18052-III; VA Assignment Code – 8035)

1 Credit

Students are taught the operating procedures for a greenhouse. Units of instruction include developing plant production facilities, science application in plant production, and identification of plants. Business management, leadership development, and marketing skills are emphasized to prepare students for careers in

the greenhouse plant production and management industry.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Horticulture Sciences

Landscaping I (Course Number – 18054-I; VA Assignment Code – 8036)

1 Credit

Landscaping offers skilled workers satisfying career opportunities in varying working environments. The expanding and evolving green industry keeps skilled workers in high-demand occupations with educational and leadership opportunities. This course focuses on preparing students for entry-level employment and advancement in landscape design, landscape construction, and landscape maintenance.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Horticulture Sciences

Landscaping II (Course Number – 18054-II; VA Assignment Code – 8039)

1 Credit

This course builds upon the skill learned in Landscaping I. Students will design landscapes and install components, including lighting, hardscapes, and water features within an environment of the landscaping business enterprise. The expanding and evolving green industry keeps skilled workers in high-demand occupations that feature educational and leadership opportunities. This course focuses on preparing students for entry-level employment in commercial landscaping through hands-on experiences. This course will use a combination of technology, hands on labs, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Landscaping I

Small Animal Care I (Course Number – 18102-I; VA Assignment Code – 8083)

1 Credit

Students learn how to care for and manage small animals, focusing on instructional areas in animal health, nutrition, management, reproduction, and evaluation. Course content also includes instruction in the tools, equipment, and facilities for small animal care, and provides activities to foster leadership development. Live animal handling may occur. FFA, SAE, or related student organization activities are encouraged. This course will use a

combination of technology, hands on labs, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Small Animal Care II (Course Number – 18102-II; VA Assignment Code – 8084)

1 Credit

Students develop their skills in the training and grooming of companion animals, focusing on specific needs of various breeds. Instruction includes handling animals and grooming/caring for coats, as well as technical and maintenance functions related to animal health. Live animal handling will occur. The course also includes technical office-management instruction and affords students the opportunity to practice leadership skills. FFA, SAE, or related student organization activities are encouraged. This course will use a combination of technology, hands on labs, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Small Animal Care I

Veterinary Science I (Course Number – 18105-I; VA Assignment Code – 8088)

1 Credit

This course prepares students for post-secondary education and/or careers in veterinary medicine or related fields. Students develop their skills in anatomy, nutrition, medical terminology, sanitation, clinical exams, and handling animals. Live animal handling may occur. Course content also includes facility maintenance, and office functions, as well as safety practices. The National FFA Organization, Supervised Agricultural Experience (SAE), or related student organization activities are encouraged.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Veterinary Science II (Course Number – 18105-II; VA Assignment Code – 8089)

1 Credit

Students expand their knowledge of animal science and the care of animals, including animal structure and function, microbes and disease prevention, parasitology, and genetics and breeding. Students develop more advanced skills and techniques for assisting the veterinarian/technician in the following areas: performing

first aid and surgery, applying aseptic techniques, performing technical functions, administering medication, handling death and dying, working with wildlife, and performing office functions. On-the-job clinical instruction coordinated by the instructor may be included in veterinary offices or animal clinics. This course will use a combination of technology, hands on labs, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Veterinary Science I

Business and Information Technology

Accounting (Course Number – 12104-I; VA Assignment Code – 6320)

1 Credit

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

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Accounting Cooperative Education (Course Number – C12104-I; VA Assignment Code – C6320)

1 Credit

Cooperative Education is a Work Based Learning experience that connects CTE classroom instruction with paid workplace experience directly related to the student's interests, abilities, and career goals. Cooperative Education combines a rigorous and relevant curriculum with an occupational specialty. Students will obtain employment with specific duties performed as outlined in the training plan which are closely related to the Accounting course competencies. Students participating in cooperative education are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered and supervised by a Coordinator. Students may earn one credit toward graduation for Cooperative Education experiences of at least a 280-hour duration and by working continuously throughout the school year.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Student must be enrolled in or have completed a related state-approved course

Advanced Computer Information Systems (Course Number – 10005-IV; VA Assignment Code – 6613)

1 Credit

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

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Computer Information Systems

Advanced Computer Information Systems Cooperative Education (Course Number – C10005-IV; VA Assignment Code – C6613)

1 Credit

Cooperative Education is a Work Based Learning experience that connects CTE classroom instruction with paid workplace experience directly related to the student's interests, abilities, and career goals. Cooperative Education combines a rigorous and relevant curriculum with an occupational specialty. Students will obtain employment with specific duties performed as outlined in the training plan which are closely related to the Advanced Computer Information Systems course competencies. Students participating in cooperative education are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered and supervised by a Coordinator. Students may earn one credit toward graduation for Cooperative Education experiences of at least a 280-hour duration and by working continuously throughout the school year.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Computer Information Systems; Student must be enrolled in or have completed a related state-approved course

Advanced Programming (Course Number – 10152-II; VA Assignment Code – 6641)

1 Credit

Building on their foundation of programming skills, Advanced Programming students use object-oriented

programming to develop database applications, interactive multimedia applications including game applications, mobile applications, and web applications. Students continue to develop their employability skills as they research pathways for continuing education and careers in the information technology industry and engage in various career-building activities.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Programming

Advanced Programming Cooperative Education (Course Number – C10152-II; VA Assignment Code – C6641)

1 Credit

Cooperative Education is a Work Based Learning experience that connects CTE classroom instruction with paid workplace experience directly related to the student's interests, abilities, and career goals. Cooperative Education combines a rigorous and relevant curriculum with an occupational specialty. Students will obtain employment with specific duties performed as outlined in the training plan which are closely related to the Advanced Programming course competencies. Students participating in cooperative education are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered and supervised by a Coordinator. Students may earn one credit toward graduation for Cooperative Education experiences of at least a 280-hour duration and by working continuously throughout the school year.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Programming; Student must be enrolled in or have completed a related state-approved course

Computer Information Systems (Course Number – 10005-II; VA Assignment Code – 6612)

1 Credit

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

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Completion of Digital Applications is recommended but not required

**Computer Information Systems Cooperative Education
(Course Number – C10005-II; VA Assignment Code – C6612)**

1 Credit

Cooperative Education is a Work Based Learning experience that connects CTE classroom instruction with paid workplace experience directly related to the student’s interests, abilities, and career goals. Cooperative Education combines a rigorous and relevant curriculum with an occupational specialty. Students will obtain employment with specific duties performed as outlined in the training plan which are closely related to the Computer Information Systems course competencies. Students participating in cooperative education are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered and supervised by a Coordinator. Students may earn one credit toward graduation for Cooperative Education experiences of at least a 280-hour duration and by working continuously throughout the school year.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Completion of Digital Applications is recommended but not required; Student must be enrolled in or have completed a related state-approved course

Design, Multimedia, & Web Technologies (Course Number – 10203-II; VA Assignment Code – 6630)

1 Credit

Students develop proficiency in designing and creating desktop-published projects, multimedia presentations/projects, and websites, using industry-standard application software. Students apply principles of layout and design in completing projects. Students create portfolios that include a résumé and a variety of desktop-published, multimedia, and website projects produced in the course.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Design, Multimedia, & Web Technologies Cooperative Education (Course Number – C10203-II; VA Assignment Code – C6630)

1 Credit

Cooperative Education is a Work Based Learning experience that connects CTE classroom instruction with paid workplace experience directly related to the

student’s interests, abilities, and career goals. Cooperative Education combines a rigorous and relevant curriculum with an occupational specialty. Students will obtain employment with specific duties performed as outlined in the training plan which are closely related to the Design, Multimedia, & Web Technologies course competencies. Students participating in cooperative education are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered and supervised by a Coordinator. Students may earn one credit toward graduation for Cooperative Education experiences of at least a 280-hour duration and by working continuously throughout the school year.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Student must be enrolled in or have completed a related state-approved course

Digital Applications (Course Number – 10004-36; VA Assignment Code – 6611)

1 Credit

This course is designed for secondary school students to develop real-life, outcome-driven approach skills for digital citizenship, basic computer operations, keyboarding, application software (word processing, spreadsheets, multimedia applications, databases), and career exploration. This course promotes skills that can be applied across the curriculum and offers preparation relevant to 21st century skills and post-secondary education. Students who successfully complete this course may be eligible for a rigorous and relevant industry certification examination. Student skills may be enhanced by participation in work-based learning activities and/or the Future Business Leaders of America (FBLA).

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Entrepreneurship Education (Course Number – 12053-I; VA Assignment Code – 9093)

1 Credit

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

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

**Entrepreneurship Education Cooperative Education
(Course Number – C12053-I; VA Assignment Code – C9093)**

1 Credit

Cooperative Education is a Work Based Learning experience that connects CTE classroom instruction with paid workplace experience directly related to the student's interests, abilities, and career goals. Cooperative Education combines a rigorous and relevant curriculum with an occupational specialty. Students will obtain employment with specific duties performed as outlined in the training plan which are closely related to the Entrepreneurship Education course competencies. Students participating in cooperative education are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered and supervised by a Coordinator. Students may earn one credit toward graduation for Cooperative Education experiences of at least a 280-hour duration and by working continuously throughout the school year.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Student must be enrolled in or have completed a related state-approved course

Advanced Entrepreneurship Education (Course Number – 12053-II; VA Assignment Code – 9094)

1 Credit

This course is designed for students who wish to concentrate on advanced strategies for entrepreneurship, building upon concepts introduced in Entrepreneurship (12053-I). The focus of the course is on development of a business plan and small business management. Students will establish, market, and maintain a business.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Entrepreneurship Education

Advanced Entrepreneurship Education Cooperative Education (Course Number – C12053-II; VA Assignment Code – C9094)

1 Credit

Cooperative Education is a Work Based Learning experience that connects CTE classroom instruction with paid workplace experience directly related to the student's interests, abilities, and career goals. Cooperative Education combines a rigorous and relevant curriculum with an occupational specialty. Students will obtain employment with specific duties performed as outlined in the training plan which are closely related to the Advanced

Entrepreneurship Education course competencies. Students participating in cooperative education are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered and supervised by a Coordinator. Students may earn one credit toward graduation for Cooperative Education experiences of at least a 280-hour duration and by working continuously throughout the school year.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Entrepreneurship Education; Student must be enrolled in or have completed a related state-approved course

Economics & Personal Finance (Course Number – 19262-I; VA Assignment Code – 6120)

1 Credit

Students learn how economies and markets operate and how the United States economy is interconnected with the global economy. Additionally, they learn how to navigate the financial decisions they must face and to make informed decisions relating to career exploration, budgeting, banking, credit, insurance, spending, financing postsecondary education, taxes, saving and investing, buying/leasing a vehicle, and living independently. They also learn the importance of investing in themselves in order to gain the knowledge and skills valued in the marketplace. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship, more effective participation in the workforce, and career success. The course incorporates all economics and financial literacy objectives included in the Code of Virginia §22.1-200-03B.

Graduation Requirements: This course is required fulfill Economics & Personal Finance credit and meets graduation requirements for online course

Prerequisites: None

Information Technology Fundamentals (Course Number – 10254; VA Assignment Code – 6670)

1 Credit

Information Technology (IT) Fundamentals introduces the essential technical and professional skills required for students to pursue programs leading to professional careers and IT certifications. Students investigate career opportunities and technologies in four major IT areas: Information Services and Support, Network Systems, Programming and Software Development, and Interactive Media. Students will evaluate the impact of IT on other career clusters. The focus of the IT Fundamentals course is the introduction of skills related to information technology

basics, Internet fundamentals, network systems, computer maintenance/upgrading/troubleshooting, computer applications, programming, graphics, web page design, and interactive media. Students explore ethical issues related to computers and Internet technology and develop teamwork and communication skills that will enhance their employability.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Legal Systems Administration (Course Number – 12008-36; VA Assignment Code – 6735)

1 Credit

Students explore various areas of law (e.g., civil, criminal, family, real estate, estate, and probate) while preparing for employment in the legal field. Students gain knowledge and skills in legal document preparation, office communications, legal terminology, client services, records management, financial records, and business ethics.

Successful completion of this course may lead to an entry-level position in a law office, court office, law enforcement agency, corporate legal department, or to postsecondary education.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Recommended Digital Applications

Legal Systems Administration Cooperative Education (Course Number – C12008-36; VA Assignment Code – C6735)

1 Credit

Cooperative Education is a Work Based Learning experience that connects CTE classroom instruction with paid workplace experience directly related to the student's interests, abilities, and career goals. Cooperative Education combines a rigorous and relevant curriculum with an occupational specialty. Students will obtain employment with specific duties performed as outlined in the training plan which are closely related to the Legal Systems Administration course competencies. Students participating in cooperative education are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered and supervised by a Coordinator. Students may earn one credit toward graduation for Cooperative Education experiences of at least a 280-hour duration and by working continuously throughout the school year.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Recommended Digital Applications; Student must be enrolled in or have completed a related state-approved course

Medical Systems Administration (36 Weeks) (Course Number – 14153-36; VA Assignment Code – 6730)

1 Credit

Students wishing to gain employment in the healthcare field may take this course to learn how to use medical terminology and apply administrative procedures necessary to be productive employees in a healthcare environment. Students will learn how to manage office activities, enhance communication skills, identify legal and ethical issues in health care practices, manage financial functions, and enhance employability skills.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Completion of Digital Applications is recommended but not required

Principles of Business And Marketing (Course Number – 12051-36; VA Assignment Code – 6115)

1 Credit

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

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Programming (Course Number – 10152-I; VA Assignment Code – 6640)

1 Credit

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

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Programming Cooperative Education (Course Number – C10152-I; VA Assignment Code – C6640)

1 Credit

Cooperative Education is a Work Based Learning experience that connects CTE classroom instruction with paid workplace experience directly related to the student's interests, abilities, and career goals. Cooperative Education combines a rigorous and relevant curriculum with an occupational specialty. Students will obtain employment with specific duties performed as outlined in the training plan which are closely related to the Programming course competencies. Students participating in cooperative education are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered and supervised by a Coordinator. Students may earn one credit toward graduation for Cooperative Education experiences of at least a 280-hour duration and by working continuously throughout the school year.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Student must be enrolled in or have completed a related state-approved course

Career Connections

Education for Employment I - Preparation (Course Number – 22153-36; VA Assignment Code – 9078)

1 Credit

This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self-advocacy, customer-service, and life skills. This course offers students integrated labor market needs through an applied employment education format.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Education for Employment II - Preparation (Course Number – 22902-36; VA Assignment Code – 9080)

1 Credit

This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self-advocacy, customer-service, and life skills. This course offers students integrated labor market needs through an applied employment education format.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Education for Employment I - Preparation

Personal Living & Finance (Course Number – 02901; VA Assignment Code – 3120)

1 Credit

This course is designed to provide instruction in the skills that are needed in both personal and business finances. Students will acquire knowledge of banking services; balancing a checkbook; completing a loan application; the implications of an inheritance; the basics of personal insurance policies; consumer rights and responsibilities; dealing with salesmen and merchants; debt management, including retail and credit card debt; state and federal tax computation; local tax assessments; computation of interest rates by various mechanisms; understanding simple contracts; and how to contest an incorrect bill. The course includes the 21 work readiness skills and students take the Workplace Readiness Skills for the Commonwealth Exam and/or wise Exam. This course is only available to students with disabilities where credit accommodation is documented in the IEP.

Graduation Requirements: N/A

Prerequisites: None

Family and Consumer Services

Child Development and Parenting (36 Weeks) (Course Number – 19255-36; VA Assignment Code – 8232)

1 Credit

Students enrolled in Child Development and Parenting focus on balancing work and family. Students will analyze parenting roles and responsibilities; ensuring a healthy start for mother and child; evaluate support systems that provide services for parents; and evaluate parenting practices that maximize human growth and development. This course will use a combination of technology

(computer, reality babies) and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Culinary Arts I (Course Number – 16052-I; VA Assignment Code – 8275)

2 Credits

The Culinary Arts I curriculum provides students with the foundations for a comprehensive knowledge of the food service industry and with opportunities to build technical skills. Students examine and practice basic rules and procedures related to kitchen and food safety, kitchen sanitation procedures, and emergency measures. Students explore the purchasing and receiving of goods and study fundamental nutritional principles and guidelines. As they explore food-preparation techniques, students practice applying these techniques to the preparation and serving of basic food products. The curriculum places a strong emphasis on science and mathematics knowledge and skills.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Introduction to Culinary Arts

Culinary Arts II (Course Number – 16052-II; VA Assignment Code – 8276)

2 Credits

The Culinary Arts II curriculum provides students with continuing opportunities to acquire a comprehensive knowledge of the food service industry as well as to expand their technical skills. Students practice kitchen safety and sanitation, apply nutritional principles to food preparation and storage, perform a wide range of more advanced food-preparation techniques including garde manger and baking, refine their dining room serving skills, develop menus, perform on-site and off-site catered functions, and strengthen their business and math skills. The curriculum continues to place a strong emphasis on science and mathematics knowledge and skills. This course will use a combination of technology and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Culinary Arts I

Fashion Careers I (Course Number – 19201-I; VA Assignment Code – 8280)

2 Credit

Students investigate career opportunities in apparel design, production, and care. Students study the business of fashion including fabric technology, fashion design skills, and apparel-production techniques. Work-based learning opportunities within the fashion industry are encouraged to provide opportunities for students to develop employability skills. Teachers emphasize skills in art, communication, mathematics, science and technology in this course. This course will use a combination of technology and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Introduction to Fashion Careers (formerly Introduction to Fashion Design and Marketing)

Independent Living (Course Number – 22904-36; VA Assignment Code – 8219)

1 Credit

Students in Independent Living build life skills focusing on establishing positive relationships, balancing work and family life, investigating careers, making responsible consumer choices, applying nutrition and wellness knowledge, and studying child development and parenting.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Introduction to Culinary Arts (Course Number – 16051-36; VA Assignment Code – 8250)

1 Credit

The Introduction to Culinary Arts curriculum provides students with opportunities to explore career options and entrepreneurial opportunities within the food service industry. Students investigate food safety and sanitation, explore culinary preparation foundations, practice basic culinary skills, explore diverse cuisines and service styles, investigate nutrition and menu development, and examine the economics of food. The curriculum places a strong emphasis on science and mathematics knowledge and skills. This course will use a combination of technology and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Introduction to Fashion Careers (36 Weeks) (Course Number – 19201-36; VA Assignment Code – 8248)

1 Credit

Students in Introduction to Fashion Careers focus on identifying and exploring the individual careers within the apparel, accessory, and textile design, manufacturing, and merchandising industry. Units of study include the relationships that exist among all areas of the clothing industry; related global and economic issues; apparel, accessory, and textile technology; exploration of careers, including entrepreneurial opportunities in related areas; and the skills and personal characteristics necessary for success in careers in the apparel, accessory, and textile design, manufacturing, and marketing industry. This course will use a combination of technology and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Nutrition & Wellness (36 Weeks) (Course Number – 19253-36; VA Assignment Code – 8229)

1 Credit

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

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Virginia Teachers for Tomorrow I (Course Number – 19151-I; VA Assignment Code – 9062)

1 Credit

Virginia Teachers for Tomorrow (VTfT) fosters student interest, understanding, and appreciation of the teaching profession and allows secondary students to explore careers in education. Students build a foundation for teaching; learn the history, structure and governance of teaching; apply professional teaching techniques in the VTfT classroom and field experience; and reflect on their teaching experiences. Additional educational leadership opportunities are offered through the student organization Educators Rising. This course will use a combination of technology, research, project creation, and lecture to distribute information. There is also the opportunity to compete in a CTSO conference.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Virginia Teachers for Tomorrow II (Course Number – 19151-II; VA Assignment Code – 9072)

1 Credit

Students continue to explore careers in the Education and Training Cluster and pathways. This course provides the opportunity for students to prepare for careers in education as they research postsecondary options, learn about the process of teacher certification in Virginia, and participate in a practicum experience.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Virginia Teachers for Tomorrow I

Health and Medical Sciences

Dental Careers I (Course Number – 14054-I; VA Assignment Code – 8328)

2 Credits

Students are introduced to the careers in dentistry, including dentist (general and specialists), hygienist, dental assistant, dental laboratory technician, and dental receptionist. Students practice and learn about many of the skills utilized in these professions while attaining all the skills necessary to become entry-level dental assistants. Study includes infection control and OSHA standards; anatomy and physiology; tooth morphology; oral histology; preventive dentistry; applied psychology; effective communication; office administration and management; use of dental software; operative dentistry techniques; and dental materials/laboratory skills. This course will use a combination of technology and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Biology I, Chemistry I, Keyboarding, and

Introduction to Health and Medical Sciences

Dental Careers II (Course Number – 14054-II; VA Assignment Code – 8329)

2 Credits

Units of study include medical emergencies, coronal polishing, oral pathology, dental roentgenology, nutrition, schedule IV drugs and pharmacology, and advanced laboratory techniques. In addition to attending classes for part of the week, students have the opportunity to

participate in internships at local private dental offices and public health dental facilities, where they participate in all phases of dental care delivery. During the program, students are eligible to take the Dental Assisting National Board Inc. (DANB) Radiation Health and Safety and Infection Control (ICE) exams. Students who pass are qualified to work in entry-level dental assistant I and dental receptionist positions. After two years in the field full-time, graduates of the program are eligible to take the national examination to become a Certified Dental Assistant. This course will use a combination of technology, hands on activities, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Dental Careers I

Emergency Medical Technician I (Course Number – 14055-I; VA Assignment Code – 8333)

1 Credit

The tasks for this course represent the National Emergency Medical Services Educational Standards. Students explore and apply the fundamentals of emergency medical services, anatomy, physiology, and medical terminology while demonstrating skills in assessing and managing patient care, including assessing the scene and understanding shock, resuscitation, and trauma. Supervised field experience outside of school hours is required. Successful completion of this course and instructor endorsement qualifies students to enroll in EMT II to complete the program sequence. Successful completion of the second course in the sequence will earn the student CTE completer status. Successful completion of all course requirements and instructor endorsement may lead to eligibility to take the Virginia State Psychomotor Exam and the National Registry EMT cognitive exam. This course will use a combination of technology, hands on labs, and lecture to distribute information. NOTE: Students must be at least 16 years old prior to the first day of EMT instruction. All students will need to undergo a criminal background check that includes fingerprinting and drug screening.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Emergency Medical Technician II (Course Number – 14055-II; VA Assignment Code – 8334)

1 Credit

The tasks for this course represent the National Emergency Medical Services Educational Standards. Students build on their knowledge and skills for providing basic life support by focusing on the areas of emergency medical services (EMS) operations, medical emergencies, and management of special patient populations. Supervised field experience outside of school hours is required. Successful completion of this second course in the sequence will earn the student CTE completer status. Successful completion of all course requirements and instructor endorsement may lead to eligibility to take the Virginia State Psychomotor Exam and the National Registry EMT cognitive exam. This course will use a combination of technology, hands on labs, and lecture to distribute information. NOTE: Students must be at least 16 years old prior to the first day of EMT instruction. All students will need to undergo a criminal background check that includes fingerprinting and drug screening.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Emergency Medical Technician I

Emergency Medical Telecommunications (Course Number – 14055-V; VA Assignment Code – 8337)

1 Credit

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

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

**Introduction to Health & Medical Sciences (36 Weeks)
(Course Number – 14001-II; VA Assignment Code – 8302)**

1 Credit

This course introduces the student to a variety of healthcare careers and develops basic skills required in all health and medical sciences. It is designed to help students understand the key elements of the U.S. healthcare system and to learn basic healthcare terminology, anatomy and physiology for each body system, pathologies, diagnostic and clinical procedures, therapeutic interventions, and the fundamentals of traumatic and medical emergency care. Throughout the course, instruction emphasizes safety, cleanliness, asepsis, professionalism, accountability, and efficiency within the healthcare environment. Students also begin gaining job-seeking skills for entry into the health and medical sciences field. In addition, instruction may include the basics of medical laboratory procedures, pharmacology fundamentals, biotechnology concepts, and communication skills essential for providing quality patient care.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Medical Coding and Billing I (Course Number – 14151-III; VA Assignment Code – 8388)

1 Credit

Students will be introduced to healthcare systems, how to manage an office, and the electronic medical record as it pertains to the field of medical coding and billing. Students will be exposed to the medical terminology used to describe human anatomy and physiology. Students will also be introduced to the field of health informatics.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

**Medical Coding and Billing I Cooperative Education
(Course Number – C14151-III; VA Assignment Code – C8388)**

1 Credit

Cooperative Education is a Work Based Learning experience that connects CTE classroom instruction with paid workplace experience directly related to the student's interests, abilities, and career goals. Cooperative Education combines a rigorous and relevant curriculum with an occupational specialty. Students will obtain employment with specific duties performed as outlined in

the training plan which are closely related to the Medical Coding and Billing course competencies. Students participating in cooperative education are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered and supervised by a Coordinator. Students may earn one credit toward graduation for Cooperative Education experiences of at least a 280-hour duration and by working continuously throughout the school year.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Student must be enrolled in or have completed a related state-approved course

Medical Coding and Billing II (Course Number – 14151-IV; VA Assignment Code – 8389)

1 Credit

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

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Completion of Medical Coding & Billing I is recommended but not required.

**Medical Coding and Billing II Cooperative Education
(Course Number – C14151-IV; VA Assignment Code – C8389)**

1 Credit

Cooperative Education is a Work Based Learning experience that connects CTE classroom instruction with paid workplace experience directly related to the student's interests, abilities, and career goals. Cooperative Education combines a rigorous and relevant curriculum with an occupational specialty. Students will obtain employment with specific duties performed as outlined in the training plan which are closely related to the Medical Coding and Billing II course competencies. Students participating in cooperative education are guided by a formal, written training plan that defines specific academic and workplace skills to be mastered and supervised by a Coordinator. Students may earn one credit toward graduation for Cooperative Education experiences of at least a 280-hour duration and by working continuously throughout the school year.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Completion of Medical Coding & Billing I is recommended but not required.; Student must be enrolled in or have completed a related state-approved course

Medical Terminology (Course Number – 14154-II; VA Assignment Code – 8383)

1 Credit

Medical Terminology is designed to help students learn common medical terms essential for safe patient care. Topics are presented in logical order, beginning with each body system's anatomy and physiology and progressing through pathology, laboratory tests and clinical procedures, therapeutic interventions, and pharmacology. Students learn concepts, terms, and abbreviations for each topic. This course will use a combination of technology, hands on activities, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Introduction to Health and Medical Sciences

Nurse Aide I Condensed (Course Number – 14051-I-A; VA Assignment Code – 8355)

1 Credit

Nurse Aide I, offered as an occupational preparation course beginning at the 11th-grade level, emphasizes the study of nursing occupations as related to the healthcare system. Students study normal growth and development, simple body structure and function, and medical terminology and are introduced to concepts of infection prevention and disease processes. They receive elementary skill training in patient-nurse aide relationships; measuring and recording of vital signs; cardiopulmonary resuscitation; and general care of the patient. Limited on-the-job instruction in nursing homes and other healthcare facilities is part of the course. This course will use a combination of technology, hands on activities, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Introduction to Health and Medical Sciences

Nurse Aide II (Course Number – 14051-II; VA Assignment Code – 8362)

2 Credits

Nurse Aide II is an occupational preparation course, emphasizing advanced skill training in areas such as catheter care, range of motion, bowel and bladder training, care of the dying, selected procedures for

maternal and infant care, and admission and discharge procedures. Students learn diseases and body systems as related to advanced clinical care of the acute medical-surgical patient, the chronically ill, and the elderly. On-the-job instruction in a licensed nursing home is part of the course. Upon completion of the nurse aide program, the student is eligible to take the nurse aide certification exam that leads to employment as a certified nurse aide in hospitals and nursing homes.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Nurse Aide I

Nurse Aide II Condensed (Course Number – 14051-II-A; VA Assignment Code – 8356)

1 Credit

Nurse Aide II is an occupational preparation course, emphasizing advanced skill training in areas such as catheter care, range of motion, bowel and bladder training, care of the dying, selected procedures for maternal and infant care, and admission and discharge procedures. Students learn diseases and body systems as related to advanced clinical care of the acute medical-surgical patient, the chronically ill, and the elderly. On-the-job instruction in a licensed nursing home is part of the course. Upon completion of the nurse aide program, the student is eligible to take the nurse aide certification exam that leads to employment as a certified nurse aide in hospitals and nursing homes. This course will use a combination of technology, hands on labs, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Nurse Aide I

Pharmacy Technician I (Course Number – 14152-I; VA Assignment Code – 8305)

1 Credit

This certificate program is designed to provide students with the basic skills and knowledge to begin work as a pharmacy technician. The coursework will fulfill the requirements of the Board of Pharmacy and prepare students to take either the state examination or the national examination administered by the Pharmacy Technician Certification Board. Trained, experienced pharmacy technicians who can demonstrate the right skills and knowledge should be able to pursue many exciting and respected career options or post-secondary study in the pharmacy field. This course will use a combination of

technology, hands on labs, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Pharmacy Technician II (Course Number – 14152-II; VA Assignment Code – 8306)

2 Credits

This certificate program is designed to provide students with the basic skills and knowledge to begin work as a pharmacy technician. The coursework will fulfill the requirements of the Board of Pharmacy and prepare students to take either the state examination or the national examination administered by the Pharmacy Technician Certification Board. This course will use a combination of technology, hands on labs, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Pharmacy Technician I

Sports Medicine I (Course Number – 14062-I; VA Assignment Code – 7660)

2 Credits

The course introduces students to topics such as human anatomy and physiology, nutrition, biomechanics, medical terminology, injuries and illnesses, and legal and ethical issues in sports medicine. Students also examine prospective careers in the sports medicine field. In this course, students earn a certification in First Aid/CPR/AED. Upon successful completion of this course, students are eligible to take Sports Medicine II and pursue certification as a personal trainer. This course will use a combination of technology, hands on labs, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Introduction to Health and Medical Sciences

Sports Medicine II (Course Number – 14062-II; VA Assignment Code – 7662)

2 Credits

This course builds upon basic knowledge acquired in Sports Medicine I on topics such as exercise physiology, biomechanics, exercise program design, and injury prevention, assessment, treatment, and management. Students prepare for a career in sports medicine, including completing an internship. Upon successful completion of this course, students will be eligible to take the National

Academy of Sports Medicine-Certified Personal Trainer (NASM-CPT) exam. This course will use a combination of technology, hands on labs, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Sports Medicine I

Marketing

Marketing (Course Number – 12164; VA Assignment Code – 8120)

1 Credit

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.

Computer/technology applications and DECA activities enhance the course. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Hotel Management & Operations (Course Number – 12159; VA Assignment Code – 8159)

1 Credit

Students with an interest in hotel marketing and hospitality develop specialized skills in the areas of human resources and supervision, marketing and public relations, sales, front-office functions, guest relations, communication, financial functions, food and beverage service, housekeeping operations, security, and engineering. In addition, students obtain a thorough understanding of the hotel industry and the career options available. Computer/technology applications and DECA activities enhance the course. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Fashion Marketing (Course Number – 12153-I; VA Assignment Code – 8140)

1 Credit

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.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.
Prerequisites: None

Digital and Social Media Marketing (Course Number – 12162; VA Assignment Code – 8125)

1 Credit

This course introduces students to digital and social media marketing. Students explore principles, strategies, tools, and tactics related to consumers, branding, advertising, and promotions. Students explore how success is measured in a digital and social media marketing campaign. This course emphasizes ethics, laws, and security. Students also investigate business and marketing plans as well as careers in digital and social media marketing.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.
Prerequisites: None

Advanced Fashion Marketing (Course Number – 12153-II; VA Assignment Code – 8145)

1 Credit

Students with an interest in apparel and accessories marketing gain in-depth knowledge of the apparel and accessories industry and skills utilized in various 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, economics, hiring and retaining employees, 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.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.
Prerequisites: Fashion Marketing

Sports and Entertainment Management (Course Number – 12163-II; VA Assignment Code – 8177)

1 Credit

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, economic, ethical, and legal concepts. Students will be able to plan and execute an event, establish a sports, entertainment, or recreation marketing product/business, and develop a career plan. 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.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.
Prerequisites: Sports and Entertainment Marketing

Sports and Entertainment Marketing (Course Number – 12163-I; VA Assignment Code – 8175)

1 Credit

This introductory course helps students develop a thorough understanding of fundamental marketing concepts and theories as they relate to the sports and entertainment industries. Students will investigate the components of customer service skills, branding, product development, pricing and distribution strategies, business structures, sales processes, social media, sponsorships and endorsements, as well as promotion plans needed for sports and entertainment 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.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.
Prerequisites: None

Military Science

Army JROTC I (Course Number – 09051; VA Assignment Code – AR7913)

1 Credit

This course introduces students to the foundations of the Army JROTC program, the rights and responsibilities of U.S. citizenship, the principle components of leadership, and the foundational elements needed for academic and career success. Additionally, students receive instruction in U.S. and military history, discipline, personal wellness, physical fitness, career education, and workplace readiness skills. Military customs and courtesies, proper uniform wear, and personal appearance guidelines are established and reinforced in the classroom, drill, and military ceremonies.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Army JROTC II (Course Number – 09052; VA Assignment Code – AR7916)

1 Credit

This course continues to provide students instruction in the Army JROTC program and the rights and responsibilities of U.S. citizenship. Students continue to learn leadership skills, U.S. and military history, the origins and development of the U.S. government, discipline, personal wellness, physical fitness, first aid, map skills, career education, and workplace readiness skills. Military customs and courtesies, proper uniform wear, and personal appearance guidelines are emphasized within the leadership lab, drill, and military ceremonies.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Army JROTC I

Army JROTC III (Course Number – 09053; VA Assignment Code – AR7918)

1 Credit

Students are instructed in the Army JROTC curriculum, where U.S. citizenship rights and responsibilities are reinforced. This course continues to provide students instruction in the Army JROTC program, reinforcing U.S. citizenship rights and responsibilities. Students continue instruction in leadership, military history, discipline, physical fitness, career education, financial planning, personal development, and workplace readiness skills. Military customs and courtesies, proper uniform wear, and personal appearance guidelines are required in the leadership lab, drill, and military ceremonies.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Army JROTC II

Army JROTC IV (Course Number – 09054; VA Assignment Code – AR7919)

1 Credit

Students continue instruction in the Army JROTC program, consisting of U.S. citizenship rights and responsibilities, leadership, military history, discipline, citizenship, physical fitness, career education, and workplace readiness skills. Students receive additional instruction in military customs and courtesies, proper uniform wear, and personal appearance guidelines. Adherence to the guidelines is required in leadership lab, drill, and military ceremonies.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Army JROTC III

Technology Education

Digital Visualization (Course Number – 11153; VA Assignment Code – 8459)

1 Credit

Students gain experiences related to computer animation by using graphics and design concepts. Students solve problems involving 3-D object manipulation, storyboarding, texturing/mapping, lighting concepts, and environmental geometry. Students create a variety of animations that reflect real-world applications and are introduced to interactive and 3-D animation software. Production of a portfolio showcasing examples of original student work is included.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Engineering Practicum IV (Course Number – 21047; VA Assignment Code – 8453)

1 Credit

This course will enable students to examine technology and engineering fundamentals related to solving real-world problems. Students examine ethics and intellectual property and design a practicum project, a culmination of knowledge and skill gained in the previous engineering courses. In addition, students continue to investigate a variety of engineering specialty fields and related careers to determine whether they are good candidates for postsecondary educational opportunities in engineering.

Graduation Requirements: This course may be used to fulfill one standard credit in laboratory science.

Prerequisites: Engineering Analysis and Applications II, Engineering Studies, Principles of Engineering (PLTW)

Advanced Drawing & Design (Course Number – 21149; VA Assignment Code – 8438)

1 Credit

Students use a graphic language for product design and technical illustration. They increase their understanding of drawing techniques learned in the prerequisite courses. They 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 CADD, construct physical models, and create multimedia presentations of finished designs. They complete a work portfolio based on a chosen graphic project.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Architectural Drawing and Design, Engineering Drawing and Design

Architectural Drawing/Design (Course Number – 21103; VA Assignment Code – 8437)

1 Credit

Students learn the principles of architecture and increase understanding of working drawings and construction techniques learned in the prerequisite course. Experiences include residential and commercial building designs, rendering, model development, and structural details. Students use computer-aided drawing and design (CADD) equipment and established standards or codes to prepare models for presentation. The course is especially beneficial to future architects, interior designers, or home builders.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Introduction to Engineering Design (PLTW), Technical Drawing and Design, Technical Drawing and Design

Civil Engineering & Architecture PLTW (Course Number – 21021; VA Assignment Code – 8430)

1 Credit

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

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Introduction to Engineering Design (PLTW)

Introduction to Engineering Design PLTW (Course Number – 21017; VA Assignment Code – 8439)

1 Credit

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

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Principles of Engineering PLTW (Course Number – 21018; VA Assignment Code – 8441)

1 Credit

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

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Introduction to Engineering Design (PLTW)

Software Engineering Essentials PLTW (Course Number – 10015-I; VA Assignment Code – 8473)

1 Credit

Students will experience the major topics, big ideas, and computational thinking practices used by computing professionals to solve problems and create value for others. This course will empower students to develop computational thinking skills while building confidence that prepares them to advance to Computer Science Principles and Computer Science.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Technical Drawing and Design (Course Number – 21101-36; VA Assignment Code – 8435)

1 Credit

In this foundation course, students learn the basic language of technical drawing and design, and they design, sketch, and make technical drawings, models, or prototypes of real design problems. The course is

especially recommended for future engineering and architecture students.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Technology Foundations (Course Number – 21003-36; VA Assignment Code – 8403)

1 Credit

In this beginning high school course, students acquire a foundation in technological material, energy, and information and apply processes associated with the technological thinker. Challenged by laboratory activities, students create new ideas and innovations, build systems, and analyze technological products to learn further how and why technology works. They work in groups to build and control systems using engineering design in the development of a technology.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Technology Transfer (Course Number – 21052-36; VA Assignment Code – 8405)

1 Credit

Students learn that technology transfer occurs when a new user applies an existing technology developed for one purpose to a different function. Groups work together, applying mathematics, science, and engineering concepts to projects that combine systems such as energy and power, agriculture and biotechnology, information and communication, manufacturing, construction, transportation, and medical technologies. Students engage in thematic activities to learn that the transfer of a technology from one society to another can cause cultural, social, economic, and political changes that affect both societies to varying degrees.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Technology Foundations

Trade and Industrial

Auto Body Technology I (Course Number – 20117-I; VA Assignment Code – 8676)

1 Credit

In the global automotive repair industry, there is a growing demand for qualified auto body technicians. In this course, students are taught non-structural analysis, damage

repair, and welding. Students work with a variety of materials, using metal finishing and body filling techniques to prepare surfaces and repair panels. In addition, students practice lab safety and gain career skills. Students who successfully complete this program sequence will be prepared to take and pass the respective Automotive Service Excellence (ASE) Student Certification examination and will be prepared for post-secondary education opportunities.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Auto Body Technology II (Course Number – 20117-II; VA Assignment Code – 8677)

2 Credits

In the global automotive repair industry there is a growing demand for qualified auto body technicians. In this course, students are taught to repair, mask, and refinish auto body components and entire vehicles. In addition, they use spray guns and personal safety equipment while applying undercoats and topcoats, working with a variety of materials, and gaining career skills. Students who successfully complete this program sequence will be prepared to take and pass the respective Automotive Service Excellence (ASE) Student Certification examination and will be prepared for post-secondary education opportunities.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Auto Body Technology I

Auto Body Technology III (Course Number – 20117-III; VA Assignment Code – 8678)

2 Credits

In this course allows students to further apply the tasks/competencies learned in Auto Body Technology I and II. This course may also be used as a capstone course in which students may perfect their auto body skills and move toward employment in the industry. Students who successfully complete this program sequence will be prepared to take and pass the respective Automotive Service Excellence (ASE) Student Certification examination and will be prepared for postsecondary education opportunities.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Auto Body Technology II

Automotive Technology I (Course Number – 20104-I; VA Assignment Code – 8506)**2 Credits**

In this course, students explore, handle, and perform basic functions in engine repair, automatic transmission and transaxle, manual drivetrain and axles, suspension and steering systems, and brakes. Students who successfully complete the Automotive Technology program may be eligible to take the Automotive Service Excellence (ASE) Student Certification examination. The ASE Entry Level Certification is the first step in building a career as a service professional in the automotive industry.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Automotive Technology II (Course Number – 20104-II; VA Assignment Code – 8507)**2 Credits**

In this course, students build upon their basic knowledge of automotive technology, exploring more advanced tasks in engine repair, automatic transmission and transaxle, manual drivetrain and axles, suspension and steering systems, and brakes. They also learn about electrical, electronic, and HVAC systems in automobiles. Upon successful completion of the course, students may be eligible to take the Automotive Service Excellence (ASE) Student Certification examination.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Automotive Technology I

Barbering I (Course Number – 19102-I; VA Assignment Code – 8740)**2 Credits**

Barbering is the study of hair, scalp, and skin. Students study and prepare in a clinical lab setting, using mannequins and live models for manipulative practice. The program emphasizes safety and sanitation, communication, and management skills. Related areas of study include psychology, ethics, and professional image. Competency completions prepare the students to work or apprentice in a local barber shop or beauty salon.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Barbering II (Course Number – 19102-II; VA Assignment Code – 8741)**2 Credits**

Students apply their knowledge of barbering skills in a clinical lab setting, using mannequins and live models for manipulative practice. The program emphasizes safety and sanitation, communication skills, and management of a barber shop or beauty salon. Related areas of study include psychology, ethics, and professional image. Competency completions prepare the students for the Virginia state licensing exam.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Barbering I

Barbering III (Course Number – 19102-III; VA Assignment Code – 8742)**2 Credits**

In this advanced course, students build on their theoretical foundation of general sciences and practices in barbering to increase proficiency in hair cutting and styling on live models, with attention to professionalism, client consultation, safety, and infection control. Students are trained in safe chemical processes related to chemical texture services and advanced hair coloring techniques. They also develop artistic skills with wigs and hair additions. An advanced business management unit focuses on managing the shop. Competency completion prepares the student for the Virginia State Licensing Exam. Students can combine classroom instruction and supervised on-the-job training in an approved position or internship with continuing supervision throughout the school year.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Barbering II

Building Management I (Course Number – 16103-I; VA Assignment Code – 8590)**1 Credit**

Students obtain the knowledge and skills to perform the upkeep of commercial and public buildings and grounds through hands-on training in cleaning operations, building repairs, electrical, plumbing, and grounds maintenance.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

**Building Management II (Course Number – 16103-II;
VA Assignment Code – 8591)**

2 Credits

Students obtain advanced knowledge and skills to perform the upkeep of commercial and public buildings and grounds through hands-on training in cleaning operations, building repairs, electrical, plumbing, and grounds maintenance.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Building Management I

**Building Management III (Course Number – 16103-III;
VA Assignment Code – 8592)**

2 Credits

Building Management III is offered as a capstone course for high school. Students apply the knowledge and skills to perform advanced maintenance and upkeep of commercial and public buildings and grounds through specific hands-on training in cleaning operations, building repairs, electrical, plumbing, and grounds maintenance.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Building Management II

Carpentry I (Course Number – 17003-I; VA Assignment Code – 8601)

1 Credit

Carpentry I is the building block for achieving high-level construction industry skills that can result in an exciting and lucrative career. With an emphasis on safety, students are taught to use hand and power tools, cut stock, apply construction mathematics, and interpret blueprints. Students will become proficient in identifying types of residential construction components to form foundations and frame walls, floors, ceilings, roofs, doors, and windows. All students will obtain the required OSHA 10 safety credential.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Carpentry II (Course Number – 17003-II; VA Assignment Code – 8602)

2 Credits

Carpentry II leads to successful transition into postsecondary education for careers in carpentry and related fields, such as construction management, architecture, and others. Students are taught the safe use of hand and power tools common to the industry to

complement their OSHA 10 safety credential earned in Carpentry I. 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. Successfully passing this course leads to CTE program completion.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Carpentry I

Cosmetology I (Course Number – 19101-I; VA Assignment Code – 8527)

2 Credits

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 mannequins for manipulative skill practice. The first-year course emphasizes personal safety, professionalism, and sanitation and disinfection of equipment and facilities. Students develop skills in shampooing and conditioning hair, as well as styling and cutting hair. They are introduced to chemical texture services and develop skills in manicure and pedicure procedures.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Cosmetology II (Course Number – 19101-II; VA Assignment Code – 8528)

2 Credits

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

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Cosmetology I

Cosmetology III (Course Number – 19101-III; VA Assignment Code – 8529)**2 Credits**

In this advanced course, students build on their theoretical foundation of general sciences and practices in cosmetology to increase proficiency in hair cutting and styling on live models, with attention to professionalism, client consultation, safety, and infection control. Students are trained in safe chemical processes related to chemical texture services and advanced hair coloring techniques. They also develop artistic skills with wigs and hair additions. In addition, students learn to care for skin, hands, and feet, developing experience in providing facials, manicures, pedicures, and nail enhancements. An advanced business management unit focuses on managing the salon. Competency completion prepares the student for the Virginia State Licensing Exam. Students can combine classroom instruction and supervised on-the-job training in an approved position or internship with continuing supervision throughout the school year.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Cosmetology II

Criminal Justice I (Course Number – 15051-I; VA Assignment Code – 8702)**1 Credit**

Students are introduced to the legal foundations and processes, and the principles, techniques, and practices for exploring careers within the criminal justice system.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Criminal Justice II (Course Number – 15051-II; VA Assignment Code – 8703)**2 Credits**

Students learn the legal foundations and processes, the principles, techniques, and practices for exploring careers within the criminal justice system, and the history of terrorism in the United States. Students combine classroom instruction and supervised, practical experience throughout the school year.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Criminal Justice I

Electricity I (Course Number – 17102-I; VA Assignment Code – 8533)**1 Credit**

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

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Electricity II (Course Number – 17102-II; VA Assignment Code – 8534)**2 Credits**

Students continue to develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems. They also study electrical theory and mathematical problems related to electricity, navigate the National Electrical Code Book, select and install conductors, examine lighting, communication, and power systems, and work with conduit and raceways, panelboards, switchboards, grounding systems, and generators.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Electricity I

Graphic Imaging Technology I (Course Number – 11154-I; VA Assignment Code – 8660)**1 Credit**

Graphic Imaging Technology I introduces students to the graphic communications industry. Students gain an overview of digital file preparation, image capture, color theory, digital file output, press operations, and bindery operations. Students learn to practice workplace safety and develop skills in measurement, mathematical problem solving, interpersonal communication, and the job application process. Graphic Imaging Technology programs may be accredited by GAERF, the accrediting body for the nationally recognized PrintEd certification program.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Graphic Imaging Technology II (Course Number – 11154-II; VA Assignment Code – 8661)**2 Credits**

Graphic Imaging Technology II prepares students for a career in the graphic communications industry. Students gain knowledge and skills in digital file preparation and output. Graphic Imaging Technology programs may be accredited by GAERF, the accrediting body for the nationally recognized PrintED certification program.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Graphic Imaging Technology I

Precision Machining Technology I (Course Number – 13204-I; VA Assignment Code – 8539)**1 Credit**

The demand for precision machinists is growing along with the resurgence of the U.S. manufacturing industry. Machinists are highly skilled, creative problem solvers who are task-oriented and self-directed individuals. In this first course, students are taught safety awareness and the foundations of machining, including how to accurately apply measurements, use engineering drawings and sketches, and apply metalworking theory in order to efficiently plan, manage, and perform general machine maintenance and machining jobs.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Precision Machining Technology II (Course Number – 13204-II; VA Assignment Code – 8540)**2 Credits**

The demand for precision machinists is growing along with the resurgence of the U.S. manufacturing industry. Machinists are highly skilled, creative problem solvers who are task-oriented and self-directed individuals. In this advanced course, CNC machining operations are emphasized. Students have the opportunity to increase their skills in applying precise measurements, using engineering drawings and sketches, and applying metalworking theory in order to safely and efficiently plan, manage, and perform general machine maintenance and machining jobs.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Precision Machining Technology I

Television and Media Production I (Course Number – 11103-I; VA Assignment Code – 8688)**1 Credit**

In this course, students will engage in hands-on digital media production while using industry-standard equipment and software. They will learn how to work as media producers and explore careers in the dynamic industry of digital media production.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Television and Media Production II (Course Number – 11103-II; VA Assignment Code – 8689)**2 Credits**

This course builds upon knowledge and skills from Television and Media Production I. Students will generate fiction and non-fictional media content. Students will enhance their digital media production skills by entering the studio and control room and become proficient with industry-standard equipment and software. They put their knowledge of digital media production into action with use of sophisticated tools and equipment as they begin to develop their personal portfolios.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Television and Media Production I

Welding I (Course Number – 13207-I; VA Assignment Code – 8672)**1 Credit**

Welding is required by a wide variety of industries—anywhere fusible materials and high heat are needed to manufacture, repair, or alter tools and products. Professional welders are in high demand and can earn accordingly. Students in Welding I are taught to use manual welding, cutting, and electrical arc welding processes to fabricate and join metal parts according to diagrams, blueprints, and specifications. Students will also learn all safety-related practices and techniques, including earning the OSHA 10 card.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Welding II (Course Number – 13207-II; VA Assignment Code – 8673)**2 Credits**

This course teaches advanced welding students how to fine-tune their craft and to perform welds in various positions, using multiple welding processes. Students prepare to pass relevant industry certifications. Welding is required by a wide variety of industries—anywhere fusible materials and high heat are needed to manufacture, repair, or alter products. Professional welders are in high-demand and can earn accordingly.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Welding I

Welding III (Course Number – 13207-III; VA Assignment Code – 8674)**2 Credits**

This welding capstone course teaches the industry's emerging technologies and how to demonstrate gas tungsten arc welding (GTAW) and shielded metal arc welding (SMAW) pipe tests. Students are prepared to earn relevant industry credentials toward employment in production or manufacturing facilities.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Welding II

Dual Enrollment**Dual Enrollment at J. Sargeant Reynolds****Automotive Technology I (Course Number – DE20104-I; VA Assignment Code – DE8506)****2 Credits**

In this course, students explore, handle, and perform basic functions in engine repair, automatic transmission and transaxle, manual drivetrain and axles, suspension and steering systems, and brakes. Students who successfully complete the Automotive Technology program may be eligible to take the Automotive Service Excellence (ASE) Student Certification examination. The ASE Entry Level Certification is the first step in building a career as a service professional in the automotive industry.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Automotive Technology II (Course Number – DE20104-II; VA Assignment Code – DE8507)**2 Credits**

In this course, students build upon their basic knowledge of automotive technology, exploring more advanced tasks in engine repair, automatic transmission and transaxle, manual drivetrain and axles, suspension and steering systems, and brakes. They also learn about electrical, electronic, and HVAC systems in automobiles. Upon successful completion of the course, students may be eligible to take the Automotive Service Excellence (ASE) Student Certification examination.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Automotive Technology I

Criminal Justice I (Course Number – DE15051-I; VA Assignment Code – DE8702)**1 Credit**

Students are introduced to the legal foundations and processes, and the principles, techniques, and practices for exploring careers within the criminal justice system.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Criminal Justice II (Course Number – DE15051-II; VA Assignment Code – DE8703)**2 Credits**

Students learn the legal foundations and processes, the principles, techniques, and practices for exploring careers within the criminal justice system, and the history of terrorism in the United States. Students combine classroom instruction and supervised, practical experience throughout the school year.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Criminal Justice I

Emergency Medical Technician I (Course Number – DE14055-I; VA Assignment Code – DE8333)**1 Credit**

The tasks for this course represent the National Emergency Medical Services Educational Standards. Students explore and apply the fundamentals of emergency medical services, anatomy, physiology, and medical terminology while demonstrating skills in assessing and managing patient care, including assessing the scene and understanding shock, resuscitation, and trauma. Supervised field experience outside of school

hours is required. Successful completion of this course and instructor endorsement qualifies students to enroll in EMT II to complete the program sequence. Successful completion of the second course in the sequence will earn the student CTE completer status. Successful completion of all course requirements and instructor endorsement may lead to eligibility to take the Virginia State Psychomotor Exam and the National Registry EMT cognitive exam. This course will use a combination of technology, hands on labs, and lecture to distribute information. NOTE: Students must be at least 16 years old prior to the first day of EMT instruction. All students will need to undergo a criminal background check that includes fingerprinting and drug screening.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Emergency Medical Technician II (Course Number – DE14055-II; VA Assignment Code – DE8334)

1 Credit

The tasks for this course represent the National Emergency Medical Services Educational Standards. Students build on their knowledge and skills for providing basic life support by focusing on the areas of emergency medical services (EMS) operations, medical emergencies, and management of special patient populations. Supervised field experience outside of school hours is required. Successful completion of this second course in the sequence will earn the student CTE completer status. Successful completion of all course requirements and instructor endorsement may lead to eligibility to take the Virginia State Psychomotor Exam and the National Registry EMT cognitive exam. This course will use a combination of technology, hands on labs, and lecture to distribute information. NOTE: Students must be at least 16 years old prior to the first day of EMT instruction. All students will need to undergo a criminal background check that includes fingerprinting and drug screening.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Emergency Medical Technician I

Nurse Aide II (Course Number – DE14051-II; VA Assignment Code – DE8362)

2 Credits

Nurse Aide II is an occupational preparation course, emphasizing advanced skill training in areas such as catheter care, range of motion, bowel and bladder training, care of the dying, selected procedures for

maternal and infant care, and admission and discharge procedures. Students learn diseases and body systems as related to advanced clinical care of the acute medical-surgical patient, the chronically ill, and the elderly. On-the-job instruction in a licensed nursing home is part of the course. Upon completion of the nurse aide program, the student is eligible to take the nurse aide certification exam that leads to employment as a certified nurse aide in hospitals and nursing homes.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Nurse Aide I

Nurse Aide I Condensed (Course Number – DE14051-I-A; VA Assignment Code – DE8355)

1 Credit

Nurse Aide I, offered as an occupational preparation course beginning at the 11th-grade level, emphasizes the study of nursing occupations as related to the healthcare system. Students study normal growth and development, simple body structure and function, and medical terminology and are introduced to concepts of infection prevention and disease processes. They receive elementary skill training in patient-nurse aide relationships; measuring and recording of vital signs; cardiopulmonary resuscitation; and general care of the patient. Limited on-the-job instruction in nursing homes and other healthcare facilities is part of the course. This course will use a combination of technology, hands on activities, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Introduction to Health and Medical Sciences

Nurse Aide II Condensed (Course Number – 14051-II-A; VA Assignment Code – DE8356)

1 Credit

Nurse Aide II is an occupational preparation course, emphasizing advanced skill training in areas such as catheter care, range of motion, bowel and bladder training, care of the dying, selected procedures for maternal and infant care, and admission and discharge procedures. Students learn diseases and body systems as related to advanced clinical care of the acute medical-surgical patient, the chronically ill, and the elderly. On-the-job instruction in a licensed nursing home is part of the course. Upon completion of the nurse aide program, the student is eligible to take the nurse aide certification exam that leads to employment as a certified nurse aide in hospitals and nursing homes. This course will use a

combination of technology, hands on labs, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Nurse Aide I

Pharmacy Technician I (Course Number – DE14152-I; VA Assignment Code – DE8305)

1 Credit

This certificate program is designed to provide students with the basic skills and knowledge to begin work as a pharmacy technician. The coursework will fulfill the requirements of the Board of Pharmacy and prepare students to take either the state examination or the national examination administered by the Pharmacy Technician Certification Board. Trained, experienced pharmacy technicians who can demonstrate the right skills and knowledge should be able to pursue many exciting and respected career options or post-secondary study in the pharmacy field. This course will use a combination of technology, hands on labs, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Pharmacy Technician II (Course Number – DE14152-II; VA Assignment Code – 8306)

2 Credits

This certificate program is designed to provide students with the basic skills and knowledge to begin work as a pharmacy technician. The coursework will fulfill the requirements of the Board of Pharmacy and prepare students to take either the state examination or the national examination administered by the Pharmacy Technician Certification Board. This course will use a combination of technology, hands on labs, and lecture to distribute information.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Pharmacy Technician I

J. Sargeant Reynolds Early College Academy

The Early College Academy (ECA), a 60-credit, cohort-based program during 11th and 12th grade offered five mornings a week from mid-August through mid-June on the Reynolds Downtown Campus, leading to an Associate of Science (A.S.) in Social Sciences degree.

BIO 101 - General Biology I (Course Number – DE03051-I; VA Assignment Code – N/A)

0.5 Credit

Focuses on foundations in cellular structure, metabolism, and genetics in an evolutionary context. Explores the core concepts of evolution; structure and function; information flow, storage and exchange; pathways and transformations of energy and matter; and systems biology. Emphasizes process of science, interdisciplinary approach, and relevance of biology to society. Part I of a two-course sequence.

Graduation Requirements: NA

Prerequisites: Completion of ENF 2 and MTE 1-3, if required by placement test. Satisfactory completion of Biology I.

BIO 102 - General Biology II (Course Number – DE03051-II; VA Assignment Code – N/A)

0.5 Credit

Focuses on diversity of life, anatomy and physiology of organisms, and ecosystem organization and processes in an evolutionary context. Explores the core concepts of evolution; structure and function; information flow, storage and exchange; pathways and transformations of energy and matter; and systems biology. Emphasizes process of science, interdisciplinary approach, and relevance of biology to society. Part II of a two-course sequence.

Graduation Requirements: NA

Prerequisites: Satisfactory completion of BIO 101

ENG 111 - College Composition I (Course Number – DE01102-PartI; VA Assignment Code – N/A)

0.5 Credit

Introduces students to critical thinking and the fundamentals of academic writing. Through the writing process, students refine topics; develop and support ideas; investigate, evaluate, and incorporate appropriate resources; edit for effective style and usage; and determine appropriate approaches for a variety of contexts, audiences, and purposes. Writing activities will include exposition and argumentation with at least one researched essay. ENG 111 has been designated as a "writing intensive" course according to standards developed by the English department.

Graduation Requirements: NA

Prerequisites: Placement recommendation for ENG 111 or placement recommendation for co-requisites ENG 111 and ENF 3. ENG 111 is a prerequisite for ENG 112

ENG 112 - College Composition II (Course Number – DE01102-PartII; VA Assignment Code – N/A)**0.5 Credit**

Continues to develop college writing with increased emphasis on critical essays, argumentation, and research, developing these competencies through the examination of a range of texts about the human experience. Requires students to locate, evaluate, integrate, and document sources and effectively edit for style and usage. ENG 112 has been designated as a "writing intensive" course according to standards developed by the English department.

Graduation Requirements: NA

Prerequisites: Successful completion of ENG 111 or its equivalent and the ability to use word processing software; a grade of C or better in ENG 111 is recommended.

ENG 241 - Survey of American Literature I (Course Number – DE01055; VA Assignment Code – N/A)**0.5 Credit**

Examines American literary works from pre-colonial times through the mid-nineteenth century, emphasizing the ideas and characteristics of our national literature. Involves critical reading and writing. ENG 241 has been designated as a "writing intensive" course according to standards developed by the English department. ENG 241 and 242 may be taken out of order.

Graduation Requirements: NA

Prerequisites: ENG 112 or equivalent

ENG 244 - Survey of English (British) Literature (Course Number – DE01057; VA Assignment Code – N/A)**0.5 Credit**

Studies major English works from the Romantics to the present, emphasizing the ideas and characteristics of the British literary tradition. Involves critical reading and writing. ENG 244 has been designated as a "writing intensive" course according to standards developed by the English department.

Graduation Requirements: NA

Prerequisites: ENG 112 or equivalent

HIS 121 - United States History I (Course Number – DE04102-II; VA Assignment Code – N/A)**0.5 Credit**

Surveys the United States history from its beginning to the present. HIS 121 and HIS 122 need not be taken in sequence. Part I of II.

Graduation Requirements: NA

Prerequisites: Placement in ENG 111 or placement in Co-requisites ENG 111 and ENF 3.

HIS 122 - United States History II (Course Number – DE04103-II; VA Assignment Code – N/A)**0.5 Credit**

Surveys the United States history from its beginning to the present. HIS 121 and HIS 122 need not be taken in sequence. Part II of II.

Graduation Requirements: NA

Prerequisites: Placement in ENG 111 or placement in Co-requisites ENG 111 and ENF 3

HLT 115 - Introduction to Personal and Community Health (Course Number – DE08053-II; VA Assignment Code – N/A)**0.5 Credit**

Introduces and focuses on the principles of personal and community health.

Graduation Requirements: NA

Prerequisites: None

HUM 260 - Survey of Twentieth-Century Culture (Course Number – DE04064; VA Assignment Code – N/A)**0.5 Credit**

Explores literature, visual arts, philosophy, music, and history of our time from an interdisciplinary perspective.

Graduation Requirements: NA

Prerequisites: None

ITE 115 - Introduction to Computer Applications (Course Number – DE10004; VA Assignment Code – N/A)**0.5 Credit**

Covers computer concepts and internet skills, and uses a software suite, which includes word processing, spreadsheet, database, and presentation software to demonstrate skills. Introduces information literacy knowledge and skills.

Graduation Requirements: NA

Prerequisites: Keyboarding skills

MTH 154 - Quantitative Reasoning (Course Number – DE02317; VA Assignment Code – N/A)**0.5 Credit**

Presents topics in proportional reasoning, modeling, financial literacy, and validity studies (logic and set theory). Focuses on the process of taking a real-world

situation, identifying the mathematical foundation needed to address the problem, solving the problem, and applying what is learned to the original situation. Replaces MTH 151, MTH 152, MTH 158, or MTH 170.

Graduation Requirements: NA

Prerequisites: Competency in MTE 1-5 as demonstrated through placement or unit completion or equivalent or co-enrollment in MCR 4.

MTH 245 - Statistics I (Course Number – DE02201; VA Assignment Code – N/A)

0.5 Credit

Presents an overview of statistics, including descriptive statistics, elementary probability, probability distributions, estimation, hypothesis testing, correlation, and linear regression. Credit will not be awarded for both MTH 155 - Statistical Reasoning and MTH 245 - Statistics I or equivalent.

Graduation Requirements: NA

Prerequisites: Completion of MTH 154 or MTH 161 or equivalent with a grade of C or better.

PLS 211 - United States Government I (Course Number – DE04151-PartI; VA Assignment Code – N/A)

0.5 Credit

Teaches structure, operation, and process of national, state, and local governments. Includes in-depth study of the three branches of the government and of public policy. PLS 211 and PLS 212 need not be taken in sequence. Part I of II.

Graduation Requirements: NA

Prerequisites: Placement in ENG 111 or placement in Co-requisites ENG 111 and ENF 3

PLS 212 - United States Government II (Course Number – DE04151-PartII; VA Assignment Code – N/A)

0.5 Credit

Teaches structure, operation, and process of national, state, and local governments. Includes in-depth study of the three branches of the government and of public policy. Political Science 211 and 212 need not be taken in sequence. Part II of II.

Graduation Requirements: NA

Prerequisites: Placement in ENG 111 or placement in Co-requisites ENG 111 and ENF 3.

PSY 200 - Principles of Psychology (Course Number – DE04254-IPart1; VA Assignment Code – N/A)

0.5 Credit

Surveys the basic concepts of psychology. Covers the scientific study of behavior and mental processes, research methods and measurement, theoretical perspectives, and application. Includes biological bases of behavior, learning, social interactions, memory, and personality; and other topics, such as sensation, perception, consciousness, thinking, intelligence, language, motivation, emotion, health, development, psychological disorders, and therapy.

Graduation Requirements: NA

Prerequisites: Placement in ENG 111 or placement in Co-requisites ENG 111 and ENF 3

PSY 230 - Developmental Psychology (Course Number – DE04254-IPart2; VA Assignment Code – N/A)

0.5 Credit

Studies the development of the individual from conception to death. Follows a life-span perspective on the development of the person's physical, cognitive, and psycho-social growth.

Graduation Requirements: NA

Prerequisites: Placement in ENG 111 or placement in Co-requisites ENG 111 and ENF 3.

SDV 100 - College Success Skills (Course Number – DE99955; VA Assignment Code – N/A)

0.5 Credit

Assists students in transition to college. Provides overviews of college policies, procedures, and curricular offerings. Encourages contacts with other students and staff. Assists students toward college success through information regarding effective study habits, career and academic planning, and other college resources available to students. Strongly recommended for beginning students. Required for graduation.

Graduation Requirements: NA

Prerequisites: None

SPA 101 - Beginning Spanish I (Course Number – DE24052-Part1; VA Assignment Code – N/A)

0.5 Credit

Introduces understanding, speaking, reading, and writing skills and emphasizes basic Spanish sentence structure. Incorporates exposure to the arts, culture, and literature of the areas of the world where Spanish is spoken. Part I of II. May include an additional hour of oral drill and practice per week.

Graduation Requirements: NA

Prerequisites: None

SPA 102 - Beginning Spanish II (Course Number – DE24052-Part2; VA Assignment Code – N/A)

0.5 Credit

Introduces understanding, speaking, reading, and writing skills and emphasizes basic Spanish sentence structure. Incorporates exposure to the arts, culture, and literature of the areas of the world where Spanish is spoken. Part II of II. May include an additional hour of oral drill and practice per week.

Graduation Requirements: NA

Prerequisites: SPA 101 or its equivalent.

Welding I (Course Number – DE13207-I; VA Assignment Code – DE8672)

1 Credit

Welding is required by a wide variety of industries—anywhere fusible materials and high heat are needed to manufacture, repair, or alter tools and products. Professional welders are in high demand and can earn accordingly. Students in Welding I are taught to use manual welding, cutting, and electrical arc welding processes to fabricate and join metal parts according to diagrams, blueprints, and specifications. Students will also learn all safety-related practices and techniques, including earning the OSHA 10 card.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Welding II (Course Number – DE13207-II; VA Assignment Code – DE8673)

2 Credits

This course teaches advanced welding students how to fine-tune their craft and to perform welds in various positions, using multiple welding processes. Students prepare to pass relevant industry certifications. Welding is required by a wide variety of industries—anywhere fusible materials and high heat are needed to manufacture, repair, or alter products. Professional welders are in high-demand and can earn accordingly.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Welding I

Welding III (Course Number – DE3207-III; VA Assignment Code – DE8674)

2 Credits

This welding capstone course teaches the industry's emerging technologies and how to demonstrate gas tungsten arc welding (GTAW) and shielded metal arc welding (SMAW) pipe tests. Students are prepared to earn relevant industry credentials toward employment in production or manufacturing facilities.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Welding II

VCU CMST 210 - Health Careers (Course Number – DE99951; VA Assignment Code – N/A)

Varies Credit

Semester course; variable hours. 1-3 credits. Open only to high school students enrolled in programs partnering with VCU's Health Sciences Academy. High school students will learn college-success skills, how to make informed decisions about the health careers they wish to pursue and plan college-level courses and extracurricular activities to achieve their career goals. Material is presented through lectures from health care workers in various specialties, hands-on activities and exposure to college mentors.

Graduation Requirements: NA

Prerequisites: CMST 209, College Success Skills

English Language Arts

English - Grade 9 (Course Number – 01001; VA Assignment Code – 1130)

1 Credit

Students in ninth grade focus on the continued development of communication, vocabulary, reading, writing, and research. The student will continue to expand vocabulary using the structural analysis of roots and affixes to understand complex words, as well as apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. There is a continued emphasis on reading comprehension by comparing fiction and nonfiction texts, with an emphasis on nonfiction reading. Students will read, comprehend, and analyze a variety of fiction, nonfiction, poetry, and drama. Students will use the recursive writing process to write in a variety of forms, including expository, persuasive, reflective, and analytic with an emphasis on persuasion and analysis. Students will be expected to have greater control over the conventions of writing and self-

and peer-edit writing for capitalization, punctuation, spelling, sentence structure, paragraphing, and Standard English. Students will continue their development of research skills that are foundational to effective critical thinking and responsible use of information by finding, evaluating, and selecting credible resources to create a research product.

Graduation Requirements: This course is one of the four required courses needed to fulfill the English standard credits.
Prerequisites: None

English - Grade 9 Honors (Course Number – H01001; VA Assignment Code – H1130)

1 Credit

Students in ninth grade focus on the continued development of communication, vocabulary, reading, writing, and research. The student will continue to expand vocabulary using the structural analysis of roots and affixes to understand complex words, as well as apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. There is a continued emphasis on reading comprehension by comparing fiction and nonfiction texts, with an emphasis on nonfiction reading. Students will read, comprehend, and analyze a variety of fiction, nonfiction, poetry, and drama. Students will use the recursive writing process to write in a variety of forms, including expository, persuasive, reflective, and analytic with an emphasis on persuasion and analysis. Students will be expected to have greater control over the conventions of writing and self- and peer-edit writing for capitalization, punctuation, spelling, sentence structure, paragraphing, and Standard English. Students will continue their development of research skills that are foundational to effective critical thinking and responsible use of information by finding, evaluating, and selecting credible resources to create a research product.

Graduation Requirements: This course is one of the four required courses needed to fulfill the English standard credits.
Prerequisites: None

English - Grade 10 (Course Number – 01002; VA Assignment Code – 1140)

1 Credit

Students in tenth grade focus on the continued development of communication, vocabulary, reading, writing, and research. The student will continue to expand vocabulary and extend vocabulary development. In tenth grade, there is a sustained emphasis on reading comprehension by analyzing the cultural and social

function and universal themes of a variety of fictional texts from different cultures. There is an increased emphasis on analyzing and synthesizing information from a variety of nonfiction texts to solve problems, answer questions, and generate new knowledge. Students will use the recursive writing process to write in a variety of forms, including expository, persuasive, reflective, and analytic, with an emphasis on persuasion and analysis. Students will be expected to have greater control over the conventions of writing and write and revise to a standard acceptable both in the workplace and postsecondary education. Students will continue their development of research skills that are foundational to effective critical thinking and responsible use of information by finding, evaluating, and selecting credible resources to create a research product.

Graduation Requirements: This course is one of the four required courses needed to fulfill the English standard credits.
Prerequisites: English - Grade 9

English - Grade 10 Honors (Course Number – H01002; VA Assignment Code – H1140)

1 Credit (Eligible for Verified Credit)

Students in tenth grade focus on the continued development of communication, vocabulary, reading, writing, and research. The student will continue to expand vocabulary and extend vocabulary development. In tenth grade, there is a sustained emphasis on reading comprehension by analyzing the cultural and social function and universal themes of a variety of fictional texts from different cultures. There is an increased emphasis on analyzing and synthesizing information from a variety of nonfiction texts to solve problems, answer questions, and generate new knowledge. Students will use the recursive writing process to write in a variety of forms, including expository, persuasive, reflective, and analytic, with an emphasis on persuasion and analysis. Students will be expected to have greater control over the conventions of writing and write and revise to a standard acceptable both in the workplace and postsecondary education. Students will continue their development of research skills that are foundational to effective critical thinking and responsible use of information by finding, evaluating, and selecting credible resources to create a research product.

Graduation Requirements: This course is one of the four required courses needed to fulfill the English standard credits.
Prerequisites: English - Grade 9

English - Grade 11 (Course Number – 01003; VA Assignment Code – 1150)

1 Credit (Eligible for a Verified Credit in Reading and Writing)

Students in eleventh grade focus on the continued development of communication, vocabulary, reading, writing, and research. The student will continue to expand vocabulary and extend vocabulary development. In eleventh grade, there is a sustained emphasis on reading comprehension by reading, comprehending, and analyzing relationships among American literature, history, and culture. They will conduct comparative analyses of multiple texts that address the same topic, as well as analyze fictional texts by American authors describing the contributions of other cultures and identifying prevalent themes and characterizations, which are reflective of American culture. Students will also read, interpret, analyze and evaluate a variety of nonfiction texts, including employment documents and technical writing. Students will use the recursive writing process to write persuasive/argumentative, reflective, interpretive, and analytic essays with an emphasis on persuasive/argumentation. Students will be expected to have greater control over the conventions of writing and write and revise to a standard acceptable both in the workplace and postsecondary education. Students will be expected to write and revise to a standard acceptable both in the workplace and postsecondary education. Students will continue their development of research skills that are foundational to effective critical thinking and responsible use of information by analyzing, evaluating, synthesizing, and organizing information from a variety of credible resources to produce a research product.

Graduation Requirements: This course is one of the four required courses needed to fulfill the English standard credits.
Prerequisites: English - Grade 10

English - Grade 12 (Course Number – 01004; VA Assignment Code – 1160)

1 Credit (Eligible for Verified Credit)

Students in twelfth grade focus on the continued development of communication, vocabulary, reading, writing and research. The student will continue to expand vocabulary and extend vocabulary development. In twelfth grade, there is a sustained emphasis on reading comprehension by reviewing multiple texts to identify and evaluate resources to make decisions and solve problems. The focus is on British authors and literature, therefore students will read, comprehend and evaluate the development of British literature and the literature of

other cultures while evaluating how authors use key elements to contribute to meaning and interpreting how themes are connected across texts. Students will also read, interpret, analyze, and evaluate a variety of nonfiction texts. Students will use the recursive writing process to write persuasive/argumentative, reflective, interpretive, and analytic essays with an emphasis on persuasive/argumentation. Students will be able expected to write and revise to a standard acceptable both in the workplace and postsecondary education. Students will continue their development of research skills that are foundational to effective critical thinking and responsible use of information by analyzing, evaluating, synthesizing, and organizing information from a variety of credible resources.

Graduation Requirements: This course is one of the four required courses needed to fulfill the English standard credits.
Prerequisites: English - Grade 11 or equivalent (AP Language)

AP English Language & Composition (Course Number – AP01005; VA Assignment Code – N/A)

1 Credit (Eligible for Verified Credit)

A college level course providing students with opportunities to write about multiple subjects from a variety of disciplines and to demonstrate an awareness of audience and purpose. Students will move beyond programmatic responses and are encouraged to focus on content, purpose and audience in the organization of their writing. Students will become acquainted with a wide variety of styles from many disciplines and gain understanding of the connections between writing and reading. Students will be asked to analyze how graphics and visual images in texts relate to written texts and serve as alternative forms of text. Also, the informed use of research materials and the ability to synthesize varied sources (to evaluate, use and cite sources) will be integral parts of the course.

Graduation Requirements: This course may be used or counted as one of the four required courses needed to fulfill the English standard credits.

Prerequisites: None

AP English Literature & Composition (Course Number – AP01006; VA Assignment Code – N/A)

1 Credit

A college level course that includes both a wide and a deep reading of works from various genres and periods, concentrating on works of recognized literary merit. Students will read to understand a work's complexity, to absorb its richness of meaning, and to analyze how that

meaning is shared through its details. In addition students will reflect on the social and historical values texts reflect. Students will also write about literary works by explaining judgments about artistry, social and cultural values, and how the details of the work justify the judgments. Students will learn how to make careful observations of textual details, establish connections among their observations, and make inferences leading to an interpretive conclusion about the meaning and value of a piece of writing. Students enrolled are expected to take the AP Exam.

Graduation Requirements: This course may be used or counted as one of the four required courses needed to fulfill the English standard credits.

Prerequisites: None

**AP Research (Course Number – AP22112; VA
Assignment Code – N/A)**

1 Credit

AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The AP Research course is an inquiry-based course that aims to engage students in scholarly research with the end goal of making a unique contribution to that conversation. Students are encouraged to investigate real-world topics of interest. This course is designed around six essential skills and their development—critical thinking and reasoning, critical reading, inquiry and research, argumentation, communicating publicly, and collaboration. Students will be working toward the completion of a scholarly research paper of 4,000-5,000 words and a 15-20 minute presentation with oral defense. There is no end-of-course examination administered by the AP College Board; rather, a score is assigned from the culmination of both paper and presentation. This course places great emphasis on academic reading, writing, and presenting. Students are encouraged to seek a consultant in her/his field of interest; however, this is not mandatory and will depend upon the student's research question.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: AP Seminar

**AP Seminar (Course Number – AP22210; VA
Assignment Code – N/A)**

1 Credit

AP Seminar is a foundational Capstone course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literary and philosophical texts. Students also practice listening to and viewing speeches, broadcasts, and personal accounts of artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision. The AP Seminar course is an inquiry-based course that aims to engage students in cross-curricular conversations that explore real-world topics and issues from multiple perspectives. This course is designed around six essential skills and their development—critical thinking and reasoning, critical reading, inquiry and research, argumentation, communicating publicly, and collaboration. Students in this course will be working collaboratively toward the completion of a team research project and presentation, an individual research project and presentation, and an end-of-course examination administered by the AP College Board. It is essential that students come to this class self-motivated, willing to step outside the bounds of their comfort zone, and ready to work hard as they will be making several presentations in front of classes, peers, and potentially professional colleagues. This course places great emphasis on reading, writing, and presentation both in and out of class. AP Seminar is a prerequisite for AP Research. Completing AP Seminar and all its required assessment component is necessary for students to develop the skills to be successful in AP Research.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Creative Writing (Course Number – 01104; VA Assignment Code – 1171)

1 Credit

Creative Writing offers students the opportunity to develop their expressive writing abilities as well as develop and improve their technique and individual style in poetry, short story, drama, essays, other forms of prose, and vocabulary development. The emphasis of the course is on writing; however, students may study exemplary representations and authors to obtain a fuller appreciation of the form and craft.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Strategic Reading (Course Number – 01066; VA Assignment Code – 1515)

1 Credit

Strategic Reading course offers students the opportunity to develop basic skills needed for reading grade level materials. This course will offer additional direct teaching and learning opportunities. The focused topics include fluency, comprehension and vocabulary building skills through the use of fiction and non-fiction material and critical reading to enhance understanding. Texts from across the various contents at both independent and on-grade levels will be used to focus students' strategy use for independent and grade-level reading success. A technology-rich blended learning reading intervention program will be used to support the growth of students in this course in to help students and teachers to monitor progress. It also customizes instruction to meet the diverse needs of all learners.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Students are recommended for placement and continuation based on multiple criteria including results from previous standardized tests, diagnostic assessments, IEPs and on-going quarterly data with teacher observation evidence of reading skills.

English Language Learners

Developmental Reading for ELs (Course Number – 01996; VA Assignment Code – N/A)

1 Credit

Reading intervention block specifically for students classified as SLIFE (Students with Limited or Interrupted Formal Education). This course offers students the

opportunity to develop basic skills needed for reading grade level materials. Students engage in tasks that promote academic language development. The focused topics include fluency, comprehension, and vocabulary building skills primarily through the use of non-fiction material and critical reading to enhance understanding. Texts from across the various contents at both independent and on-grade levels will be used to focus students' strategy use for independent and grade-level reading success. A blended learning reading intervention program, will be used to support the growth of students in this course. This course will be taught by an endorsed ESL teacher.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: SLIFE and EL designation

English as a Second Language I (Course Number – 01008-I; VA Assignment Code – 5710)

1 Credit

English learners enter their English language proficiency and English literacy skills by engaging in academic language development in the four domains of reading, writing, listening and speaking. This course is aligned to the WIDA English language development (ELD) standards and the grade-level English standards of learning.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit (one credit per completed course in the related sequence).

Prerequisites: EL designation and ELP level 1.0-1.4

English as a Second Language II (Course Number – 01008-II; VA Assignment Code – 5720)

1 Credit

English learners emerge in their English language proficiency and English literacy skills by engaging in academic language development in the four domains of reading, writing, listening and speaking. This course is aligned to the WIDA English language development (ELD) standards and the grade-level English standards of learning.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit (one credit per completed course in the related sequence).

Prerequisites: EL designation and ELP level 1.5-2.4

English as a Second Language III (Course Number – 01008-III; VA Assignment Code – 5730)

1 Credit

English learners develop their English language proficiency and English literacy skills by engaging in academic language development in the four domains of reading, writing, listening and speaking. This course is aligned to the WIDA English language development (ELD) standards and the grade-level English standards of learning.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit (one credit per completed course in the related sequence).

Prerequisites: EL designation and ELP level 2.5- 3.4

English as a Second Language IV (Course Number – 01008-IV; VA Assignment Code – 5731)

1 Credit

English learners expand and bridge English language proficiency and English literacy skills by engaging in academic language development in the four domains of reading, writing, listening and speaking. This course is aligned to the WIDA English language development (ELD) standards and the grade-level English standards of learning.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit (one credit per completed course in the related sequence)

Prerequisites: EL designation and ELP level 3.5-4.3

History for Newcomers (Course Number – 04996; VA Assignment Code – N/A)

1 Credit

This course is designed to develop content understandings and English language proficiency simultaneously. Students explore the historical development of people, places, and patterns of life from ancient times until 1500 A.D. The diversity of culture and the evolution of human history will be explored chronologically and geographically from the beginning of time until the Renaissance in Europe. Geographical concepts will be incorporated within the context of world historical events. Students will examine the development of the world's major political, economic, and legal systems; artistic and literary movements; technological changes; trade patterns; religions; and the influential people of history. 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 World History

Standards of Learning; students earn elective credit. This course will be taught by an endorsed ESL teacher.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: EL designation and ELP level 1.0- 1.5

Math for Newcomers (Course Number – 02996; VA Assignment Code – N/A)

1 Credit

The course is designed students with gaps in mathematics to support the development of the mathematics and language skills necessary for success in Algebra I. Students examine algebra and geometry preparatory concepts and skills; strategies for collecting, analyzing, and interpreting data; and number concepts and skills emphasizing proportional reasoning. Problem solving, communication, concept representation, and connections among mathematical ideas are presented in a hands-on learning environment. This course emphasizes language objectives in addition to mathematics objectives and does not meet the mathematics graduation requirements; students earn elective credit. This course will be taught by an endorsed ESL teacher.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: SLIFE & EL designation with gaps in mathematics as determined by placement test

Science for Newcomers (Course Number – 03996; VA Assignment Code – N/A)

1 Credit

This course is designed to develop content understandings and English language proficiency simultaneously. This course integrates biology, earth science, chemistry, and engineering to study many components of our environment. Course outcomes focus on scientific inquiry, the physical world, the living environment, resource conservation, humans' impact on the environment, and legal and civic responsibility. Students will focus on data collection and analysis through laboratory experiences and field work, including descriptive and comparative studies. This course is aligned to the WIDA English language development standards; students earn elective credit. This course will be taught by an endorsed ESL teacher.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: EL designation and ELP level 1.0-1.5

Fine Arts

Beginning Band (Course Number – 05101-I; VA Assignment Code – 9232)

1 Credit

This course is designed for early training in band/instrumental literature. Emphasis is on the basic fundamentals of music reading, breathing technique, and reading and performing from a musical score in a variety of styles. This course will help students develop technique for playing brass, woodwind, and percussion instruments and their ability to perform a variety of band literature. Students will have experiences in creating and responding to music of different styles and genres.

Graduation Requirements: This course meets the graduation requirements for Fine Arts
Prerequisites: None

Intermediate Band (Course Number – 05101-II; VA Assignment Code – 9233)

1 Credit

This course is designed to give greater attention to band/instrumental performance skills and techniques. Students will enhance their technique for intermediate level playing of brass, woodwind, and percussion instruments. More complex technique and skills are introduced and developed in the areas of sight-reading, performance and auditions. Musical note reading is refined and music of higher grade levels is mastered (music grades II-III). Students will have experiences in creating and responding to music of different styles and genres for music grades II-III.

Graduation Requirements: This course meets the graduation requirements for Fine Arts
Prerequisites: Beginning Band

Advanced Band (Course Number – 05101-III; VA Assignment Code – 9234)

1 Credit

This course continues in sequence after Beginning and Intermediate Band. Students will enhance their technique and skills for advanced level playing of brass, woodwind, and percussion instruments. High Level thinking skills are reinforced by student's participation in analyzing and critiquing music for performances. Advanced musical technique and skills are developed in the areas of sight-reading, rehearsal, performance and auditions. Students will be expected to audition for local and district band ensembles. Musical note reading is refined, and music of advanced grade levels is performed (music grades III-IV).

Students will have experiences in creating and responding to music of different styles and genres for music grades III-IV.

Graduation Requirements: This course meets the graduation credit requirement for Fine Arts
Prerequisites: Intermediate Band

Artist Band (Course Number – 05101-IV; VA Assignment Code – 9244)

1 Credit

This course continues in sequence after Advanced Band. Students will be proficient in technique and skills for high level performance of brass, woodwind, and percussion instruments. Music analysis and critique are reinforced, and high-level thinking is emphasized through performances. Performances are required for this ensemble. Musical note reading is refined, and music grades III-IV is performed. Artist level technique and skills become proficient in the areas of sight-reading, rehearsal, performances, and auditions. Students will be required to audition for local and district band ensembles. Students will have experiences in creating and responding to music of different styles and genres for music grades III-IV. Students will participate in All-City band and VBODA district assessment.

Graduation Requirements: This course meets the graduation requirements for Fine Arts
Prerequisites: Advanced Band

Beginning Chorus (Course Number – 05110-I; VA Assignment Code – 9260)

1 Credit

This course is designed to help the students develop the skills necessary for improved vocal ability and technique. It prepares a student for participation in a vocal ensemble. Emphasis is placed on correct posture, breathing, vocal techniques, diction and intonation. Students will also concentrate on sight singing. Public performances are required. Students will have experiences in creating and responding to music of different styles and genres.

Graduation Requirements: This course meets the graduation requirements for Fine Arts
Prerequisites: None

Intermediate Chorus (Course Number – 05110-II; VA Assignment Code – 9285)

1 Credit

This course is designed to give greater attention to vocal production and the interpretation of traditional and contemporary literature. Emphasis is placed on improving

vocal quality, vocal techniques, and sight singing ability. Participation in scheduled school and public performances are required. Successful completion of high school beginning chorus or middle school advanced chorus is necessary. Students will have experiences in creating and responding to music of different styles and genres.

Graduation Requirements: This course meets the graduation requirements for Fine Arts
Prerequisites: Beginning Chorus

Advanced Chorus (Course Number – 05110-III; VA Assignment Code – 9289)

1 Credit

This course is a continuation of the choral studies from intermediate chorus. It provides students with many opportunities to refine their choral skills to a high level of performance. It is the major vocal performing group. This course also provides an in-depth musical experience which will challenge those students who have achieved a level of development commensurate with requirements of performance at the advanced level. Participation in scheduled public performances and All-City chorus is required. Continued development of sight-reading skills are emphasized. Students will have experiences in creating and responding to music of different styles and genres.

Graduation Requirements: This course meets the graduation requirements for Fine Arts
Prerequisites: Intermediate Chorus

Artist Chorus (Course Number – 05110-IV; VA Assignment Code – 9290)

1 Credit

This course provides music instruction for students who will perform in Honors Choir, All City Choir, Show Choir, Madrigals, and other advanced choirs, local, state, and national ensembles. Participation in this course will provide skills and technique in the area of repertoire building, music theory, and performance development. Public performances are required to enhance the learning process. Students will participate in VBODA district assessment. Students will have experiences in creating and responding to music of different styles and genres.

Graduation Requirements: This course meets the graduation requirements for Fine Arts
Prerequisites: Advanced Chorus

Beginning Orchestra (Course Number – 05104-I; VA Assignment Code – 9237)

1 Credit

This course is designed to help develop students' technique for playing a string instrument in the orchestra and an introduction to early training in orchestral literature. Emphasis is on the basic fundamentals of music reading, bowing technique, and reading and performing from a musical score in a variety of styles. This course will help students develop technique for playing violin, viola, cello and bass instruments and their ability to perform a variety of band literature. Students will have experiences in creating and responding to music of different styles and genres.

Graduation Requirements: This course meets the graduation requirements for Fine Arts
Prerequisites: None

Intermediate Orchestra (Course Number – 05104-II; VA Assignment Code – 9285)

1 Credit

This course is designed to provide intermediate level music instruction for students who perform in the Orchestra on stringed instruments. Attention is given to the understanding of form and style in the musical periods. Technical concentration on scales, etudes, and intermediate graded music literature is included. Daily practice outside of class is required. Scheduled school related and public performances are required. Students will have experiences in creating and responding to music of different styles and genres.

Graduation Requirements: This course meets the graduation requirements for Fine Arts
Prerequisites: Beginning Orchestra

Advanced Orchestra (Course Number – 05104-III; VA Assignment Code – 9239)

1 Credit

This course is designed to continue in technical sequence from Intermediate Orchestra and offers an advanced level of orchestral participation. An examination of early European through contemporary literature will be explored. Position playing for strings, the use of vibrato, mastery of bowing styles, interpretation of standard symphonic literature, and refinement of large ensemble playing for all families of instruments are qualities of extreme value. Daily practice outside of class is required. Scheduled school related and public performances are required. Participation in All-City Orchestra is required.

Students will have experiences in creating and responding to music of different styles and genres.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Beginning Orchestra, Intermediate Orchestra

Artist Orchestra (Course Number – 05104-IV; VA Assignment Code – 9242)

1 Credit

This course is designed to continue in technical sequence from Advanced Orchestra and offers an advanced level of orchestral participation. An examination of advanced literature will be explored (Grades III-IV). Advanced position playing for strings (2nd, 3rd, 4th & 5th position), the use of vibrato, master of bowing technique and skills will be worked on intensely. Interpretation of standard symphonic literature, and the refinement of large ensemble playing for all families of instruments are qualities of extreme value and will be explored. Audition preparation will be a focus as these students will participate in auditions for local and state ensembles. All-City Orchestra participation is expected. Regional Orchestra auditions are required and participation in VBODA district assessment is required.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Advanced Orchestra

AP Art History (Course Number – AP05153; VA Assignment Code – 9151)

1 Credit

AP Art History is designed to parallel college-level Art History courses, AP Art History courses provide the opportunity for students to critically examine and respond to works of art within their historical and cultural contexts. In covering the art and movements of several centuries not necessarily in chronological order, students learn to identify different styles, techniques, media and influences. Students formulate and articulate their reactions to various kinds of artwork to understand and appreciate themselves, other and the world around them.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: None

AP Music Theory (Course Number – AP05114; VA Assignment Code – N/A)

1 Credit

AP Music Theory courses are designed to be the equivalent of a first-year music theory college course as

specified by the College Board. AP Music Theory develops students' understanding of musical structure and compositional procedures. Usually intended for students who already possess performance-level skills, AP Music Theory courses extend and build upon students' knowledge of intervals, scales, chords, metric/rhythmic patterns, and the ways they interact in a composition. Musical notation, analysis, composition, and aural skills are important components of the course.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Suggested: Beginning Band, Intermediate Band

AP Studio Art – Drawing Portfolio (Course Number – AP05172; VA Assignment Code – 9150)

1 Credit

This is an advanced Placement (AP) course that is equivalent to an introductory college course. The Advanced Placement Studio Program enables highly motivated students to do college-level work in studio art while still in high school. AP Studio Art: Drawing Portfolio is not based on written examination; instead, students submit portfolios for evaluation at the end of the school year. Course content is developed according to the College Board's AP curriculum.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Suggested: Art I/Art Foundations

AP Studio Art – Three Dimensional (Course Number – AP05175; VA Assignment Code – 9149)

1 Credit

AP Studio Art – Three Dimensional is designed for students with a professional or academic interest in three-dimensional art. This course focuses on a variety of concepts and approaches in 3-D design and creation, enabling students to demonstrate a range of abilities and versatility with media, technique, problem solving, and scope. They can demonstrate such conceptual variety through the use of one or several media. Students refine their skills and create artistic works to submit via portfolio to the College Board for evaluation.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Suggested: Art I/Art Foundations

AP Studio Art – Two Dimensional (Course Number – AP05174; VA Assignment Code – 9148)

1 Credit

AP Studio Art – Two Dimensional is designed for students with a professional or academic interest in two-dimensional art. This course focuses on a variety of concepts and approaches in drawing and 2-D design, enabling students to demonstrate a range of abilities and versatility with media, technique, problem solving, and scope. Such conceptual variety can be demonstrated through the use of one or several media. Students refine their skills and create artistic works to submit via a portfolio to the College Board for evaluation.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Suggested: Art I/Art Foundations

Art I/Art Foundations (Course Number – 05154-I; VA Assignment Code – 9120)

1 Credit

Comprehensive courses enable students to explore one or several art forms (e.g., drawing, painting, two- and three-dimensional design, and sculpture) and to create individual works of art. Initial courses emphasize observations, interpretation of the visual environment, visual communication, imagination, and symbolism. Courses cover the language, materials, media, and processes of a particular art form and the design elements used. Advanced courses encourage students to refine their skills while also developing their own artistic styles following and breaking from traditional conventions. Courses may also include the study of major artists, art movements, and styles.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: None

Art II/Intermediate (Course Number – 05154-II; VA Assignment Code – 9130)

1 Credit

This course is designed to further develop the students' ability to observe the environs in a conscious manner and to develop abilities for visual self-expression. The course gives depth to the students' understanding of art as they explore the visual world, both natural and man-made, enabling them to refine their own concepts and skills. Emphasis is on drawing and painting, as well as the development of technical skills in a variety of media. The course examines historical and contemporary art expression across culture and ethnic groups. The course

exposes students to methods of evaluating their art work as well as the work of others.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Art I/Art Foundations

Art III/Advanced Intermediate (Course Number – 05154-III; VA Assignment Code – 9140)

1 Credit

This course is designed to give students opportunities to broaden and strengthen the skills, knowledge, and attitudes acquired in Art I/Art Foundations and Art II/Intermediate. The course focuses on the students' interests and ability to critically analyze works of art and to respond aesthetically to man-made and natural objects. Use of technology in art and individual career planning is emphasized in the course.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Art II/Intermediate

Art IV/Advanced (Course Number – 05154-IV; VA Assignment Code – 9145)

1 Credit

This course provides an in-depth study and personal development in one or more areas of the visual arts. These include drawing and painting, crafts, graphics, sculpture, architecture, and commercial design as well as other areas determined by the needs and skills of the individual art student. The student is encouraged to develop a portfolio of artwork.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Art III/Advanced Intermediate

Art V/Portfolio Preparation (Course Number – 05170; VA Assignment Code – 9147)

1 Credit

Students in the portfolio preparation course will do college-level work in studio art. All work in this course will be part of their portfolio. Students will work intensely on development and mastery in one or more areas of visual arts. The areas include: painting, crafts, graphics, sculpture, architecture, and commercial design, as well as other areas determined by the needs and skills of the individual students. Students submit portfolios for evaluation at the end of the school year.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Art IV/Advanced

Dance Technique: Dance I (Course Number – 05001-I; VA Assignment Code – N/A)

1 Credit

Students experience dance as an art form that develops critical thinking skills, discipline, collaboration, creativity, and physical skills that safely facilitate the execution of dance movement. Students enrich their views of society, themselves, and other cultures through the study of dance history. This course is an introduction to technical dance.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: None

Dance Technique: Dance II (Course Number – 05001-II; VA Assignment Code – N/A)

1 Credit

Students experience dance as an art form that develops critical thinking skills, discipline, collaboration, creativity, and physical skills that safely facilitates the execution of dance movement. Students enrich their views of society, themselves, and other cultures through the study of dance history. This is a continuation from Dance Technique: Dance I. This course works on technique of each dance discipline prepares students for further dance study, and nurtures a lifelong appreciation of dance as an expressive and accessible art form.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Dance Technique: Dance I

Dance Technique: Dance III (Course Number – 05001-III; VA Assignment Code – N/A)

1 Credit

Students experience dance as an art form that develops critical thinking skills, discipline, collaboration, creativity, and physical skills that safely facilitate the execution of dance movement. This course is an advanced course in dance technique and performance. Students will be required to choreograph short dances and learn audition technique and skills.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Dance Technique: Dance II

Dance Technique: Dance IV (Course Number – 05001-IV; VA Assignment Code – N/A)

1 Credit

Students experience dance as an art form that develops critical thinking skills, discipline, collaboration, creativity, and physical skills that safely facilitate the execution of dance movement. This course is an intensive course in dance technique and performance. Students will be required to choreograph a production for an ensemble. Student will also prepare and participate in auditions into local, regional, and state dance competitions. School and public performances are required.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Dance Technique: Dance III

Guitar I (Course Number – 05108-I; VA Assignment Code – 9245)

1 Credit

Guitar provides students an introduction to, and an opportunity to refine the fundamentals of, music and guitar literature and techniques, such as strumming and chords, as well as offering instruction in more advanced techniques. The course may include bass, ukulele, and other plucked string instruments. Formal and informal performances are typically included as well as experiences in creating and responding to music.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: None

Guitar II (Course Number – 05108-II; VA Assignment Code – 9247)

1 Credit

Guitar II provides continuous instruction on acoustic guitar. Students demonstrate proper care of the instrument and become increasingly familiar with its history and technology. They demonstrate different positions, right-hand and left-hand techniques, tone production, intonation, and chord structures. Students read and perform music of varying styles and levels of difficulty. They describe, respond to, interpret, analyze, and evaluate works of music. Students improvise and create variations of simple melodies, and they have opportunities to perform in small ensembles. They compare and contrast career options in music.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Guitar I

Theatre I/Introduction To Theatre (Course Number – 05052; VA Assignment Code – 1410)

1 Credit

This course is designed to provide a general introduction to the dramatic arts including basic acting skills, dramatic structure, and visual elements of theatre production and appreciation of a variety of dramatic styles. This course should be used as a prerequisite for other theatre courses.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: None

Theater II/Dramatic Literature & Theater History (Course Number – 05059; VA Assignment Code – 1420)

1 Credit

This course is designed to provide an intermediate level of dramatic arts including intermediate technical acting skills, dramatic structure, and visual elements of theatre production and appreciation of a variety of dramatic styles.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Theatre-I/Introduction to Theatre

Theatre III/Intermediate Acting & Playwriting (Course Number – 05058; VA Assignment Code – 1423)

1 Credit

This course will emphasize different acting techniques, character analysis, scene study, and performances. Students will have opportunities to create, read, view, perform in and respond to plays. Participation in the productions is required.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Theatre II/Intermediate Theatre

Theatre IV/Advanced Acting & Directing (Course Number – 05057; VA Assignment Code – 1426)

1 Credit

This course is designed to provide advanced instruction in acting, directing, and theatre production. This elective course includes script analysis, design, and application of technical elements, and stage management. Students will plan, rehearse, and direct a theatrical production. Production performances are required.

Graduation Requirements: This course meets the graduation requirements for Fine Arts

Prerequisites: Theatre III/Intermediate Acting & Playwriting

Health and Physical Education

Advanced Physical Education/Individual/Dual Sports (Course Number – 08003; VA Assignment Code – 7640)

1 Credit

This advanced physical education elective exposes students to physical activities for in-depth study and participation (aerobics, cycling, dance, individual sports & fitness, outdoor pursuits, team sports, weight training and conditioning).

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Health & PE - Grade 9 (not Driver Education), Health & PE - Grade 10

Advanced Physical Education/Weight Training (Course Number – 08009; VA Assignment Code – 7650)

1 Credit

Students will work as a group and independently to design and implement a health enhancing personal fitness program complete with personal fitness goals. The students should also be able to use available technology and resources to complete lifetime fitness plans.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Health & PE - Grade 9 (not Driver Education), Health & PE - Grade 10

Driver Education - Classroom Instruction Only (Course Number – 08151; VA Assignment Code – 7015)

Pass/Fail Credit

An elective course consisting of two phases: theory and behind-the-wheel training. Students learn attitudes and natural laws which affect driving. Mental and physical characteristics which affect driving are also discussed. The effects of alcohol and other drugs as well as the differences in a driver's ability to perceive, react, and stop an automobile are covered. Students receive instruction on the safety equipment of the automobile, buying and selling a car, state laws and their effects on driving, motorcycle safety and careers in the driving profession.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Health & PE - Grade 9 (not Driver Education) (Course Number – 08052; VA Assignment Code – 7300)

1 Credit

The student will learn to perform all basic movement skills and demonstrate competence in self-selected, lifetime, skill-related physical activities from individual, dual, or team game/sport, dance, and recreational pursuit activities categories. Students in grade nine integrate a variety of health concepts, skills, and behaviors to plan for their personal, lifelong health goals. These include awareness and consequences of risky behaviors, disease prevention, overall wellness and good Samaritan CPR, First Aid and AED training.

Graduation Requirements: This course is required to fulfill the Health & Physical Education graduation requirement.

Prerequisites: None

Health, PE, & Driver Education - Grade 10 (Course Number – 08201-II; VA Assignment Code – 7425)

1 Credit

This course is designed to provide instruction in lifetime fitness, team and individual sports with an emphasis on lifetime fitness, along with dance and recreational sports. The student will demonstrate an understanding of health concepts, behaviors, and skills that reduce health risks and enhance the health and wellness of self and others throughout life. One semester health and one semester Driver Education

Graduation Requirements: This course is required to fulfill the Health & Physical Education graduation requirement.

Prerequisites: Health and Physical Education - Grade 9

Health & PE - Grade 10 (not Driver Education) Virtual (Course Number – V8999; VA Assignment Code – 7400)

1 Credit

Online Health & PE offers both health and physical education in a nationally and state aligned course curriculum. Students will use Online Health & PE to fulfill their 10th grade health and physical education requirements, and will do it on their time, in their comfort zone and in their community. The key areas of learning are the same one would find in an ordinary classroom in an independent study curriculum set. Using technology for presenting health and physical education allows the students to have control over their education and the environment in which they learn. Students will be required to participate in physical activity, of their choosing, on their time. Students will be given a heart rate monitor which measures and tracks healthy heart rate activity. Each student must participate in the healthy heart rate

range for a certain length of time to get credit for the physical education portion of their grade.

Graduation Requirements: This course can be used to fulfill the Health & Physical Education graduation requirement.

Prerequisites: Health & Physical Education - Grade 9

History and Social Sciences

AP European History (Course Number – AP04056; VA Assignment Code – AP2399)

1 Credit (Eligible for Verified Credit)

The College Board's curriculum is followed and is equivalent to a first-year college course. Emphasis is placed on the political, economic, and social survey of the history of modern Europe from the Renaissance to the present. It also includes the background of the ancient and medieval worlds of western civilization. Students in this course are expected to read and interpret points of view and abstract concepts.

Graduation Requirements: This course may be used to fulfill the history & social sciences standard credit.

Prerequisites: None

AP Human Geography (Course Number – AP04004; VA Assignment Code – AP2212)

1 Credit (Eligible for Verified Credit)

The College Board's curriculum is followed and is equivalent to a first-year college course. In this course students are introduced to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice. Students enrolled are expected to take the AP Exam.

Graduation Requirements: This course may be used to fulfill the history & social sciences standard credit.

Prerequisites: None

AP United States Government & Politics (Course Number – AP04157; VA Assignment Code – AP2445)

1 Credit (Eligible for Verified Credit)

AP U.S. Government and Politics provides a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students study U.S.

foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behavior. They also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. In addition, they complete a political science research or applied civics project.

Graduation Requirements: This course may be used to fulfill the history & social sciences standard credit.

Prerequisites: None

AP United States History (Course Number – AP04104; VA Assignment Code – AP2319)

1 Credit (Eligible for Verified Credit)

AP U.S. History is designed to be the equivalent of a two-semester introductory college or university U.S. history course. In AP U.S. History students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; making historical comparisons; utilizing reasoning about contextualization, causation, and continuity and change over time; and developing historical arguments. The course also provides seven themes that students explore throughout the course in order to make connections among historical developments in different times and places: American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment; and culture and society.

Graduation Requirements: This course may be used to fulfill the history & social sciences standard credit.

Prerequisites: None

Virginia & U.S. Government (Course Number – 04151; VA Assignment Code – 2440)

1 Credit

The curriculum examines the structure and functions of our federal form of government. The decision-making processes at the local, state, national, and international levels are emphasized. The foundations of American government, the politics of American democracy, and constitutional rights and responsibilities are explored in depth. United States political and economic systems are compared to those of other nations, with emphasis on the relationships between economic and political freedoms. Economic content includes the United States market system, supply and demand, and the role of the

government in the economy. Democratic values and citizen participation are stressed throughout the course.

Graduation Requirements: This course may be used to fulfill the history & social sciences standard credit.

Prerequisites: None; It is preferred that students enrolled in this course have previous experience in at least one World History and Virginia and United States History.

Virginia & U.S. History (Course Number – 04101; VA Assignment Code – 2360)

1 Credit (Eligible for Verified Credit)

The standards for Virginia and United States History include the historical development of American ideas and institutions from the Age of Exploration to the present. While focusing on political and economic history, the standards provide students with a basic knowledge of American culture through a chronological survey of major issues, movements, people, and events in United States and Virginia history. Students should use historical and geographical analysis skills to explore in depth the events, people, and ideas that fostered our national identity and led to our country's prominence in world affairs. The study of history must emphasize the intellectual skills required for responsible citizenship. Students practice these skills as they extend their understanding of the essential knowledge defined by the standards for history and social science.

Graduation Requirements: This course may be used to fulfill the history & social sciences standard credit.

Prerequisites: Successful completion of World History I and World History II is recommended but not required.

World Geography (Course Number – 04001; VA Assignment Code – 2210)

1 Credit (Eligible for Verified Credit)

The focus of this course is the study of the world's peoples, places, and environments, with an emphasis on world regions. The knowledge, skills, and perspectives of the course are centered on the world's peoples and their cultural characteristics, landforms and climates, economic development, and migration and settlement patterns. Spatial concepts of geography will be used as a framework for studying interactions between humans and their environments. Using geographic resources, students will employ inquiry, research, and technology skills to ask and answer geographic questions. Particular emphasis will be placed on students' understanding and applying geographic concepts and skills to their daily lives.

Graduation Requirements: This course may be used to fulfill the history & social sciences standard credit.

Prerequisites: None

**World History & Geography 1500 A.D. to the Present
(Course Number – 04053; VA Assignment Code – 2216)
1 Credit (Eligible for Verified Credit)**

This course will enable students to cover history and geography from 1500 A.D. to the present, with emphasis on Western Europe. Geographic influences on history continue to be explored, but increased attention is given to political boundaries that developed with the evolution of nations. Significant attention will be given to the ways in which scientific and technological revolutions created new economic conditions that in turn produced social and political changes. Noteworthy people and events of the nineteenth and twentieth centuries will be emphasized for their strong connections to contemporary issues.

Graduation Requirements: This course may be used to fulfill the history & social sciences standard credit.

Prerequisites: None

**World History & Geography to 1500 A.D. (Course Number – 04052; VA Assignment Code – 2215)
1 Credit (Eligible for Verified Credit)**

This course will enable students to explore the historical development of people, places, and patterns of life from ancient times until 1500 A.D. The diversity of culture and the evolution of human history will be explored chronologically and geographically from the beginning of time until the Renaissance in Europe. Geographical concepts will be incorporated within the context of world historical events. Students will examine the development of the world's major political, economic, and legal systems; artistic and literary movements; technological changes; trade patterns; religions; and the influential people of history. Special emphasis will be given to the five themes of geography as they relate to regional conflicts, humanity's relationships with the environment, and the foundation of democratic principles, such as citizenship.

Graduation Requirements: This course may be used to fulfill the history & social sciences standard credit.

Prerequisites: None

**World History & Geography to 1500 A.D. Honors
(Course Number – H04052; VA Assignment Code – H2215)
1 Credit (Eligible for Verified Credit)**

This honors course will enable students to explore the historical development of people, places, and patterns of life from ancient times until 1500 A.D. (C.E.) in terms of the impact on Western civilization but with an approach

which guides students into deeper learning through questioning and investigation. This course will be challenging and will require students to take a larger role in their learning by participating in problem-solving, creative processes, critical analysis and reflective thinking. Students will be given the opportunity to explore recurring themes of the human experience common to civilizations around the globe from ancient to contemporary times. The goals and objectives of this course are the same as the general World History I course but the material will reflect a greater complexity of thought. The diversity of culture and the evolution of human history will be explored chronologically and geographically from the beginning of time until the Renaissance in Europe. Geographical concepts will be incorporated within the context of world historical events. Students will examine the development of the world's major political, economic, and legal systems; artistic and literary movements; technological changes; trade patterns; religions; and the influential people of history. Special emphasis will be given to regional conflicts, humanity's relationships with the environment, and the foundation of democratic principles from ancient times.

Graduation Requirements: This course may be used to fulfill the history & social sciences standard credit.

Prerequisites: None

**World History & Geography: 1500 A.D. to the Present Honors
(Course Number – H04053; VA Assignment Code – H2216)
1 Credit (Eligible for Verified Credit)**

This honors course will enable students to cover history and geography from 1500 A.D. (C.E.) to the Present, with an emphasis on Western Europe and an approach which guides students into deeper learning through questioning and investigation. This course will require students to participate in problem-solving, critical analysis and reflective thinking. Students will be given the opportunity to explore recurring themes of the human experience common to nations around the globe, from the Reformation to contemporary times. The goals and objectives of this course are the same as the general World History II course, but the material will require deeper student thought. Geographic influences on history will continue to be explored, but increasing attention is given to political boundaries that developed with the evolution of nations. Significant attention will be given to the ways in which scientific and technological revolutions created new economic conditions that in turn produced social and political changes. Noteworthy people and events of the nineteenth and twentieth centuries will be

emphasized for their strong connections to contemporary issues.

Graduation Requirements: This course may be used to fulfill the history & social sciences standard credit.

Prerequisites: None

African American Studies (Course Number – 04107; VA Assignment Code – 2371)

1 Credit

In this course students will examine significant aspects of the history of African Americans with particular emphasis on the evolution and development of black communities from Africa to enslavement to the present. The black experience from a number of perspectives — history, politics, economics, sociology, psychology, religion and culture — will be explored. The progression of black political and social thought, engagement and protest, and the struggle to enact change will also be examined. In doing so, students will investigate the intersections of race, class, and gender. Thus, students will gain a comprehensive introduction to the social, political, legal, and economic roots of the contemporary challenges faced by African Americans.

Graduation Requirements: This is an elective course and does not fulfill the requirements of the history and social sciences credits towards graduation.

Prerequisites: None

Sociology (Course Number – 04258; VA Assignment Code – 2500)

1 Credit

Sociology introduces students to the study of human behavior in society. Positive human relationships are an essential part of a civilized society and how we interact with each other is important so that we can find answers to questions and solve problems in our world. Topics to be covered include culture, violence, deviance, social control, socialization and personality, group behavior, social class, and social institutions. The key component of this course is the study one's self and the society that influences our behavior.

Graduation Requirements: This is an elective course and does not fulfill the requirements of the history and social sciences credits towards graduation.

Prerequisites: None

International Baccalaureate

IB Biology HL1 - Grade 11 (Course Number – IB03057-HL1; VA Assignment Code – IB4380)

1 Credit

This course is year 1 of a 2-year college-level sequence. This course fills the Group 4 requirement of the IB Diploma. In this course, students learn the principles of Biology through theoretical and practical applications. Participation in the Group 4 project is mandatory. Students will create and be assessed on labs and procedure. Topics include cell biology, molecular biology, ecology, genetics and evolution, and plant biology. The course prepares students for the Biology Higher Level DP assessments and exam in year 2.

Graduation Requirements: This course may be used or counted toward the graduation requirement in science.

Prerequisites: Biology I

IB Biology HL2 - Grade 12 (Course Number – IB03057-HL2; VA Assignment Code – IB4390)

1 Credit

This course is year 2 of a 2-year college-level sequence. This course fills the Group 4 requirement of the IB Diploma. In this course, students learn the principles of Biology through theoretical and practical applications. Participation in the Group 4 project is mandatory. Students will create and be assessed on labs and procedure. Topics include metabolism, cell respiration, photosynthesis, genetics and evolution, ecology, evolution and biodiversity, and human physiology. Students present and analyze data in a clear, concise, and organized manner, using appropriate graphical, diagrammatic and mathematical techniques. The course prepares students for the Biology Higher Level DP assessments and exam.

Graduation Requirements: This course may be used or counted toward the graduation requirement in science.

Prerequisites: IB Biology I HL

IB Biology SL1 - Grade 11 (Course Number – IB03057-SL1; VA Assignment Code – IB4380)

1 Credit

This course is year 1 of a 2-year college-level sequence. This course fills the Group 4 requirement of the IB Diploma. In this course, students learn the principles of Biology through theoretical and practical applications. Participation in the Group 4 project is mandatory. Students will create and be assessed on labs and procedure. Topics include cell biology, molecular biology, ecology, and genetics. The course prepares students for

the Biology Standard Level DP assessments and exam in year 2.

Graduation Requirements: This course may be used or counted toward the graduation requirement in science.

Prerequisites: Biology I

IB Biology SL2 - Grade 12 (Course Number – IB03057-SL2; VA Assignment Code – IB4390)

1 Credit

This course is year 2 of a 2-year college-level sequence. This course fills the Group 4 requirement of the IB Diploma. In this course, students learn the principles of Biology through theoretical and practical applications. Participation in the Group 4 project is mandatory. Students will create and be assessed on labs and procedure. Topics include ecology, evolution and biodiversity, and human physiology. Students present and analyze data in a clear, concise, and organized manner, using appropriate graphical, diagrammatic and mathematical techniques. The course prepares students for the Biology Standard Level DP assessments and exam.

Graduation Requirements: This course may be used or counted toward the graduation requirement in science.

Prerequisites: IB Biology SL 1

IB Environmental Systems & Societies SL1 - Grade 11 (Course Number – IB03208-SL1; VA Assignment Code – IB4280)

1 Credit

This course is year 1 of a 2-year college-level sequence. This course fills the group 4 requirement of the IB Diploma. In this course, students explore both the scientific and the societal aspects of environmental studies. Work is done under eight topics: foundations, ecosystems and ecology, biodiversity and conservation, water and aquatic food production, soil systems and terrestrial food production, atmospheric systems and societies, climate change and energy production, human systems and resource use. Students will create and be assessed on labs and procedure. This course prepares students for the Environmental Systems and Societies Standard Level assessments and exam in year 2.

Graduation Requirements: This course may be used or counted toward the graduation requirement in science or for elective course credit.

Prerequisites: Successfully have completed two out the following: Earth Science, Biology I, and Geometry

IB Environmental Systems & Societies SL2 - Grade 12 (Course Number – IB03208-SL2; VA Assignment Code – IB4281)

1 Credit

This course is year 2 of a 2-year college-level sequence. This course fills the group 4 requirement of the IB Diploma. In this course, students explore both the scientific and the societal aspects of environmental studies. Work is done under eight topics: foundations, ecosystems and ecology, biodiversity and conservation, water and aquatic food production, soil systems and terrestrial food production, atmospheric systems and societies, climate change and energy production, human systems and resource use. Students will create and be assessed on labs and procedure. Students present and analyze data in a clear, concise, and organized manner, using appropriate graphical, diagrammatic and mathematical techniques. This course prepares students for the Environmental Systems and Societies Standard Level assessments and exam.

Graduation Requirements: This course may be used or counted toward the graduation requirement in science or for elective course credit

Prerequisites: IB Environmental Systems I

IB History HL1 - Grade 11 (Course Number – IB04054-HL1; VA Assignment Code – IB2360)

1 Credit (Eligible for Verified Credit)

This course is year 1 of a 2-year college-level sequence. The course satisfies required content for the United States/Virginia History course. This course also fills the Group 3 requirements for the IB Diploma. A comprehensive study of Virginia and United States history is followed along with IB History content, including rights and protest. Students examine processes for gathering historical evidence and learn to evaluate its validity. Students take the SOL Virginia and United States History end-of-course test at the end of year 1. The course prepares students for the IB History Higher Level assessments and examinations in year 2.

Graduation Requirements: This course may be used to fulfill the history & social sciences standard credit.

Prerequisites: World History and Geography II: 1500 AD to the Present

IB History HL2 - Grade 12 (Course Number – IB04054-HL2; VA Assignment Code – IB2361)

1 Credit

This course is year 2 of a 2-year college-level sequence. The course fills the Group 3 requirement for the IB

Diploma. The course includes IB History content, including the global history of the Cold War, authoritarian states, causes and effects of 20th century wars, and aspects of the history of the Americas. Students examine processes for gathering historical evidence and learn to evaluate its validity. Students must conduct required individually-driven research and writing. The course prepares students for the IB History Higher Level assessments and examinations.

Graduation Requirements: This course may be used to fulfill the history & social sciences standard credit.

Prerequisites: IB History I HL

IB Language B - Spanish SL1 - Grade 11 (Course Number – IB24063-SL1; VA Assignment Code – IB5552)

1 Credit

This course is year 1 of a 2-year college-level sequence. This course fills the Group 2 requirement for the IB Diploma. The course focuses on language acquisition and the development of receptive (reading and listening), productive (writing and speaking), and interactive (conversing) skills. Students develop competencies through the study of a range of written and spoken material organized around five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. The class will prepare students for the IB Spanish B Standard Level assessments and exams in year two.

Graduation Requirements: This course may be used or counted toward the graduation requirement in World Language or for elective course credit.

Prerequisites: Spanish II or above

IB Language - Spanish SL2 - Grade 12 (Course Number – IB24063-SL2; VA Assignment Code – IB5562)

1 Credit

This course is year 2 of a 2-year college-level sequence. This course fills the Group 2 requirement for the IB Diploma. The course focuses on language acquisition and the development of receptive (reading and listening), productive (writing and speaking), and interactive (conversing) skills. Students develop competencies through the study of a range of written and spoken material organized around five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Oral assessments are required. The class will prepare students for the IB Spanish B Standard Level assessments and exams.

Graduation Requirements: This course may be used or counted toward the graduation requirement in World Language or for elective course credit.

Prerequisites: IB Spanish SL1

IB Language A: Literature - English HL1 - Grade 11 (Course Number – IB01007-HL1; VA Assignment Code – IB1150)

1 Credit (Eligible for Verified Credit)

This course is year 1 of a 2-year college-level sequence. The course satisfies required content for the State of Virginia EOC English along with the Group 1 requirement of the IB-DP. The course explores various genres, periods, and places of American and English-language literature and literature in translation, with an eye toward cultural analysis, understanding, and awareness of global concerns. Coursework is divided into three parts explored over both years: Readers, writers, and texts; Time and space; and Intertextuality: connecting texts. Students will collect their critical and creative reflections and responses to their readings in a Learner Portfolio. Students study four genres. In year 1, students take the SOL English Reading End-of-Course, prepare preliminary work for the HL Essay, and complete the Individual Oral assessment required for IB. The course prepares students to complete HL Essay and the IB English Literature Higher Level exams in Year 2.

Graduation Requirements: This course is may be used or counted as one of the four required courses needed to fulfill the English standard credits

Prerequisites: English - Grade 10

IB Language A: Literature - English HL2 - Grade 12 (Course Number – IB01007-HL2; VA Assignment Code – IB1160)

1 Credit

This course is year 2 of a 2-year college-level sequence. This course fills the Group 1 requirement of the IB Diploma. The course explores various genres, periods, and places of American and English-language literature and literature in translation, with an eye toward cultural analysis and understanding. Coursework is divided into four parts with two parts being taught each year. In year 2, students study works from translation and 4 works from one literary genre. The course prepares students for the IB English Literature Higher Level exams, and students will complete mandatory oral work and formal written literary analyses required for IB assessment.

Graduation Requirements: This course is may be used or counted as one of the four required courses needed to fulfill the English standard credits

Prerequisites: IB English A 11 HL

**IB Language A: Literature - English SL1 - Grade 11
(Course Number – IB01007-SL1; VA Assignment Code – IB1150)**

1 Credit (Eligible for Verified Credit)

This course is year 1 of a 2-year college-level sequence. The course satisfies required content for the State of Virginia EOC English along with the Group 1 requirement of the IB Diploma. The course explores various genres, periods, and places of American and English-language literature and literature in translation, with an eye toward cultural analysis and understanding. Coursework is divided into three parts explored over both years: Readers, writers, and texts; Time and space; and Intertextuality: connecting texts. Students will collect their critical and creative reflections and responses to their readings in a Learner Portfolio. Students study three genres. In year 1, students take the SOL English Reading End-of-Course and complete the Individual Oral assessment required for IB. The course prepares students to complete the IB English Literature Standard Level exams in Year 2.

Graduation Requirements: This course is may be used or counted as one of the four required courses needed to fulfill the English standard credits

Prerequisites: English - Grade 10

**IB Language A: Literature - English SL2 - Grade 12
(Course Number – IB01007-SL2; VA Assignment Code – IB1160)**

1 Credit

This course is year 2 of a 2-year college-level sequence. This course fills the Group 1 requirement of the IB-DP. The course explores various genres, periods, and places of American and English-language Literature and Literature in Translation, with an eye toward cultural analysis and understanding. Coursework is divided into four parts with two parts being taught each year. In year 2, students study 2 works from translation and 3 works from one literary genre. The course prepares students for the IB English Literature Standard Level exams, and students will complete mandatory oral work and formal written literary analyses required for IB assessment.

Graduation Requirements: This course is may be used or counted as one of the four required courses needed to fulfill the English standard credits

Prerequisites: IB English SL Grade 11

**IB Language Ab Initio - French SL1 - Grade 11 (Course Number – IB24118-SL1; VA Assignment Code – N/A)
1 Credit**

This course is year 1 of a 2-year college-level sequence. This course fills the Group 2 requirement for the IB Diploma. For students with little or no previous experience in French who have developed strong language study skills in another language. Through study of vocabulary, linguistic structures, and writing systems, students will learn to communicate clearly in a range of situations in an accelerated time frame. Students will also work to demonstrate an awareness of intercultural elements related to prescribed topics. The class will prepare students for the IB French ab initio Standard Level assessments and exams in year 2.

Graduation Requirements: This course may be used or counted toward the graduation requirement in World Language or for elective course credit.

Prerequisites: Spanish II or at least two years of successful study of another foreign language with high school credit.

**IB Language Ab Initio - French: SL2 - Grade 12 (Course Number – IB24118-SL2; VA Assignment Code – N/A)
1 Credit**

This course is year 2 of a 2-year college-level sequence. This course fills the Group 2 requirement for the IB Diploma. Through study of vocabulary, linguistic structures, and writing systems, students will learn to communicate clearly in a range of modes and situations in an accelerated time frame. Students will also work to demonstrate an awareness of intercultural elements related to prescribed topics. Independently-driven research is required, as are written and oral assessments. The class will prepare students for the IB French ab initio Standard Level assessments and exams.

Graduation Requirements: This course may be used or counted toward the graduation requirement in World Language or for elective course credit.

Prerequisites: IB French ab initio I SL

**IB Language Ab Initio - Japanese SL1 - Grade 11 (Course Number – IB24468-SL1; VA Assignment Code – N/A)
1 Credit**

This course is year 1 of a 2-year college-level sequence. This course fills the Group 2 requirement for the IB Diploma. For students with little or no previous experience in Japanese who have developed strong language study skills in another language. Through study of vocabulary, linguistic structures, and writing systems, students will learn to communicate clearly in a range of situations in an

accelerated time frame. Students will also work to demonstrate an awareness of intercultural elements related to prescribed topics. The class will prepare students for the IB Japanese ab initio Standard Level assessments and exams in year 2.

Graduation Requirements: This course may be used or counted toward the graduation requirement in World Language or for elective course credit.

Prerequisites: Spanish II or at least two years of successful study of another foreign language with high school credit

**IB Language Ab Initio - Japanese SL2 - Grade 12 (Course Number – IB24468-SL2; VA Assignment Code – N/A)
1 Credit**

This course is year 2 of a 2-year college-level sequence. This course fills the Group 2 requirement for the IB Diploma. Through study of vocabulary, linguistic structures, and writing systems, students will learn to communicate clearly in a range of modes and situations in an accelerated time frame. Students will also work to demonstrate an awareness of intercultural elements related to prescribed topics. Independently-driven research is required, as are written and oral assessments. The class will prepare students for the IB Japanese ab initio Standard Level assessments and exams.

Graduation Requirements: This course may be used or counted toward the graduation requirement in World Language or for elective course credit.

Prerequisites: IB Japanese ab initio I SL

**IB Language B - Spanish HL1 - Grade 11 (Course Number – IB24063-HL1; VA Assignment Code – IB5552)
1 Credit**

This course is year 2 of a 2-year college-level sequence. This course fills the Group 2 requirement for the IB Diploma. The course focuses on language acquisition and the development of receptive (reading and listening), productive (writing and speaking), and interactive (conversing) skills, with a study of introductory Spanish-language literature. Students develop competencies through the study of a range of written and spoken material organized around five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. The class will prepare students for the IB Spanish B Higher Level assessments and exams in year two.

Graduation Requirements: This course may be used or counted toward the graduation requirement in World Language or for elective course credit.

Prerequisites: Spanish III or above

**IB Language B - Spanish HL2 - Grade 12 (Course Number – IB24063-HL2; VA Assignment Code – IB5562)
1 Credit**

This course is year 2 of a 2-year college-level sequence. This course fills the Group 2 requirement for the IB Diploma. The course focuses on language acquisition and the development of receptive (reading and listening), productive (writing and speaking), and interactive (conversing) skills, with a study of introductory Spanish-language literature. Students develop competencies through the study of a range of written and spoken material organized around five themes: identities, experiences, human ingenuity, social organization, and sharing the planet. Oral assessments are required. The class will prepare students for the IB Spanish B Higher Level assessments and exams.

Graduation Requirements: This course may be used or counted toward the graduation requirement in World Language or for elective course credit.

Prerequisites: IB Spanish HL 1

**IB Math: Applications & Interpretation SL1 - Grade 11 (Course Number – IB02131-SL1; VA Assignment Code – IB3196)
1 Credit**

This course is year 1 of a 2-year college-level sequence. This course fills the Group 5 requirement of the IB Diploma. Students will study topics common to the IB Mathematics: Applications and Interpretation SL course and the IB Mathematics: Analysis and Approaches course. Core topics include number and algebra; functions; geometry and trigonometry; statistics and probability; and calculus. Students will begin investigation and development of an independent exploration in mathematics, a required assessment. The course prepares students for enrollment in year 2 in either IB Math: Applications and Interpretation SL II (for students interested in further study in fields such as the social sciences, natural sciences, medicine, statistics, business, and design) or IB Math: Analysis and Approaches SL II (for students interested in further study in mathematics, engineering, the physical sciences, and some economics). The course leads to eventual IB assessment and examination in year two.

Graduation Requirements: This course may be used or counted toward the graduation requirement in mathematics.

Prerequisites: Algebra II

IB Mathematical Studies SL2 - Grade 12 (Course Number – IB02131-SL2; VA Assignment Code – IB3196)
1 Credit

This course is year 2 of a 2-year college-level sequence. This course fills the Group 5 requirement of the IB-DP. Course content focuses on the application of mathematics outside of the classroom. Core topics include number and algebra; descriptive statistics; logic, sets, and probability; statistical applications; geometry and trigonometry; mathematical models; and an introduction to differential calculus. Completion of an independently-driven mathematical project including original research and data collection is required. The course prepares students for the IB Math Studies SL assessment and exam.

Graduation Requirements: This course may be used or counted toward the graduation requirement in mathematics.
Prerequisites: IBDP Math Studies SL I

IB Mathematics SL2 - Grade 12 (Course Number – IB02132-SL2; VA Assignment Code – IB3198)
1 Credit

This course is year 2 of a 2-year college-level sequence. This course fills the Group 5 requirement of the IB Diploma. Course content focuses on the application of mathematics outside of the classroom. Core topics include algebra; functions and equations; circular functions and equations; circular functions and trigonometry; vectors; statistics and probability; and calculus. Completion of an independently-driven mathematical exploration is mandatory. The course prepares students for the IB Mathematics SL assessments and examinations.

Graduation Requirements: This course may be used or counted toward the graduation requirement in mathematics.
Prerequisites: IB Math Studies SL I

IB Music SL1 - Grade 11 (Course Number – IB05115-SL1; VA Assignment Code – IB9294)
1 Credit

This course is year 1 of a 2-year college-level sequence. This course fills the Group 6 requirement for the IB Diploma, and requires proficiency reading music and playing a band instrument. Students will study concepts of musical theory, form, and analysis. The study will involve music of various world genres and time periods, with two prescribed works mandated by the IBO studied in detail. Students will also complete requirements in music performance, with participation in scheduled performances required. The course prepares students for the IB Music SL assessments and exam in year two.

Graduation Requirements: This course may be used or counted toward the graduation requirement in Fine Arts or for elective course credit.

Prerequisites: High School Intermediate Band

IB Music SL2 - Grade 12 (Course Number – IB05115-SL2; VA Assignment Code – IB9295)
1 Credit

This course is year 2 of a 2-year college-level sequence. This course fills the Group 6 requirement for the IB Diploma, and requires proficiency reading music and playing a band instrument. Students will study concepts of musical theory, form, and analysis. The study will involve music of various world genres and time periods, with two prescribed works mandated by the IBO studied in detail. An independently researched project is required. Students will also complete requirements in music performance, with participation in scheduled performances required. The course prepares students for the IB Music SL assessments and exam.

Graduation Requirements: This course may be used or counted toward the graduation requirement in Fine Arts or for elective course credit.

Prerequisites: IB Music I

IB Physics SL1 - Grade 11 (Course Number – IB03157-SL1; VA Assignment Code – IB4580)
1 Credit

This course is year 1 of a 2-year college-level sequence. This course fills the Group 4 requirement of the IB Diploma. Students learn the principles of physics through theoretical and practical applications. Participation in the Group 4 project is mandatory. Students will create and be assessed on labs and procedure. Topics include mechanics; thermal physics; waves and wave phenomena; electricity and magnetism; fields; circular motion and gravitation; atomic, nuclear, and particle physics; energy production; and work from the options. The course prepares students for the Physics Standard Level DP assessments and examination in year two.

Graduation Requirements: This course may be used or counted toward the graduation requirement in science.
Prerequisites: Algebra II with concurrent enrollment in IB Mathematics: Applications and Interpretation I or equivalent

IB Physics SL2 - Grade 12 (Course Number – IB03157-SL2; VA Assignment Code – IB4590)
1 Credit

This course is year 2 of a 2-year college-level sequence. This course fills the Group 4 requirement of the IB-DP.

Students learn the principles of physics through theoretical and practical applications. Participation in the Group 4 project is mandatory. Students will create and be assessed on labs and procedure. Topics include mechanics; thermal physics; waves and wave phenomena; electricity and magnetism; fields; circular motion and gravitation; atomic, nuclear, and particle physics; energy production; and work from the options. Students present and analyze data in a clear, concise, and organized manner, using appropriate graphical, diagrammatic and mathematical techniques. The course prepares students for the Physics Standard Level DP assessments and examination.

Graduation Requirements: This course may be used or counted toward the graduation requirement in science.

Prerequisites: IB Physics I (Strongly recommended is concurrent enrollment in IB Math Studies SL II, IB Mathematics SL II, or equivalent)

IB Theory of Knowledge 1 - Grade 11 (Course Number – IB04304-I; VA Assignment Code – IB1197)

1 Credit

This course is year 1 of a 2-year college-level sequence. This course is required for IB Diploma candidates and strongly suggested for students taking IB Diploma Programme Courses. In this course, students analyze the role of knowledge and various ways of knowing in multiple disciplines, examine the belief systems inherent in various academic subjects, focus on questioning, clarifying, and expressing ideas through written and oral communication, and reflect on beliefs that affect the acquisition of knowledge. Student progress on the Creativity, Activity, Service (CAS) requirement is monitored. Students also begin the process of writing the Extended Essay. This 2-year course satisfies the requirements for IB-DP.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

IB Theory of Knowledge 2 - Grade 12 (Course Number – IB04304-II; VA Assignment Code – IB1198)

1 Credit

This course is year 2 of a 2-year college-level sequence. This course is required for IB Diploma candidates and strongly suggested for students taking IB Courses. In this course, students analyze the role of knowledge and various ways of knowing in multiple disciplines, examine the belief systems inherent in various academic subjects, focus on questioning, clarifying, and expressing ideas through written and oral communication, and reflect on beliefs that affect acquisition of knowledge. Student

progress on the Creativity, Activity, Service (CAS) requirement is monitored. Students also finish the process of writing the Extended Essay. This course satisfies the requirements for IB-DP.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: IB Theory of Knowledge I

IB Visual Arts HL1 - Grade 11 (Course Number – IB05173-HL1; VA Assignment Code – IB9194)

1 Credit

This course is year 1 of a 2-year college-level sequence. This course fills the Group 6 requirement for the IB Diploma and requires higher quality and increased output over the standard level course. Students will pursue independent learning through research and artistic production. Independently-organized off-site gallery visits are required outside of school. The course will cover drawing, painting, and 3-D work/design. Students will work with a wide range of media and engage in a cultural awareness of art history, art interpretation, and global perspectives. An independently researched comparative study is required. The course prepares students for the IB Visual Arts SL assessments in year two.

Graduation Requirements: This course may be used or counted toward the graduation requirement in Fine Arts or for elective course credit.

Prerequisites: Art II/Intermediate

IB Visual Arts HL2 - Grade 12 (Course Number – IB05173-HL2; VA Assignment Code – IB9195)

1 Credit

This course is year 2 of a 2-year college-level sequence. This course fills the Group 6 requirement for the IB Diploma and requires higher quality and increased output over the standard level course. Students will pursue independent learning through research and artistic production. Independently-organized off-site gallery visits are required outside of school. The course will cover drawing, painting, and 3-D work/design. Students will work with a wide range of media and engage in a cultural awareness of art history, art interpretation, and global perspectives. An independently researched comparative study is required. Participation in the IB Senior Art Show, including curating and showing the student's own artwork, is required and assessed. The course prepares students for the IB Visual Arts SL assessments.

Graduation Requirements: This course may be used or counted toward the graduation requirement in Fine Arts or for elective course credit.

Prerequisites: IB Visual Arts I HL

IB Visual Arts SL1 - Grade 11 (Course Number – IB05173-SL1; VA Assignment Code – IB9194)

1 Credit

This course is year 1 of a 2-year college-level sequence. This course fills the Group 6 requirement for the IB Diploma. Students will pursue independent learning through research and artistic production. Independently-organized off-site gallery visits are required outside of school. The course will cover drawing, painting, and 3-D work/design. Students will work with a wide range of media and engage in a cultural awareness of art history, art interpretation, and global perspectives. An independently researched comparative study is required. The course prepares students for the IB Visual Arts SL assessments in year two.

Graduation Requirements: This course may be used or counted toward the graduation requirement in Fine Arts or for elective course credit.

Prerequisites: Art II/Intermediate

IB Visual Arts SL2 - Grade 12 (Course Number – IB05173-SL2; VA Assignment Code – IB9195)

1 Credit

This course is year 2 of a 2-year college-level sequence. This course fills the Group 6 requirement for the IB Diploma. Students will pursue independent learning through research and artistic production. Independently-organized off-site gallery visits are required outside of school. The course will cover drawing, painting, and 3-D work/design. Students will work with a wide range of media and engage in a cultural awareness of art history, art interpretation, and global perspectives. An independently researched comparative study is required. Participation in the IB Senior Art Show, including curating and showing the student's own artwork, is required and assessed. The course prepares students for the IB Visual Arts SL assessments.

Graduation Requirements: This course may be used or counted toward the graduation requirement in Fine Arts or for elective course credit.

Prerequisites: IB Visual Arts SL1

Mathematics

Algebra I (Course Number – 02052; VA Assignment Code – 3130)

1 Credit (Eligible for Verified Credit)

This course provides the foundation for future mathematics courses by transferring concrete mathematical knowledge to more abstract algebraic generalizations. The focused topics include variables and expressions; solving equations and inequalities; linear, quadratic and exponential functions; graphing and writing linear equations; systems of equations and inequalities; polynomials; factoring; statistics; and rational expressions. In order to develop critical thinking, course will be learned by integrating engaging activities using an online graphing calculator (DESMOS), projects, classwork, homework, and other learning avenues.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.

Prerequisites: None

Algebra I - Part I (Course Number – 02053; VA Assignment Code – 3131)

1 Credit

This course is year 1 of a 2-year sequence. This modified course is designed to assist students in mathematics by providing the foundation for future mathematics courses by transferring concrete math knowledge to more algebraic generalizations. The course focuses on the development of problem solving skills and the acquisition of mathematic vocabulary and symbols. The focused topics include variables and expressions; solving equations and inequalities; linear and exponential functions; graphing and writing linear equations; and rational expressions. In order to develop critical thinking, integrated activities using graphing calculator and online graphing calculator (DESMOS), stations, classwork, homework and other learning avenues will be utilized.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: None

Algebra I - Part II (Course Number – 02054; VA Assignment Code – 3132)

1 Credit (Eligible for Verified Credit)

This course is year 2 of a 2-year sequence. This modified course is designed to assist students in mathematics by providing the foundation for future mathematics courses by transferring concrete math knowledge to more algebraic generalizations. The course focuses on the development of problem solving skills and the acquisition

of mathematic vocabulary and symbols. The focused topics include polynomials, radicals, systems of equations and inequalities, linear functions, quadratic functions, rational functions, and statistics. In order to develop critical thinking, integrated activities using graphing calculator and online graphing calculator (DESMOS), stations, classwork, homework and other learning avenues will be utilized.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.

Prerequisites: Algebra Part 1

Algebra I Honors (Course Number – H02052; VA Assignment Code – H3130)

1 Credit (Eligible for Verified Credit)

Algebra I Honors is a faster paced mathematics course for students who exhibit high mathematical ability and achievement while extending learning. The course may focus on performance task, integration of technology and/or collaborative projects. Students will make connections and build relationships between algebra and arithmetic, geometry, and probability and statistics. Connections will also be made to other subject areas through practical applications. Students will focus on abstract and theoretical exploration collaborative and independently. Honors Algebra I includes the use of technology (such as, graphing calculators and DESMOS) in algebra, linear and quadratic equations and functions, using algebra to analyze data, and to solve problems. Students enrolled in this course will take the Standards of Learning Algebra I test.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.

Prerequisites: None

Algebra II (Course Number – 02056; VA Assignment Code – 3135)

1 Credit (Eligible for Verified Credit)

This course extends the concepts taught in Algebra I and includes a thorough treatment of advanced algebraic concepts through the study of functions, “families of functions,” equations, inequalities, systems of equations and inequalities, polynomials, rational and radical equations, complex numbers, and sequences and series. The course also includes a transformational approach to graphing functions. Emphasis will be placed on practical applications and modeling throughout the course of study using oral and written communication in classwork, homework, projects, and other learning continuums. Online graphing calculators (DESMOS) and/or other

computer graphing simulators will be integrated throughout the course.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.

Prerequisites: Algebra I

Algebra II & Trigonometry Honors (Course Number – H02106; VA Assignment Code – H3137)

1 Credit (Eligible for Verified Credit)

This accelerated paced Honors Algebra II & Trigonometry course is designed to place emphasis on independent and collaboration in understanding all the Algebra II standards with the inclusion of numerous Trigonometry standards. Engagement in performance tasks and challenging problems will help develop problem-solving skills. This course extends the concepts taught in Algebra I and includes the study of higher-degree equations, an introduction to conic sections, and the irrational and complex number systems. Topics from trigonometry include circular functions, graphs and applications. Students will be expected to work independently and collaboratively with emphasis placed on practical applications and modeling throughout the course using oral, and written communication in classwork, homework, projects, and other learning continuums. Online graphing calculators (DESMOS) and other online simulations will be integrated. An end of year project, student selected, may be expected.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.

Prerequisites: Algebra I, Geometry

Algebra II Honors (Course Number – H02056; VA Assignment Code – H3135)

1 Credit (Eligible for Verified Credit)

This Honors Algebra II course is designed to place emphasis on independent and collaboration in understanding Algebra II objectives. Engagement in performance tasks and challenging problems will help develop problem-solving skills. This course extends the concepts taught in Algebra I and includes the study of higher-degree equations, an introduction to conic sections, and the irrational and complex number systems. Students will be expected to work independently and collaboratively with emphasis placed on practical applications and modeling throughout the course using oral, and written communication in classwork, homework, projects, and other learning continuums. Online graphing calculators (DESMOS) and other online simulations will be

integrated. An end of year project, student selected, may be expected.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.

Prerequisites: Algebra I

Trigonometry/Probability & Statistics (SCED Code 02103/02201; VA Assignment Code 3150/3190)

1 Credit

This year-long course will introduce the study of Trigonometry and Probability & Statistics. Trigonometry includes the study of trigonometric definitions, applications, graphing, and solving trigonometric equations and inequalities. Probability & Statistics presents basic concepts and techniques for collecting and analyzing data, drawing conclusions, and making predictions. Applications and modeling are included throughout the course(s). Oral and written communication concerning the language of mathematics, logic of procedure, and interpretation of results should also permeate the course(s). The use of graphing calculators as well as DESMOS will be incorporated with other means of technology integration.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.

Prerequisites: None

Algebra, Functions, & Data Analysis (Course Number – 02902; VA Assignment Code – 3134)

1 Credit

This course provides an opportunity for mathematical ideas to be developed in the context of real-world problems. Through classroom, homework, and projects, students will collect and analyze univariate and bivariate data using a variety of statistics and analytical tools. They will learn to attach functional algebra to statistics, allowing for the possibility of standardizing and analyzing data through the use of mathematical models. The course will use transformational graphing and the regression capabilities of online graphing calculators (DESMOS) to find regression equations, and they will use them to analyze data and to predict the placement of data points between and beyond given data points. Other instructional practices may be used including oral and written representations.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.

Prerequisites: Algebra I

AP Calculus AB (Course Number – AP02124; VA Assignment Code – AP3177)

1 Credit (Eligible for Verified Credit)

Course content corresponds to the syllabus of the College Board Advanced Placement program. Students will utilize graphing calculators, complete online activities, and various other technologies to gain knowledge of topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. Students will learn how to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and how to make connections amongst these representations. College credit is given at the discretion of the institution accepting the student and is based on the student's score on the AP Exam. Students enrolled are expected to take the AP Exam.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.

Prerequisites: Algebra I, Geometry, Algebra II, and Pre-Calculus or Math Analysis

AP Computer Science A (Course Number – AP10157; VA Assignment Code – AP3185)

1 Credit

Course content corresponds to the syllabus of the College Board Advanced Placement program. The goals of the course is application and teaching of concepts around the following: design, implement, and analyze solutions to problems; use and implement commonly used algorithms; use standard data structures; develop and select appropriate algorithms and data structures to solve new problems; write solutions fluently in an object-oriented paradigm; write, run, test, and debug solutions in the Java programming language, utilizing standard Java library classes and interfaces from the AP Java subset; read and understand programs consisting of several classes and interacting objects; read and understand a description of the design and development process leading to such a program; understand the ethical and social implications of computer use. College credit is given at the discretion of the institution accepting the student and is based on the student's score on the AP Exam. Students enrolled are expected to take the AP Exam.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.

Prerequisites: Algebra I, Geometry

AP Computer Science Principles (Course Number – AP10019; VA Assignment Code – AP3183)

1 Credit

The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. In this course, students will develop computational thinking vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course is unique in its focus on fostering student creativity. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using computer software and other technology to explore questions that interest them. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.

Prerequisites: Algebra I, Geometry

AP Statistics (Course Number – AP02203; VA Assignment Code – AP3192)

1 Credit

Course content corresponds to the syllabus of the College Board Advanced Placement program. Content includes topics in exploratory analysis, planning and conducting a study, probability, and statistical inference. Technology is integrated to encourage investigations of data analysis. College credit is given at the discretion of the institution accepting the student and is based on the student's score on the AP Exam. Students enrolled are expected to take the AP Exam.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.

Prerequisites: Algebra I, Geometry

Geometry (Course Number – 02072; VA Assignment Code – 3143)

1 Credit (Eligible for Verified Credit)

This course is designed for students who have successfully completed the standards for Algebra I. Course emphasizes transformational geometry and measurement, theorems and properties, formal definitions of geometric terms, trigonometric relationships, and reasoning to justify conclusions. Methods of justification will include paragraph proofs, two-column proofs, indirect proofs,

coordinate proofs, algebraic methods, and verbal arguments. A variety of applications and some general problem-solving techniques, including algebraic skills, will be used to implement these standards using classwork, homework, project, etc. Graphing calculators (DESMOS), computers, graphing utilities, dynamic geometry software, and other appropriate technology tools may be used to assist in teaching and learning.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.

Prerequisites: Algebra I

Geometry Honors (Course Number – H02072; VA Assignment Code – H3143)

1 Credit (Eligible for Verified Credit)

Honors Geometry is a faster paced mathematics course for students who exhibit high mathematical ability and achievement while extending learning. The course may focus on performance task, integration of technology and/or collaborative projects. Students will make connections and build relationships between algebra and arithmetic and geometry. Connections will also be made to other subject areas through practical applications. Students will focus on abstract and theoretical exploration collaborative and independently. Honors Geometry includes the use of technology (such as, graphing calculators and DESMOS). Students enrolled in this course may be expected to take the Standards of Learning Geometry end of course assessment.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.

Prerequisites: Algebra I

Geometry Part I (Course Number – 02903-I; VA Assignment Code – 3144)

1 Credit

This course presents the first semester in year 1 of a 2-year sequence integrating plane geometry with review of algebraic topics needed in geometry. Course focuses on an introduction to logic and proofs, basic structures of geometry, application of geometric concepts and skills in real world situations while developing problem-solving skills and the acquisition of mathematical vocabulary and symbols. Topics include reasoning and proof, lines and their relationships, triangles and their relationships and polygons and quadrilaterals. In order to develop critical thinking, integrated activities using graphing calculator and online graphing calculator (DESMOS), stations, classwork, homework and other learning avenues will be utilized. Graphing utilities, dynamic geometry software, and other

relevant technology tools may be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.
Prerequisites: Algebra I

Geometry - Part II (Course Number – 02903-II; VA Assignment Code – 3144)

1 Credit (Eligible for Verified Credit)

This course presents the second semester in year 2 of a 2-year sequence. Course continues the focus on logic and proofs along with topics involving similarity, properties of transformations and area and volume. Investigations of properties of quadrilaterals, other polygons, circles, and three-dimensional figures using inductive and deductive reasoning will be explored. Other topics may be included and reviewed. In order to develop critical thinking, integrated activities using graphing calculator and online graphing calculator (DESMOS), stations, classwork, homework and other learning avenues will be utilized. Graphing utilities, dynamic geometry software, and other relevant technology tools may be used when appropriate to support instruction, especially to allow students to explore graphical, numerical, and symbolic relationships.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.
Prerequisites: Geometry – Part I

Intensified Algebra (Course Number – 02999-III; VA Assignment Code – 3199)

1 Credit

Intensified Algebra course offers students the opportunity to develop and apply conceptual understanding while enhancing foundational mathematics skills required for successful completion of Algebra I. This course will offer additional direct teaching and learning opportunities by creating a double period version in conjunction with Algebra I course. An online program may be utilized. The focused topics include review strategies for pre-algebra concepts and skills, as well as, variables and expressions; solving equations and inequalities; linear, quadratic and exponential functions; graphing and writing linear equations; systems of equations and inequalities; polynomials; factoring; statistics; and rational expressions. In order to develop critical thinking skills, course will be learned by integrating engaging activities using an online graphing calculator (DESMOS), classwork, homework, and other learning avenues. This course can only be taken alongside Algebra I.

Graduation Requirements: This is an elective course and does not fulfill the requirements of a standard credit course.
Prerequisites: None

Mathematical Analysis/Pre-Calculus (Course Number – 02104; VA Assignment Code – 3162)

1 Credit

This course covers many of the topics previously introduced Algebra II but in much greater depth with an emphasis on functions. Students are introduced to several other types of functions including polynomials, logarithmic and exponential, and circular and trigonometric. Students work with complex numbers and with polar coordinate system. The concept of limits is introduced through analysis of sequence and series. Limits of functions are introduced and applied to the development of the derivative. Basic differential calculus and its applications are introduced as well. The course emphasizes problem solving and analysis by integrating the use of technology, including the graphing calculator (DESMOS) and other computer-based applications.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.
Prerequisites: Algebra II

Mathematical Analysis/Pre-Calculus Honors (Course Number – H02104; VA Assignment Code – H3162)

1 Credit

Honors Mathematical Analysis develops students' understanding of algebraic and transcendental functions, parametric and polar equations, sequences and series, and vectors. The content of this course serves as appropriate preparation for a calculus course. Students may be expected to participate in the completion of performance task and projects. This course covers many of the topics previously introduced Algebra II but in much greater depth with an emphasis on functions. Students are introduced to several other types of functions including polynomials, logarithmic and exponential, and circular and trigonometric. Students work with complex numbers and with polar coordinate system. The concept of limits is introduced through analysis of sequence and series. Limits of functions are introduced and applied to the development of the derivative. Basic differential calculus and its applications are introduced as well. The course emphasizes problem solving and analysis by integrating the use of technology, including the graphing calculator (DESMOS) and other computer-based applications.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.

Prerequisites: Algebra II

Probability & Statistics (Course Number – 02201; VA Assignment Code – 3190)

1 Credit

The purpose of the course is to present basic concepts and techniques for collecting and analyzing data, drawing conclusions, and making predictions. Students will plan and conduct experiments, apply hypothesis testing and conduct both large sample significance tests. Course will cover finding means and variances of random variables, simulate binomial and geometric probability distributions, interpret sampling distributions and understand the Central Limit Theorem. This includes applying t-distributions to single and two-sample t-procedures, using tables or graphing. Students in the year-long class will use statistical inference to draw conclusions about a population based on sample data and use probability to determine the reliability of the conclusions. Graphing utilities (calculators, computers, and other technology tools) will be used to assist in teaching and learning. Graphing utilities facilitate visualizing, analyzing, and understanding algebraic and statistical behaviors and provide a powerful tool for solving and verifying solutions.

Graduation Requirements: This course may be used to fulfill the mathematics standard credit.

Prerequisites: Algebra I, Geometry

Science

Earth Science I (Course Number – 03001; VA Assignment Code – 4210)

1 Credit (Eligible for Verified Credit)

Earth Science is a laboratory-based course that provides students with an opportunity to explore the various physical phenomena that affect the earth. This course, which includes research design concepts, helps students become more aware of their surroundings through the study of astronomy, space science, meteorology, oceanography, physical geology, and environmental resources.

Graduation Requirements: This course may be used or counted toward the graduation requirement in science.

Prerequisites: None

Earth Science - 2 Year Sequence Part I (Course Number – 03008-I; VA Assignment Code – 4200)

1 Credit

This laboratory course provides a basic overview of Earth Science concepts. Earth Science – 2 Year Sequence Part I covers the following: the nature of science, Earth's matter, Earth's chemistry, the history of the Earth, and the patterns of Earth's changing surface. This course will introduce topics as Earth's revolution and rotation, as well as the advantages and disadvantages associated with the use of renewable and nonrenewable resources. This course is designed for students who desire more time to grasp Earth Science concepts and content and is typically reserved for select students.

Graduation Requirements: This course may be used as a science elective credit.

Prerequisites: None

Earth Science - 2 Year Sequence Part II (Course Number – 03008-II; VA Assignment Code – 4201)

1 Credit (Eligible for Verified Credit)

Earth Science - 2 Year Sequence Part II is the second part of this laboratory course that provides an overview of Earth Science concepts, such as meteorology, oceanography, physical geology, and environmental resources. This course is designed for students who desire more time to grasp Earth Science concepts and content and is typically reserved for select students.

Graduation Requirements: This course may be counted toward the graduation requirement in science.

Prerequisites: Earth Science - 2 Year Sequence Part I

Earth Science I Honors (Course Number – H03001-I; VA Assignment Code – H4210)

1 Credit (Eligible for Verified Credit)

This honors Earth Science course is designed for students who display an advanced knowledge of science. Students will have the opportunity to explore Earth Science concepts through completing performance tasks, engaging in case studies, and conducting and reviewing authentic research. Earth Science is a laboratory-based course that provides students with an opportunity to explore the various physical phenomena that affect Earth. This course, which includes research design concepts, helps students become more aware of their surroundings through the study of astronomy, space science, meteorology, oceanography, physical geology, and environmental resources.

Graduation Requirements: This course may be counted toward the graduation requirement in science.

Prerequisites: None

Earth Science II - Astronomy (Course Number – 03004; VA Assignment Code – 4260)

1 Credit

Astronomy is a laboratory science course that explores the tools and techniques of the astronomer, the solar system, exploration of space, universal laws, stellar evolution, and formation of galaxies and the origin of the universe.

Graduation Requirements: This course may be used or counted toward the graduation requirement in science or for elective course credit.

Prerequisites: Earth Science I

Biology I (Course Number – 03051; VA Assignment Code – 4310)

1 Credit (Eligible for Verified Credit)

Biology is a laboratory science course in which students engage in a depth study of the principles of biology. Students will investigate the understanding of living systems and the relationship between structure and function of organisms and systems, and the interdependence and interactions of biotic and abiotic components of the environment.

Graduation Requirements: This course may be counted toward the graduation requirement in science.

Prerequisites: None

Biology I - 2 Year Sequence Part I (Course Number – 03099-I; VA Assignment Code – 4300)

1 Credit (Eligible for Verified Credit)

This laboratory course provides a basic overview of Biology concepts and is designed to provide students with a detailed understanding of living systems. Biology – 2 Year Sequence Part I covers the following: scientific investigation, cellular organization, and mechanisms of inheritance. This course is designed for students who desire more time to grasp Biology concepts and content and is typically reserved for select students.

Graduation Requirements: This course may be used as a science elective credit.

Prerequisites: None

Biology I - 2 Year Sequence Part II (Course Number – 03099-II; VA Assignment Code – 4301)

1 Credit

This laboratory course provides a basic overview of Biology concepts and is designed to provide students with a detailed understanding of living systems. Biology I – 2 Year Sequence Part 2 covers the following: scientific

investigation, biochemical life processes, dynamic relationships among organisms, and the change in organisms through time. This course is designed for students who desire more time to grasp Biology concepts and content and is typically reserved for select students.

Graduation Requirements: This course may be counted toward the graduation requirement in science.

Prerequisites: Biology I - 2 Year Sequence Part I

Biology I Honors (Course Number – H03051; VA Assignment Code – H4310)

1 Credit (Eligible for Verified Credit)

This honors Biology course is designed for students who display an advanced knowledge of science. Students will have the opportunity to explore biology concepts through completing performance tasks, engaging in case studies, and conducting and reviewing authentic research. The Biology course is designed to provide students with a detailed understanding of living systems. Emphasis is placed on the skills necessary to examine alternative scientific explanations, actively conduct controlled experiments, analyze and communicate information, and gather and use information in scientific literature. The history of biological thought and the evidence that supports it are explored, providing the foundation for investigating biochemical life processes, cellular organization, mechanisms of inheritance, dynamic relationships among organisms, and the change in organisms through time. The importance of scientific research that validates or challenges ideas is emphasized at this level. Students are required to complete daily homework assignments and are expected to be more independent and highly motivated.

Graduation Requirements: This course may be used to fulfill the science standard credit.

Prerequisites: None

AP Biology (Course Number – AP03056; VA Assignment Code – AP4370)

1 Credit

Advanced Placement Biology is a second-year, laboratory-centered biology course designed to help students develop an understanding of how biological information is collected, how it is interpreted, and how hypotheses are formulated to make further predictions. Students focus on three broad content areas: the molecular and cellular, the organism, and the population. In this college-level course, the major emphasis is on laboratory observations and experimentation. Students enrolled are expected to take the AP Exam.

Graduation Requirements: This course may be used to fulfill the science standard credit.

Prerequisites: Biology I

Biology II - Anatomy/Physiology (Course Number – 03053; VA Assignment Code – 4330)

1 Credit

This laboratory course gives an explanation of the chemical and physical phenomena underlying the structure and function of systems of the human body. Identifies, explains functions of and describes chemical networking of the various body parts in relation to the total system. Students will investigate the intricate machinery that makes the body work, relating the functional anatomy and physical geography of organs and organ systems to the physiological functions which they perform. Students will also explore the delicate web of interaction among body systems, the importance of maintaining homeostatic balance within this web, and the medical implications of disturbing this balance.

Graduation Requirements: This course may be used to fulfill the science standard credit.

Prerequisites: Biology I

Chemistry I (Course Number – 03101-I; VA Assignment Code – 4410)

1 Credit (Eligible for Verified Credit)

Chemistry is a laboratory science course in which students will study the following: topics such as atomic theory, compounds and bonding, chemical reactions, gases and solutions, moles and stoichiometry, as well as the appropriate safety precautions when working with chemicals and laboratory equipment.

Graduation Requirements: This course may be used to fulfill the science standard credit.

Prerequisites: None

Chemistry I Honors (Course Number – H03101; VA Assignment Code – H4410)

1 Credit (Eligible for Verified Credit)

This honors Chemistry course is designed for students who display an advanced knowledge of science. Students will have the opportunity to explore chemistry concepts through through completing performance tasks, engaging in case studies, and conducting and reviewing authentic research. Chemistry is a laboratory science course in which students will study the following: atomic theory, compounds and bonding, chemical reactions, gases and solutions, moles and stoichiometry, as well as the

appropriate safety precautions when working with chemicals and laboratory equipment.

Graduation Requirements: This course may be used to fulfill the science standard credit.

Prerequisites: None

AP Chemistry (Course Number – AP03106; VA Assignment Code – AP4470)

1 Credit

This course is designed to offer college-level general chemistry experiences with emphasis on chemical calculations, the mathematical formulations of principles, and laboratory work. The AP Chemistry course is designed to be the equivalent of the general first year chemistry course. AP Chemistry students attain a depth of understanding of chemistry fundamentals and of laboratory experiences that goes beyond that covered in first year chemistry. All major topics of chemistry are covered. Students enrolled are expected to take the AP exam.

Graduation Requirements: This course may be used to fulfill the science standard credit.

Prerequisites: Chemistry I and Algebra II

Environmental Science (Course Number – 03003; VA Assignment Code – N/A)

1 Credit

This course serves as a foundation course for students enrolling in Biology or Earth Science the following year. Major concepts studied include, energy, earth's surface and interior, renewable and nonrenewable resources, pollutions, and environmental issues of the world. Students will identify and analyze environmental problems, both natural and human-made; evaluate the relative risks associated with these problems; and examine alternative solutions for resolving or preventing them. It integrates the study of many components of our environment, including the human impact on our planet.

Graduation Requirements: This course may be used or counted toward the graduation requirement in science.

Prerequisites: None

Additional Notes: This course is only offered to a small number of students who require additional time and support to master the content.

AP Environmental Science (Course Number – AP03207; VA Assignment Code – AP4270)

1 Credit

The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course

in environmental science. AP Environmental Science is designed to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Environmental science is interdisciplinary and embraces a wide variety of topics from different areas of study including the earth systems and resources, the living world, population, land and water, energy resources and consumption, pollution, and global change. Students enrolled are expected to take the AP exam.

Graduation Requirements: This course may be used to fulfill the science standard credit.

Prerequisites: Biology I

AP Physics I (Course Number – AP03165-I; VA Assignment Code – N/A)

1 Credit

In this college-level algebra-based physics course, students will study major topics in physics outlined by College Board AP Physics 1, including: motion, forces, simple harmonic motion, conservation of energy, conservation of momentum, rotational motion, electrostatics, circuits, electromagnetism, and waves. Students enrolled are expected to take the AP exam.

Graduation Requirements: This course may be used to fulfill the science standard credit.

Prerequisites: Biology I and Algebra II

Physics I (Course Number – 03151; VA Assignment Code – 4510)

1 Credit

This introductory laboratory course in the basic laws of the physical universe stresses both practical and theoretical applications of physics. This course offers a combination of theoretical and practical studies such as mechanics that analyze motions and forces; study of energy with applications to work and power; thermodynamics; properties of waves (light and sound); electricity and magnetism; and atomic physics leading to an understanding of the basic principles of physics.

Graduation Requirements: This course may be used or counted toward the graduation requirement in science or for elective course credit

Prerequisites: None

World Languages

American Sign Language I (Course Number – 24852; VA Assignment Code – 5990)

1 Credit

Designed to introduce students to American Sign Language language and culture, American Sign Language I courses prepare students to communicate authentically in American Sign Language by interpreting (reading/viewing), exchanging (signing and reading), and presenting (signing) information on a variety of topics. They introduce the relationship among the practices, perspectives, and cultures of deaf people and communities.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: None

American Sign Language II (Course Number – 24853; VA Assignment Code – 5995)

1 Credit

American Sign Language II courses build upon skills developed in American Sign Language I, preparing students to communicate authentically in American Sign Language by interpreting (reading/viewing), exchanging (signing and reading), and presenting (signing) information on concrete topics. American Sign Language II courses introduce the relationship among the practices, perspectives, and cultures of deaf people and communities.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: American Sign Language I

American Sign Language III (Course Number – 24854; VA Assignment Code – 5997)

1 Credit

American Sign Language III courses prepare students to communicate authentically in American Sign Language by interpreting (reading/viewing), exchanging (signing and reading), and presenting (signing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. These courses expand students' knowledge of relationships among the practices, perspectives, and cultures of deaf people and communities.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: American Sign Language II

American Sign Language IV (Course Number – 24855; VA Assignment Code – 5998)

1 Credit

American Sign Language IV courses prepare students to communicate authentically in American Sign Language by interpreting (reading/viewing), exchanging (signing and reading), and presenting (signing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. American Sign Language IV courses promote students' understanding of the relationships among the practices, perspectives, and cultures of deaf people and communities.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: American Sign Language III

AP Spanish Language (Course Number – AP24064; VA Assignment Code – AP5570)

1 Credit

Designed by the College Board to parallel third-year college-level courses in Spanish language, AP Spanish Language and Culture courses build upon prior knowledge and develop students' ability to express ideas, exchange opinions, and present information in Spanish, both orally and in writing. These courses also help students understand and interpret written and spoken Spanish. In addition, students explore the culture of Spanish-speaking people in historical and contemporary contexts.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: Spanish language proficiency

French I (Course Number – 24102; VA Assignment Code – 5110)

1 Credit

Designed to introduce students to French language and culture, French I courses prepare students to communicate authentically in French by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on a variety of topics. They introduce the relationships among the products, practices, and perspectives of French-speaking cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: None

French II (Course Number – 24103; VA Assignment Code – 5120)

1 Credit

French II courses build upon skills developed in French I, preparing students to communicate authentically in French by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on concrete topics. French II courses introduce the relationships among the products, practices, and perspectives of French-speaking cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: French I

French III (Course Number – 24104; VA Assignment Code – 5130)

1 Credit

French III courses prepare students to communicate authentically in French by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. These courses expand students' knowledge of relationships among the products, practices, and perspectives of French-speaking countries and cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: French II

French IV (Course Number – 24105; VA Assignment Code – 5140)

1 Credit

French IV courses prepare students to communicate authentically in French by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. French IV courses promote students' understanding of the relationships among the products, practices, and perspectives of French-speaking countries and cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: French III

German I (Course Number – 24252; VA Assignment Code – 5210)**1 Credit**

Designed to introduce students to German language and culture, German I courses prepare students to communicate authentically in German by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on a variety of topics. They introduce the relationships among the products, practices, and perspectives of German-speaking cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: None

German II (Course Number – 24253; VA Assignment Code – 5220)**1 Credit**

German II courses build upon skills developed in German I, preparing students to communicate authentically in German by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on concrete topics. German II courses introduce the relationships among the products, practices, and perspectives of German-speaking cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: German I

German III (Course Number – 24254; VA Assignment Code – 5230)**1 Credit**

German III courses prepare students to communicate authentically in German by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. These courses expand students' knowledge of relationships among the products, practices, and perspectives of German-speaking countries and cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: German II or placement based on proficiency

German IV (Course Number – 24255; VA Assignment Code – 5240)**1 Credit**

German IV courses prepare students to communicate authentically in German by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. German IV courses promote students' understanding of the relationships among the products, practices, and perspectives of German-speaking countries and cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: German III or placement based on proficiency

Japanese I (Course Number – 24452; VA Assignment Code – 5910)**1 Credit**

Designed to introduce students to Japanese language and culture, Japanese I courses prepare students to communicate authentically in Japanese by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on a variety of topics. They introduce the relationships among the products, practices, and perspectives of Japanese-speaking cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: None

Japanese II (Course Number – 24453; VA Assignment Code – 5920)**1 Credit**

Japanese II courses build upon skills developed in Japanese I, preparing students to communicate authentically in Japanese by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on concrete topics. Japanese II courses introduce the relationships among the products, practices, and perspectives of Japanese-speaking cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: Japanese I

Japanese III (Course Number – 24454; VA Assignment Code – 5930)**1 Credit**

Japanese III courses prepare students to communicate authentically in Japanese by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. These courses expand students' knowledge of relationships among the products, practices, and perspectives of Japanese-speaking countries and cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: Japanese II

Japanese IV (Course Number – 24455; VA Assignment Code – 5940)**1 Credit**

Japanese IV courses prepare students to communicate authentically in Japanese by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. Japanese IV courses promote students' understanding of the relationships among the products, practices, and perspectives of Japanese-speaking countries and cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: Japanese III

Latin I (Course Number – 24342; VA Assignment Code – 5310)**1 Credit**

Designed to introduce students to Latin language and culture, Latin I courses prepare students to communicate authentically in Latin by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on a variety of topics. They introduce the relationships among the products, practices, and perspectives of Latin-speaking cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: None

Latin II (Course Number – 24343; VA Assignment Code – 5320)**1 Credit**

Latin II courses build upon skills developed in Latin I, preparing students to communicate authentically in Latin by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on concrete topics. Latin II courses introduce the relationships among the products, practices, and perspectives of Latin-speaking cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: Latin I

Latin III (Course Number – 24344; VA Assignment Code – 5330)**1 Credit**

Latin III courses prepare students to communicate authentically in Latin by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. These courses expand students' knowledge of relationships among the products, practices, and perspectives of Latin-speaking countries and cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: Latin II

Latin IV (Course Number – 24345; VA Assignment Code – 5340)**1 Credit**

Latin IV courses prepare students to communicate authentically in Latin by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. Latin IV courses promote students' understanding of the relationships among the products, practices, and perspectives of Latin-speaking countries and cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: Latin III

Spanish for Fluent Speakers I (Course Number – 24057-I; VA Assignment Code – 5511)

1 Credit

Spanish for Native Speakers courses prepare native and heritage speakers to communicate in Spanish in all modes. These courses reinforce and expand students' skills to interpret (read, listen, view) and present (speak, write) information at the same level as they exchange (speak and listen; read and write) information, concepts, and ideas on a variety of topics. Spanish for Native Speakers courses advance students' understanding of the relationships among the products, practices, and perspectives of the cultures included in the Spanish-speaking world.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: Native or Heritage Spanish-speaker

Spanish for Fluent Speakers II (Course Number – 24057-II; VA Assignment Code – 5521)

1 Credit

Spanish for Native Speakers courses prepare native and heritage speakers to communicate in Spanish in all modes. These courses reinforce and expand students' skills to interpret (read, listen, view) and present (speak, write) information at the same level as they exchange (speak and listen; read and write) information, concepts, and ideas on a variety of topics. Spanish for Native Speakers courses advance students' understanding of the relationships among the products, practices, and perspectives of the cultures included in the Spanish-speaking world.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: Spanish for Fluent Speakers I

Spanish I (Course Number – 24052; VA Assignment Code – 5510)

1 Credit

Designed to introduce students to Spanish language and culture, Spanish I courses prepare students to communicate authentically in Spanish by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on a variety of topics. They introduce the relationships among the products, practices, and perspectives of Spanish-speaking cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: None

Spanish II (Course Number – 24053; VA Assignment Code – 5520)

1 Credit

Spanish II courses build upon skills developed in Spanish I, preparing students to communicate authentically in Spanish by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on concrete topics. Spanish II courses introduce the relationships among the products, practices, and perspectives of Spanish-speaking cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: Spanish I

Spanish III (Course Number – 24054; VA Assignment Code – 5530)

1 Credit

Spanish III courses prepare students to communicate authentically in Spanish by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. These courses expand students' knowledge of relationships among the products, practices, and perspectives of Spanish-speaking countries and cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: Spanish II or placement based on proficiency

Spanish IV (Course Number – 24055; VA Assignment Code – 5540)

1 Credit

Spanish V courses prepare students to communicate authentically in Spanish by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. Spanish V courses promote students' understanding of the relationships among the products, practices, and perspectives of Spanish-speaking countries and cultures.

Graduation Requirements: This course is one that may be used to fulfill the world languages standard credit.

Prerequisites: Spanish III or placement based on proficiency

Core Content Suggested Course Sequences

Grade	English	Mathematics	History & Social Sciences	Science
9 th Grade	English Grade 9	Algebra I Geometry Algebra II	World History & Geography 1500 World Geography AP Human Geography	Biology I Environmental Science
	English Grade 9 Honors	Algebra I Honors Geometry Honors Algebra II Honors	World History Honors Geography to 1500 Honors	Biology I Honors
10 th Grade	English Grade 10	Geometry Algebra II	World History II World Geography	Earth Science I Chemistry I Biology
	English Grade 10 Honors	Geometry Honors Algebra II Honors Mathematical Analysis/Pre-Calculus Honors	World History & Geography 1500 to Present Honors AP European History	Earth Science I Honors Chemistry I Honors Biology I Honors
11 th Grade	English Grade 11	Algebra, Functions & Data Analysis Algebra II	United States & Virginia History	Earth Science II Astronomy Biology II Anatomy/Physiology Physics I Chemistry I
	AP Language & Composition	Mathematical Analysis/Pre-Calculus Honors Probability & Statistics AP Statistics AP Computer Science A	AP United States History	AP Physics AP Chemistry AP Environmental Science

12 th Grade	English Grade 12	Probability & Statistics Mathematical Analysis/Pre-Calculus	United States and Virginia Government	Earth Science II Astronomy Biology II Anatomy/Physiology Physics I Chemistry I
	AP Literature & Composition	Mathematical Analysis/Pre-Calculus Honors AP Calculus AB AP Statistics AP Computer Science A	AP Government	AP Physics AP Chemistry AP Environmental Science

English Language Learners Suggested Course Sequence

YEAR 1 (Freshman)		
PROFILE: Newcomer 1.0-1.5	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> ESL 1 World Language Credit and English 9 (sheltered) English Credit or Developmental Reading for ELs (elective for SLIFE) 	2
Math	<ul style="list-style-type: none"> Math for Newcomers (elective for SLIFE) or Algebra 1 (sheltered or co-taught) Math Credit and Intensified Math (sheltered) 	1 or 2
History	<ul style="list-style-type: none"> World History I (sheltered) History Credit and History for Newcomers elective credit 	2
Science	<ul style="list-style-type: none"> Science for Newcomers elective credit 	1

Health & PE	<ul style="list-style-type: none"> Health & PE 9 Health & PE Credit 	1
Elective	<ul style="list-style-type: none"> Spanish for Fluent Speakers 1 Foreign Language Credit 	1
Potential Credits Towards Graduation: 5 or 6		8
YEAR 2 (Sophomore)		
L 1.5-2.5	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> ESL 2 World Language Credit and English 10 (sheltered or co-taught) English Credit 	2
Math	<ul style="list-style-type: none"> Algebra I (co-taught) Math Credit Intensified Math (depending on need) or Geometry (co-taught) Math Credit 	1 or 2
History	<ul style="list-style-type: none"> World History 2 (co-taught) History Credit 	1
Science	<ul style="list-style-type: none"> Earth Science (sheltered or co-taught) Science Credit 	1
Health & PE	<ul style="list-style-type: none"> Health and PE 10 Health & PE Credit 	1
Elective	<ul style="list-style-type: none"> Required Fine Art/CTE: Students could potentially meet the requirement for Foreign Language/Fine Art or CTE Recommended Scheduling: Spanish for Fluent Speakers 1 or Fine Art or CTE course 	1
Potential Credits Towards Graduation: 6		8

YEAR 3 (Junior)		
L 2.5-3.5	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> ESL 3 World Language Credit and English 11 (co-taught) English Credit 	2
Math	<ul style="list-style-type: none"> AFDA, Geometry, or Algebra II (co-taught) Math Credit 	1
History	<ul style="list-style-type: none"> VA US History (co-taught) History Credit 	1
Science	<ul style="list-style-type: none"> Biology (co-taught) Science Credit 	1
Econ/Pers Fin.	<ul style="list-style-type: none"> Economics and Personal Finance 	1
Elective	<ul style="list-style-type: none"> Required Fine Art/CTE: Students could potentially meet the requirement for World Language/Fine Art or CTE Recommended scheduling: Spanish Fluent Speakers 2 or Fine Art CTE course 	2
Potential Credits Towards Graduation: 8		8
YEAR 4 (Senior)		
L 3.5-4.4	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> ESL 4 World Language Credit English 12 English Credit 	2
Math	<ul style="list-style-type: none"> Algebra II Math Credit AP Computer Science A Math Credit 	1 or 2
History	<ul style="list-style-type: none"> Government History Credit 	1
Science	<ul style="list-style-type: none"> Chemistry Science Credit 	1 or 2

	<ul style="list-style-type: none"> Biology II Science Credit 	
Electives	<ul style="list-style-type: none"> Required: Fine Art/CTE (Art elective/ AP Spanish Language) Students could potentially meet the requirement for World Language/Fine Art or CTE Recommended Scheduling: AP Spanish Language or Fine Art/ CTE completer course 	2 or 3
Potential Credits Towards Graduation: 8		8
Total Potential Credits Toward Graduation: 26		

YEAR 1 (Freshman)		
PROFILE: L 1.5-2.4	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> ESL 2 World Language Credit English 9 (sheltered or co-taught) English Credit 	2
Math	<ul style="list-style-type: none"> Algebra 1 (co-taught) Math Credit Intensified Math 	2
History	<ul style="list-style-type: none"> World History 1 (co-taught) History Credit 	1
Science	<ul style="list-style-type: none"> Earth Science (co-taught) Science Credit 	1
Health & PE	<ul style="list-style-type: none"> Health & PE 9 Health & PE Credit 	1
Elective	<ul style="list-style-type: none"> Fine Art / World Language / CTE Credit Recommended Scheduling: Spanish Fluent Speakers 1 or Fine Art 	1
Potential Credits Towards Graduation: 7		8

YEAR 2 (Sophomore)		
L 2.5-3.4	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> ESL 3 World Language Credit English 10 (co-taught) English Credit 	2
Math	<ul style="list-style-type: none"> AFDA or Geometry Math Credit 	1
History	<ul style="list-style-type: none"> World History 2 History Credit 	1
Science	<ul style="list-style-type: none"> Biology (co-taught) Science Credit 	1
Health & PE	<ul style="list-style-type: none"> Health and PE 10 Health & PE Credit 	1
Elective	<ul style="list-style-type: none"> Fine Art/ World Language/ CTE Credit: Students could potentially meet the requirement for World Language/Fine Art or CTE Recommended Scheduling: Spanish for Fluent Speakers 2 or Fine Art and CTE course 	2
Potential Credits Towards Graduation: 8		8
YEAR 3 (Junior)		
L 3.5-4.4	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> ESL 4 World Language Credit English 11 (co-taught) English Credit 	2
Math	<ul style="list-style-type: none"> Algebra 2 Math Credit 	1
History	<ul style="list-style-type: none"> VA US History Credit 	1
Science	<ul style="list-style-type: none"> Chemistry Science Credit 	1

Econ/Pers Fin.	<ul style="list-style-type: none"> • Economics and Personal Finance 	1
Elective	<ul style="list-style-type: none"> • <i>Fine Art/ World Language/ CTE Credit</i>: Students could potentially meet the requirement for World Language/Fine Art or CTE • Recommended Scheduling: AP Spanish Language or Fine Art and CTE course 	2
Potential Credits Towards Graduation: 8		8
YEAR 4 (Senior)		
L 4.5- FLEP	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> • English 12 <i>English Credit</i> 	1
Math	<ul style="list-style-type: none"> • AP Computer Science A or other Math course above level of Algebra 2 <i>Math Credit</i> 	1
History	<ul style="list-style-type: none"> • Government <i>History Credit</i> 	1
Science	<ul style="list-style-type: none"> • Biology 2: Ecology <i>Science Credit</i> • Biology 2: Anatomy & Physiology <i>Science Credit</i> • AP Environmental Science <i>Science Credit</i> 	1
Electives	<ul style="list-style-type: none"> • <i>Fine Art/ World Language/ CTE Credit</i>: Students could potentially meet the requirement for World Language/Fine Art or CTE • Recommended Scheduling: AP Spanish Literature or Fine Art and CTE completer course 	4
Potential Credits Towards Graduation: 8		8
Total Potential Credits Toward Graduation: 30		

YEAR 1 (Freshman)		
PROFILE: L 2.5-3.4	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> ESL 3 World Language Credit English 9 (co-taught) English Credit 	2
Math	<ul style="list-style-type: none"> Algebra 1 (co-taught) Math Credit Geometry 	1
History	<ul style="list-style-type: none"> World History 1 (co-taught) History Credit 	1
Science	<ul style="list-style-type: none"> Earth Science (co-taught) Science Credit 	1
Health & PE	<ul style="list-style-type: none"> Health & PE 9- Health & PE Credit 	1
Elective	<ul style="list-style-type: none"> Fine Art/ World Language/ CTE Credit Recommended Scheduling: AP Spanish Language and Culture or Fine Art or CTE 	1 or 2
Potential Credits Towards Graduation: 7		8
YEAR 2 (Sophomore)		
L 3.5-4.4	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> ESL 4 World Language Credit English 10 English Credit 	2
Math	<ul style="list-style-type: none"> AFDA or Geometry Math Credit 	1
History	<ul style="list-style-type: none"> World History 2 History Credit 	1

Science	<ul style="list-style-type: none"> Biology <i>Science Credit</i> 	1
Health & PE	<ul style="list-style-type: none"> Health & PE 10 <i>Health & PE Credit</i> 	1
Elective	<ul style="list-style-type: none"> <i>Fine Art/ World Language/ CTE Credit</i>: Students could potentially meet the requirement for World Language/Fine Art or CTE Recommended Scheduling: AP Spanish Literature or Fine Art and CTE course 	2
Potential Credits Towards Graduation: 8		8

YEAR 3 (Junior)		
L 4.5- FLEP	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> English 11 <i>English Credit</i> 	1
Math	<ul style="list-style-type: none"> Algebra 2 <i>Math Credit</i> 	1
History	<ul style="list-style-type: none"> VA US History <i>History Credit</i> 	1
Science	<ul style="list-style-type: none"> Chemistry <i>Science Credit</i> 	1
Econ/Pers Fin.	<ul style="list-style-type: none"> Economics and Personal Finance 	1
Elective	<ul style="list-style-type: none"> <i>Fine Art/ World Language/ CTE Credit</i>: Students could potentially meet the requirement for World Language/Fine Art or CTE 	3
Potential Credits Towards Graduation: 8		8

YEAR 4 (Senior)		
FLEP	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> English 12 English Credit 	1
Math	<ul style="list-style-type: none"> AP Computer Science A or other Math course above level of Algebra II Math Credit 	1
History	<ul style="list-style-type: none"> Government History Credit 	1
Science	<ul style="list-style-type: none"> Biology 2: Ecology Science Credit Biology 2: Anatomy & Physiology Science Credit AP Environmental Science Science Credit 	1
Electives	<ul style="list-style-type: none"> Fine Art/ World Language/ CTE Credit: Students could potentially meet the requirement for World Language/Fine Art or CTE 	4
Potential Credits Towards Graduation: 8		8
Total Potential Credits Toward Graduation: 31		

YEAR 1 (Freshman)		
PROFILE: L 3.5-4.4	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> ESL 4 World Language Credit English 9 English Credit 	2
Math	<ul style="list-style-type: none"> Algebra 1 Math Credit 	1
History	<ul style="list-style-type: none"> World History 1 History Credit 	1
Science	<ul style="list-style-type: none"> Biology 1 Science Credit 	1

Health & PE	<ul style="list-style-type: none"> Health & PE 9 Health & PE Credit 	1
Elective	<ul style="list-style-type: none"> Fine Art/ World Language/ CTE Credit Recommended Scheduling: AP Spanish Language and Culture or Fine Art or CTE 	2
Potential Credits Towards Graduation: 8		8

YEAR 2 (Sophomore)

L 4.5- FLEP	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> English 10 English Credit 	1
Math	<ul style="list-style-type: none"> AFDA or Geometry Math Credit 	1
History	<ul style="list-style-type: none"> World History 2 History Credit 	1
Science	<ul style="list-style-type: none"> Earth Science Science Credit 	1
Health & PE	<ul style="list-style-type: none"> Health and PE 10 Health & PE Credit 	1
Elective	<ul style="list-style-type: none"> Fine Art/ World Language/ CTE Credit: Students could potentially meet the requirement for World Language/Fine Art or CTE Recommended Scheduling: AP Spanish Literature or Fine Art and CTE course 	3
Potential Credits Towards Graduation: 8		8

YEAR 3 (Junior)

FLEP	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> English 11 English Credit 	1

Math	<ul style="list-style-type: none"> Algebra 2 Math Credit 	1
History	<ul style="list-style-type: none"> VA US History History Credit 	1
Science	<ul style="list-style-type: none"> Chemistry Science Credit 	1
Econ/Pers Fin.	<ul style="list-style-type: none"> Economics and Personal Finance 	1
Elective	<ul style="list-style-type: none"> Fine Art / World Language / CTE Credit: Students could potentially meet the requirement for World Language/Fine Art or CTE 	3
Potential Credits Towards Graduation: 8		8
YEAR 4 (Senior)		
FLEP	Courses	Potential Credit Hours
English	<ul style="list-style-type: none"> English 12 English Credit 	1
Math	<ul style="list-style-type: none"> AP Computer Science A or other Math course above level of Algebra 2 Math Credit 	1
History	<ul style="list-style-type: none"> Government History Credit 	1
Science	<ul style="list-style-type: none"> Biology 2: Ecology Science Credit Biology 2: Anatomy & Physiology Science Credit AP Environmental Science Science Credits 	1
Electives	<ul style="list-style-type: none"> Fine Art/ World Language/ CTE Credit: Students could potentially meet the requirement for World Language/Fine Art or CTE 	4
Potential Credits Towards Graduation: 8		8
Total Potential Credits Toward Graduation: 32		

TECHNOLOGY EDUCATION

Technical Drawing and Design

Architectural Drawing and Design
Digital Visualization
Technology Foundations

Architectural Drawing and Design

prerequisite of Technical Drawing & Design or Intro Engineering & Design

Advanced Drawing and Design
Digital Visualization

Digital Visualization

Architectural Drawing and Design
Introduction to Engineering and Design
Technical drawing and Design
Advanced Drawing and Design

Technology Foundations

Technology Transfer

Technical Drawing and Design

TECHNICAL AND INNOVATION

Auto Body Technology I

Auto Body Technology II
Auto Body Technology III

Auto Technology I

Auto Technology II

Barbering I

Barbering II
Barbering III

Building Management I

Building Management II

Carpentry I

Carpentry II

Cosmetology I

Cosmetology II
Cosmetology III

Criminal Justice I

Emergency Medical Telecommunications
Criminal Justice II

Electricity I

Electricity II

Energy and Power

Graphic Imaging Technology I

Graphic Imaging Technology I

Precision Machining Technology I

Precision Machining Technology II

Television and Media Production I

Television and Media Production II

Welding I

Welding II
Welding III

MARKETING

Digital & Social Media Marketing

Entrepreneurship Education
Fashion Marketing

Hotel Management and Operations
Introduction to Fashion Careers
Marketing
Principles of Business and Marketing
Sports and Entertainment Marketing

Fashion Marketing

Advanced Fashion Marketing

Marketing
Digital & Social Media Marketing
Entrepreneurship Education
Introduction to Fashion Careers
Principles of Business and Marketing

Hotel Management and Operations

Digital & Social Media Marketing
Entrepreneurship Education
Principles of Business and Marketing
Marketing
Marketing Advanced

Marketing
Digital & Social Media Marketing
Entrepreneurship Education
Fashion Marketing
Hotel Management and Operations
Introduction to Fashion Careers
Principles of Business and Marketing
Sports and Entertainment Marketing

Marketing

Digital & Social Media Marketing
Entrepreneurship Education
Fashion Marketing
Hotel Management and Operations
Introduction to Fashion Careers
Principles of Business and Marketing
Sports and Entertainment Marketing

Marketing, Advanced
 Marketing
 Digital & Social Media Marketing
 Entrepreneurship Education
 Fashion Marketing
 Hotel Management and Operations
 Introduction to Fashion Careers
 Principles of Business and Marketing
 Sports and Entertainment Marketing

Sports and Entertainment Marketing
Sports and Entertainment Management

Marketing
 Digital & Social Media Marketing
 Entrepreneurship Education
 Principles of Business and Marketing

BUSINESS & INFORMATION TECHNOLOGY

Accounting

***Adv. Accounting**
 Computer Information Systems
 Computer Information Systems, Advanced
 Design, Multimedia & Web Technologies
 Design, Multimedia & Web Technologies, Adv.
 Entrepreneurship Education
 Entrepreneurship Education, Advanced
 Digital Applications
 Legal Systems Administration
 Medical Systems Administration
 Principles of Business & Marketing

Computer Information Systems

*** Adv. Computer Information System**
 Accounting
 Accounting, Advanced
 Design, Multimedia & Web Technologies

Design, Multimedia & Web Technologies, Adv.
 Entrepreneurship
 Entrepreneurship
 Information Technology (IT) Fundamentals
 Digital Application
 Legal Systems Administration
 Medical Systems Administration
 Principles of Business & Marketing
 Programming

Design, Multimedia & Web Design

*** Adv. Design, Multimedia, & Web Tech.**

Accounting
 Accounting, Advanced
 Computer Information Systems
 Computer Information Systems, Advanced
 Design, Multimedia & Web Technologies
 Design, Multimedia & Web Technologies
 Entrepreneurship
 Information Technology (IT) Fundamentals
 Digital Applications
 Legal Systems Administration
 Medical Systems Administration
 Principles of Business & Marketing
 Programming
 Programming, Advanced

Adv. Design, Multimedia, & Web Tech.

***Design, Multimedia & Web Design**

Accounting
 Accounting, Advanced
 Computer Information Systems
 Computer Information Systems, Advanced
 Digital and Social Media Marketing
 Entrepreneurship Education
 Fashion Marketing
 Fashion Marketing, Advanced
 Hotel Management and Operations

Introduction to Fashion Careers
 Marketing
 Marketing, Advanced
 Opportunities in Global Trade, Advanced
 Sports and Entertainment Management
 Sports and Entertainment Marketing

Information Technology Fundamentals

Digital Applications
 Computer Information Systems
 Computer Information Systems, Advanced
 Design, Multimedia & Web Technologies
 Design, Multimedia & Web Technologies, Advanced
 Legal Systems Administration
 Medical Systems Administration
 Programming
 Programming, Advanced

Digital Applications (6611) replaces Keyboarding Applications/Computer Applications/Word Processing in 2019-2020

Accounting
 Accounting, Advanced
 Computer Information Systems, Advanced
 Design, Multimedia & Web Technologies
 Design, Multimedia 7 Web Technologies, Advanced
 Information Technology Fundamentals
 Legal Systems Administration Medical Systems Administration
 Principles of Business & Marketing
 Programming
 Programming, Advanced

Legal Systems Administration

Accounting
 Accounting, Advanced
 Computer Applications
 Computer Information Systems, Advanced

Design, Multimedia & Web Technologies
 Design, Multimedia & Web Technologies, Advanced
 Information Technology (IT) Fundamentals
 Digital Applications
 Principles of Business & Marketing

Medical Systems Administration

Accounting
 Computer Information Systems
 Computer Information Systems, Advanced
 Design, Multimedia & Web Technologies
 Design, Multimedia & Web Technologies, Advanced
 Information Technology (IT) Fundamentals
 Digital Applications
 Principles of Business & Marketing

Principles of Business & Marketing

Accounting
 Accounting, Advanced
 Computer Information Systems
 Computer Information Systems, Advanced
 Design, Multimedia & Web Technologies
 Design, Multimedia & Web Technologies, Advanced
 Digital Applications
 Digital and Social Media Marketing
 Entrepreneurship Education
 Entrepreneurship Education
 Fashion Marketing
 Fashion Marketing, Advanced
 Hotel Management and Operations
 Introduction to Fashion Careers
 Legal Systems Administration
 Marketing
 Marketing, Advanced
 Medical Systems Administration
 Opportunities in Global Trade, Advanced
 Sports and Entertainment Management
 Sports and Entertainment Marketing

Programming

***Adv. Programming**
 Computer Information Systems
 Computer Information Systems, Advanced
 Design, Multimedia & Web Technologies
 Design, Multimedia & Web Technologies, Advanced
 Digital Applications
 Information Technology (IT) Fundamentals

ARMY JROTC

Army JROTC I
***Army JROTC II**

Army JROTC II

Army JROTC III
 Army JROTC I

Army JROTC III

Army JROTC IV
 Army JROTC II

Army JROTC IV

Army JROTC III

FAMILY & CONSUMER SCIENCES

Culinary Arts I RTC ONLY

Culinary Arts II
 Intro to Culinary Arts
 Nutrition and Wellness
 Independent Living

Culinary Arts II RTC ONLY

Culinary Specialization

Independent Living
 Intro to Culinary Arts
 Nutrition and Wellness

Culinary Arts I
 Culinary Arts II
 Independent Living
 Intro to Culinary Arts
 Nutrition and Wellness

Child Development & Parenting

Nutrition and Wellness

Fashion Career I

Fashion Career II
 Intro Fashions Careers
 Independent Living
 Intro to Fashion Careers

Independent Living

Child Development & Parenting
 Culinary Arts I
 Culinary Arts II
 Intro to Culinary Arts
 Intro to Fashion Careers
 Nutrition and Wellness

Intro to Culinary Arts

Culinary Arts I
 Nutrition and Wellness

Intro Fashions Careers

Fashion Career I
 Fashion Marketing
 Independent Living

Nutrition and Wellness

Child Development and Parenting
 Culinary Arts
 Culinary Arts II
 Intro to Culinary Arts
 Independent Living

AGRICULTURE

Horticulture Sciences RTC ONLY

Greenhouse Plant Production and Management
 Landscaping I

Greenhouse Plant Production and Management RTC ONLY

Landscaping I
 Horticulture Sciences

Intro to Animal Systems RTC ONLY

Small Animal Care I
 Veterinary Science I

Landscaping I RTC ONLY

Landscaping II
 Greenhouse Plant Production and Management
 Horticulture Sciences

Small Animal Care I (RTC ONLY)

Small Animal Care II
 Introduction to Animal Systems
 Veterinary Science I
 Veterinary Science II

Veterinary Science I RTC ONLY

Veterinary Science II
 Small Animal Care I
 Small Animal Care II

HEALTH / MEDICAL SCIENCES (RTC ONLY)

Dental Careers I

Dental Careers II
 Intro Health and Med Sciences

Emergency Medical Technician I

Emergency Medical Technician II

Emergency Medical Technician II

Emergency Medical Technician I

Emergency Medical Telecommunications

Criminal Justice I
 Introduction to Health and Medical Sciences
 Medical Terminology

Intro Health and Med. Sciences

Dental I
 Emergency Medical Telecommunications
 Medical Terminology
 Pharmacy Tech I
 Sports Medicine I

Medical Coding and Billing I

Medical Coding and Billing II

Medical Terminology

Emergency Medical Telecommunications
 Intro Health and Med. Sciences

Nurse Aide II

Intro Health and Med. Sciences

Nurse Aide II

Intro Health and Med. Sciences

Pharmacy Technician I

Pharmacy Technician II
 Intro Health and Med. Sciences

Sports Medicine I

Sports Medicine II
 Intro Health and Med. Sciences

CAREER CONNECTIONS

Virginia Teachers for Tomorrow

Child Development & Parenting
 Individual Development
 Virginia Teachers for Tomorrow II

RTC TECHNOLOGY EDUCATION

Advanced Drawing and Design

Prerequisite of Architectural Drawing and Design
 Architectural Drawing and Design
 Digital Visualization

Architectural Drawing and Design

Prerequisite of Technical Drawing and Design or Introduction of Engineering and Design
 Advanced Drawing and Design
 Digital Visualization
 Technical Drawing and Design

Digital Visualization (8459)

Architectural Drawing and Design
 Introduction to Engineering and Design (PLTW)
 Technical Drawing and Design
 Advanced Drawing and Design

Introduction to Engineering Design (PLTW)

Civil Engineering and Architecture (PLTW)
Principles of Engineering (PLTW)

Principles of Engineering (PLTW)

*Prerequisite of Introduction to Engineering Design
(PLTW) (8439)*

Engineering Practicum IV

Technical Drawing and Design

Architectural Drawing and Design
Digital Visualization
Technology Foundations

Introduction to Engineering Design (PLTW)

Civil Engineering and Architecture (PLTW)
Digital Visualization (PLTW)
Principles of Engineering (PLTW)

Engineering Practicum IV

Prerequisite Principles of Engineering (PLTW)

Principles of Engineering (PLTW)

*Prerequisite of Introduction to Engineering Design
(PLTW)*

Engineering Practicum IV

Software Engineering Essentials (PLTW)



CTE Industry Credentials

Below is the list of CTE courses and their associated available industry certification credential.

	Available Credential
Accounting	Accounting, Basic Assessment (NOCTI); Workplace Readiness Skills for the Commonwealth (CTECS)
Advanced Computer Information Systems	Microsoft Office Specialist (MOS) Examinations; Workplace Readiness Skills for the Commonwealth Examination
Advanced Drawing & Design	Autodesk Certified User Examination (Certiport); Certified SolidWorks Associate Exam
Advanced Entrepreneurship Education	Workplace Readiness Skills for the Commonwealth Examination; NRF Customer Service & Sales Certification Assessment
Advanced Fashion Marketing	NRF Retail Industry Fundamentals Certification Assessment
Advanced Programming	Computer Programming Assistant (NOCTI); Workplace Readiness Skills for the Commonwealth
Architectural Drawing/Design	Autodesk Certified User Examination (Certiport)
Army JROTC I	None
Army JROTC II	Armed Services Vocational Aptitude Battery Examination
Army JROTC III	Armed Services Vocational Aptitude Battery Examination
Army JROTC IV	Armed Services Vocational Aptitude Battery Examination
Auto Body Technology I	Automotive Service Excellence (ASE) Entry Level Certification
Auto Body Technology II	Automotive Service Excellence (ASE) Entry Level Certification
Auto Body Technology III	Automotive Service Excellence (ASE) Entry Level Certification
Automotive Technology I	Automotive Service Excellence (ASE) Entry Level Certification; Workplace Readiness Skills for the Commonwealth
Automotive Technology II	ASE Entry Level Certification; Virginia Motor Vehicle Safety Inspection Program Exam; Workplace Readiness Skills for the Commonwealth
Barbering I	Customer Service Examination (SkillsUSA Career Essentials); Workplace Readiness Skills for the Commonwealth
Barbering II	Customer Service (SkillsUSA); Workplace Readiness Skills for the Commonwealth
Barbering III	Virginia State Board Barbering Licensure Exam (Board of Barbers and Cosmetology-Virginia Department of Professional and Occupational Regulation); Workplace Readiness Skills for the Commonwealth
Building Management I	Customer Service Examination (SkillsUSA Career Essentials); Workplace Readiness Skills for the Commonwealth
Building Management II	Customer Service Examination (SkillsUSA Career Essentials); Workplace Readiness Skills for the Commonwealth
Building Management III	Workplace Readiness Skills for the Commonwealth Examination; Customer Service Examination (SkillsUSA Career Essentials); ICC Certificates of Achievement Examination or NCCER Core
Carpentry I	Introductory Craft Skills Test (NCCER); Carpentry Level One Test (NCCER); Workplace Readiness Skills for the Commonwealth
Carpentry II	Carpentry Level One Test (NCCER); Workplace Readiness Skills for the Commonwealth Examination (CTECS); Workplace Readiness Skills for the Commonwealth

Child Development and Parenting (36 Weeks)	The Broadfield FACS Assessment, Leadership Essentials Assessment (AAFCS); Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Civil Engineering & Architecture PLTW	In this specialization course for Project Lead the Way (PLTW), students collaborate on both the development of community-based building and design projects and conceptual design for project presentations.
Computer Information Systems	Microsoft Office Specialist (MOS) Examinations; Workplace Readiness Skills for the Commonwealth
Cosmetology I	Customer Service Examination (SkillsUSA Career Essentials); Workplace Readiness Skills for the Commonwealth Examination
Cosmetology II	Cosmetology Examination (SkillsUSA); Customer Service Examination (SkillsUSA Career Essentials); Workplace Readiness Skills for the Commonwealth
Cosmetology III	Cosmetology Examination (Board of Barbers and Cosmetology - Virginia Department of Professional and Occupational Regulation); Customer Service Examination (SkillsUSA Career Essentials); Workplace Readiness Skills for the Commonwealth
Criminal Justice I	Workplace Readiness Skills for the Commonwealth Examination (CTECS); Customer Service Examination (SkillsUSA Career Essentials)
Criminal Justice II	Criminal Justice and CSI Examination (SkillsUSA); Certified Emergency Telecommunicator Examination; Workplace Readiness Skills for the Commonwealth
Culinary Arts I	ProStart Program End-of-Course Examination (Level 1): Education Foundation of the National Restaurant Association; ServSafe Manager Certification (National Restaurant Association) Culinary Arts Assessment
Culinary Arts II	ProStart Program End-of-Course Examination (Level 2): Education Foundation of the National Restaurant Association; ServSafe Manager Certification (National Restaurant Association), Culinary Arts Assessment
Dental Careers I	: Dental Support Technician Certification (DSTC) Examination, Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Dental Careers II	1. Certified Dental Assistant and National Entry Level Assistant: Radiation Health & Safety (RHS) Examination (Dental Assisting National Board), 2. Certified Dental Assistant and National Entry Level Dental Assistant: Infection Control (ICE) Examination, 3. National Entry Level Dental Assistant: Anatomy, Morphology and Physiology (AMP) Examination
Design, Multimedia, & Web Technologies	Microsoft Office Specialist (MOS) Examinations; Workplace Readiness Skills for the Commonwealth Examination
Digital and Social Media Marketing	NRF Advanced Customer Service and Sales Certification Assessment; NRF Customer Service and Sales Certification
Digital Applications	Microsoft Office Specialist (MOS) Examinations; Workplace Readiness Skills for the Commonwealth Examination
Digital Visualization	Autodesk Certified Professional Examinations (Certiport)
Economics & Personal Finance	W!SE Financial Literacy Certification; Workplace Readiness Skills for the Commonwealth Examination
Education for Employment I - Preparation	None
Education for Employment II - Preparation	None

Electricity I	Core: Introductory Craft Skills Test (NCCER); Electrical Construction Wiring Examination (Residential) (SkillsUSA); ICC Certificate of Achievement Examinations; Workplace Readiness Skills for the Commonwealth
Electricity II	Core: Introductory Craft Skills Test (NCCER); Electrical Construction Wiring Examination (Residential) (SkillsUSA); ICC Certificate of Achievement Examinations; Workplace Readiness Skills for the Commonwealth
Emergency Medical Technician I	Emergency Medical Responder Examination, Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Emergency Medical Technician II	Emergency Medical Technician Exam (Virginia Dept. of Health), Certified EKG Technician – CET Exam, Emergency Medical Responder Examination
Emergency Medical Telecommunications	Certified Emergency Telecommunicator Examination
Engineering Practicum IV	Workplace Readiness Skills for the Commonwealth (CTECS)
Entrepreneurship Education	Workplace Readiness Skills for the Commonwealth Examination; NRF Customer Service & Sales Certification Assessment
Fashion Careers I	Fashion, Textiles, and Apparel Exam (American Association of Consumer Science), Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Fashion Marketing	NRF Customer Service & Sales Certification Assessment; Fashion Merchandising Assessment (NOCTI)
Graphic Imaging Technology I	Adobe Certified Associate—ACA Examination Adobe (Systems Incorporated); PrintEd Certification Exam (Graphics Arts Education & Research Association); Workplace Readiness Skills for the Commonwealth
Graphic Imaging Technology II	Adobe Certified Associate—ACA Examination Adobe (Systems Incorporated); PrintEd Certification Exam (Graphics Arts Education & Research Association); Workplace Readiness Skills for the Commonwealth
Greenhouse Plant Production and Management	Horticulture- Landscaping Assessment (NOCTI), Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Horticulture Sciences	Horticulture- Landscaping Assessment (NOCTI), Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Hotel Management & Operations	NRF Customer Service and Sales Certification Assessment
Independent Living	Broad Field Family and Consumer Science Assessment
Information Technology Fundamentals	Microsoft Office Specialist (MOS) Examinations; Workplace Readiness Skills for the Commonwealth Examination; IC3 Digital Literacy (must pass all three parts)
Introduction to Culinary Arts	Culinary Arts Assessment American Association of Family and Consumer Sciences (AAFCS), Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Introduction to Engineering Design PLTW	PLTW Examination
Introduction to Fashion Careers (36 Weeks)	Fashion, Textiles, and Apparel Assessment (American Association of Family & Consumer Science), Workplace Readiness Skills for the Commonwealth Examination (CTECS),
Introduction to Health & Medical Sciences (36 Weeks)	National Health Science Assessment (National Consortium for Health Science Education administered by Precision Exams), Workplace Readiness Skills for the Commonwealth Examination (CTECS),

Landscaping I	Commercial Pesticide Applicator Examination (Virginia Department of Agriculture and Consumer Services), Workplace Readiness Skills for the Commonwealth Examination (CTECS),
Landscaping II	Horticulture- Landscaping Assessment (NOCTI), Workplace Readiness Skills for the Commonwealth Examination (CTECS),
Legal Systems Administration	Microsoft Office Specialist (MOS) Examinations; Workplace Readiness Skills for the Commonwealth Examination
Marketing	NRF Customer Service and Sales Certification Assessment
Medical Coding and Billing I	Workplace Readiness for the Commonwealth Examination;
Medical Coding and Billing II	Workplace Readiness Skills for the Commonwealth Examination; Electronic Health Record Certification (EHRC) Examination; Medical Coding and Billing Specialist (MCBS) Examination; Billing Coding Specialist Certification (BCSC) Examination
Medical Systems Administration (36 Weeks)	Microsoft Office Specialist (MOS) Examinations; Workplace Readiness Skills for the Commonwealth Examination
Medical Terminology	Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Nurse Aide I	Workplace Readiness Skills for the Commonwealth Examination (CTECS), EKG Technician Certification Examination
Nurse Aide I Condensed	Workplace Readiness Skills for the Commonwealth Examination (CTECS), EKG Technician Certification Examination
Nurse Aide II	National Nurse Aide Assessment (VA Board of Nursing), EKG Technician Certification Examination (American Medical Certification Association)
Nurse Aide II Condensed	National Nurse Aide Assessment (VA Board of Nursing), EKG Technician Certification Examination (American Medical Certification Associations)
Nutrition & Wellness (36 Weeks)	Broad Field FACS Assessment, Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Pharmacy Technician I	Nationally Registered Certified Pharmacy Technician (NRCPhT), Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Pharmacy Technician II	Certified Pharmacy Technician (CPhT) -American Allied Health, Nationally Registered Certified Pharmacy Technician (NRCPhT),
Precision Machining Technology I	Precision Machining Assessment (NOCTI); CNC Milling and Turning Examination (SkillsUSA); Manufacturing Specialist MT1 or Machining Level 1, Workplace Readiness Skills for the Commonwealth
Precision Machining Technology II	Manufacturing Specialist MT1; Machining Examination, Level 1 (NIMS); CNC Milling and Turning Examination (SkillsUSA); Workplace Readiness Skills for the Commonwealth
Principles of Business and Marketing	Workplace Readiness Skills for the Commonwealth Examination
Principles of Engineering	PLTW Examination
Programming	Computer Programming Assistant (NOCTI); Workplace Readiness Skills for the Commonwealth
Small Animal Care I	Animal System Assessment (NOCTI), Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Small Animal Care II	Animal Systems Assessment (NOCTI), Certified Veterinary Assistant Examination (Texas Veterinary Medical Association)
Software Engineering Essentials PLTW	Software Development Certification Tests
Sports and Entertainment Management	NRF Advanced Customer Service and Sales Certification Assessment

Sports and Entertainment Marketing	NRF Customer Service and Sales Certification Assessment
Sports Medicine I	Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Sports Medicine II	Certified personal trainer, (National Academy of Sports Medicine) Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Technical Drawing and Design	Autodesk Certified User Examination; Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Technology Foundations	Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Technology Transfer	Workplace Readiness Skills for the Commonwealth
Television and Media Production I	Audio-Visual Communications Assessment (NOCTI); Certified Broadcast Technician or Certified Television Operator; Adobe Certified Associate; Workplace Readiness Skills for the Commonwealth
Television and Media Production II	Television Video Production Examination (SkillsUSA); Television Production Assessment (NOCTI); Adobe Certified Associate or Certified Broadcast Technician; Certified Television Operator; Workplace Readiness Skills for the Commonwealth
Veterinary Science I	Animal Systems Assessment (NOCTI), Workplace Readiness Skills for the Commonwealth Examination (CTECS)
Veterinary Science II	Animal Systems Assessment (NOCTI), Certified Veterinary Assistant Exam (American Allied Health)
Virginia Teachers for Tomorrow I	Educational Fundamentals Assessment (AAFCS)
Virginia Teachers for Tomorrow II	Educational Fundamentals Assessment (AAFCS) or Praxis Core Academic Skills for Educators Tests (ETS)
Welding I	Core: Introductory Craft Skills Test (NCCER); American Welding Society (AWS) SENSE; Workplace Readiness Skills for the Commonwealth Examination
Welding II	Core: Introductory Craft Skills Test (NCCER); American Welding Society (AWS) SENSE; Workplace Readiness Skills for the Commonwealth Examination
Welding III	Welding Level One Entry-Level Assessment (NCCER); Workplace Readiness Skills for the Commonwealth Examination; American Welding Society (AWS) SENSE

Virtual Course Offerings

Richmond Public Schools offers a variety of courses in virtual formats; in SY2019-20, those formats are Edgenuity and Virtual Virginia (a program run by the Virginia Department of Education). For courses offered for possible high school credit, standard units of credit are awarded for successful completion of such courses when the course is equivalent to that offered in the regular school program and the work is done under the supervision of a licensed teacher qualified in the relevant subject areas. A verified unit of credit may be earned when the student has successfully completed the requirements specified in 8 VAC 20-131-110.

Virtual courses are offered at no-cost to the student and are scheduled based on student need and scheduling constraints. For more information, students and families should consult their school counselor. The list of courses offered in SY2019-20 are listed below:

Edgenuity

Edgenuity courses are offered to RPS students who cannot fit a traditional course into their schedule. Below is the list of courses that *may* be offered based on student need. Online courses are aligned to the Virginia state standards. In addition to being available for use for initial credit in high schools, teachers have access to their content as a supplemental resource for classroom instruction.

- *Advanced Drawing and Design*
- *Algebra I*
- *Algebra I Honors*
- *Algebra II*
- *Algebra II Honors*
- *Algebra, Functions, & Data Analysis*
- *AP English Language & Composition*
- *AP English Literature & Composition*
- *AP Environmental Science*
- *AP Human Geography*
- *Biology I*
- *Biology I Honors*
- *Chemistry I*
- *Chemistry I Honors*
- *Earth Science I*
- *Economics & Personal Finance*
- *English - Grade 10*
- *English - Grade 10 Honors*
- *English - Grade 11*
- *English - Grade 11 Honors*
- *English - Grade 12*
- *English - Grade 12 Honors*
- *English - Grade 9*
- *English - Grade 9 Honors*
- *Entrepreneurship Education*
- *Environmental Science*
- *French I*
- *French II*
- *French III*
- *German I*
- *German II*
- *Information Technology Fundamentals*
- *Introduction to Health & Medical Sciences*
- *Latin I*
- *Latin II*
- *Mathematical Analysis/Pre-Calculus*
- *Medical Terminology*
- *Pharmacy Technician I*
- *Pharmacy Technician I*
- *Physics I*
- *Physics I Honors*
- *Probability & Statistics*
- *Spanish I*
- *Spanish II*
- *Spanish III*
- *Virginia & U.S. Government*
- *Virginia & U.S. History*
- *World Geography*
- *World History & Geography 1500 A.D. to the Present*
- *World History & Geography 1500 A.D. to the Present Honors*
- *World History & Geography to 1500 A.D.*

- *World History & Geography to 1500 A.D. Honors*

Virtual Virginia

As a program of the Virginia Department of Education, Virtual Virginia (VVA) offers online Advanced Placement (AP®), world language, core academic, and elective courses to students throughout the Commonwealth and nation. VVA is committed to providing high-quality, rigorous course content with the flexibility to meet schools' and students' varied schedules. Our program strives to provide instruction that meets the individual needs of students. Virtual learning is the new frontier in today's educational institutions. The technology of the 21st century provides a unique opportunity for educators to reach students who want the experience of online courses.

RPS offers the following courses via the VVA program based on school requests; not all courses listed below will be offered at all schools. Students and families should consult with school counselors for more information.

- *American Sign Language I*
- *Arabic I*
- *Arabic II*
- *Chinese I*
- *Chinese II*
- *Chinese III*
- *Creative Writing*
- *Economics and Personal Finance*
- *French II*
- *French III*
- *Introduction to Computer Science*
- *Introduction to Game Design and Development*
- *Latin I*
- *Latin II*
- *Psychology*
- *World Mythology*

Addenda – Academic Guidelines, Practices, and Procedures for High School

This section addresses the important academic guidelines, practices, and procedures for high school students. Each section is meant to provide a high-level of information on the related program, practice, etc. Details about where to find additional information for each topic are found at the bottom of the relevant sub-section.

Academic and Career Planning and Opportunities

Academic and Career Plans and Diploma Type

Starting in eighth grade, RPS students must meet with their school counselor(s) annually to create and update their four-year high school plan. The overarching objective of these meetings is for students to have an opportunity to select and/or monitor progress of diploma type selection. This process begins with students, in discussion with their parent(s)/guardian(s), selecting their high school diploma type: Standard Diploma or Advanced Studies Diploma. Building on academic and career planning from middle school, the student uses this process to map out their high school course of study to align with their post-secondary intentions and areas of interest. This plan is then updated annually, in conversation with the student and their parent(s)/guardian(s) and their assigned school counselor. Additionally, during each of these conferences, school counselors and students evaluate course selections and credits to determine if students are on the pathway to meet all the requirements for their selected diploma type.

Process for Changing Diploma Types

In the event that a student would like to change their diploma type, they have the option to do so, pending principal and parent/guardian approval.

Course Selection Process

The Course Request Process for the upcoming school year is an opportunity for students to think carefully about their interests, achievements, and educational and career goals. Students and families should give very serious consideration to this process and consult with their counselor(s), teacher(s), and other school team members, in concert with their Academic and Career Plan, to request courses that satisfy both academic interests, progress toward graduation needs, and post-secondary goals.

The timeline for the course selection process is generally as follows:

1. School counselors meet individually with students to review and update academic and career plans.
2. School counselors hold class meetings to explain course offerings and graduation requirements.
3. School counselors host a parent night to provide information on course offerings and graduation requirements.
4. School counselors visit feeder schools to share course offerings and discuss the process.
5. Students choose elective courses for the upcoming school year.

Add/Drop Procedures

A student who wishes to drop a course on their current schedule *during the school year* may do so with the permission of their parent/guardian, principal, and school counselor at any time up to the *10th day of school*. Approved dropped courses will not appear on the student's transcript and are not calculated in the GPA. There is no assurance that a student who drops a course will be able to add another credit bearing course in the same year.

Waiver from Taking a Full Load of Coursework

Students are expected to maintain a full-day schedule as defined by being enrolled in eight scheduled courses. Students with unique personal, family, or economic needs may still request a waiver of full day schedule requirements by speaking with their school counselor. Approval by the school principal and Chief of Schools is required. Waiver requests are due no later than the *10th day of school*. Any students not fully enrolled by that date who have not obtained a waiver will have their schedule. 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.

Access to Courses

As required by federal laws and regulations, the Richmond City Public School Board does not discriminate on the basis of gender, color, race, religion, handicapping conditions, or national origin in employment or in its educational programs and activities. Every student shall have access to the high school courses of their choice, and with the exception of specific prerequisites, no student shall be denied access to a course.

Transfer Students

Transcript Evaluation, Translation of Grades & GPA Calculations

Students entering a Virginia public high school for the first time at the beginning of or during the ninth grade are required to meet all of the same graduation requirements required of non-transfer students.

Students entering a Virginia public high school for the first time at the beginning of or during the tenth grade or later should refer to the tables on the [Information for Transfer Students](#) page of the VDOE website to determine the applicable graduation requirements.

Students transferring within 20 days of their senior year shall be given every opportunity to earn a Standard Diploma or Advanced Studies Diploma. If it is not possible for the student to meet the requirements for a Standard Diploma or Advanced Studies Diploma, arrangements should be made for the student's previous school to award the diploma. If these arrangements cannot be made, the school division can submit a waiver of the verified unit of credit requirements to the VDOE.

Mid-Year Transfer of Grades (to be developed 2020)

Out of District Grade Translation (to be developed 2020)

Concurrent Enrollment

Students in the 11th and 12th grade may be permitted to enroll in college level courses prior to graduating from high school. Students in the ninth and 10th grade must have permission from the college/university president prior to enrolling. The Concurrent Enrollment Form must be signed by the parent or legal guardian and the principal or designee for each requested semester or term. Individual families are responsible for all tuition, books, and fees associated with concurrent enrollment courses.

Eligibility for Early College Academy and Concurrent Enrollment

In keeping with the Virginia Plan for Dual Enrollment and JSRCC admission standards all students, regardless of course request, students must minimally score at the Ability-to-Benefit level on the Virginia Placement Test (VPT) in order to be eligible to participate in dual enrollment offerings.

In some cases, students may be eligible to waive the VPT as follows:

- Students who score a minimum of 480 on Critical Reading/Writing (ERW combined score) sections of the SAT are waived from taking the placement test.
- Students who have scored at least a 530 on the Math section of the SAT, are waived from taking the VPT Math placement test. Waivers only apply to students taking a math course below the MTH 163 level. Students requesting MTH 163 and above must take the VPT Math placement test.
- Students requesting science courses with math prerequisites (chemistry or physics), must take the VPT Math placement test.
- Students who score a minimum of 18 on the English section of the ACT, and 18 on the reading section, are waived from taking the VPT.

Early College Academy Course Sequence

	Grade 9	Grade 10	Grade 11			Grade 12	
	(Yearlong RPS)	(Yearlong RPS)	Fall	Spring	May	Fall	Spring
English	Follow recommended RPS Course Sequences		English 111	English 112	N/A	ENG 242	ENG 244
Mathematics			Math Lab	Math 163 or Math 170	N/A	MAT 270 or MAT 240	N/A
Science			Science Courses at RPS			BIO 101	BIO 102
History & Social Sciences			Hist 121	Hist 122	N/A	PLS 211	PLS 212
World Languages			SPA 101	SPA 102	SPA 102	N/A	N/A
Health & PE			Elective	HLT 115		Elective	
Arts			Elective	ITE 115		Elective	

For more information, consult the Reynolds Community College Dual Enrollment Handbook. Students should consult college catalogues about the transfer of college credit between colleges and universities as policies may vary.

Eligibility and Selection for Summer Residential Governor's School for Interdisciplinary Studies

The Summer Residential Governor's Schools (SRGS) provide accelerated and highly motivated rising 11th and 12th graders a rigorous and concentrated educational experience in visual and performing arts, humanities, mathematics, science,

and technology; or through mentorships in marine science, medicine, and health sciences, or engineering. 2020 Summer Residential Governor’s School options are found in the introductory section of this document.

Summer Residential Governor’s School Selection Timeline

September/October 2019	Applications made available by the VDOE via Internet. Suggested time frame for interested students to let the appropriate school or division contact know that they would like to apply for Summer Governor’s School Program. Note: Applications are submitted directly to RPS and NOT to the VDOE.
October 2019	Suggested time frame for Visual and Performing Arts (VPA) students to let the appropriate RPS contact, beginning with the school counselor and then submitted through the division contact (Gifted and Talented Coordinator), know that the student would like to adjudicate on the specified date and location assigned to the school division.
November (3rd week)	VDOE deadline for RPS to submit nominees for statewide VPA adjudication. School division and private school regional adjudication quotas are available at the VDOE website on the public and private school administrators’ guide.
Early January 2020	Suggested time frame for applications with teacher recommendations to be submitted to the appropriate school or division contact.
Early February 2020	Suggested time frame for the RPS Selection Committee to meet and review applications for nominee selection.
February 2020 (last week)	VDOE deadline for the RPS Selection Committee to mail applications and to send the nomination report form electronically through SSWS to the VDOE. School division and private school regional adjudication quotas are available at the VDOE Website. The RPS Selection Committee will notify students that they are NOT selected as nominees from the division.
April 2020 (mid)	The School Division and the Gifted and Talented Coordinator are notified of the admission status of each nominee one week prior to student notification. Each nominee is emailed and sent a letter of notification by the VDOE of his/her admission status.

Evaluation of Academic Performance and Progress to Graduation

Grading Scale, Grade Point Average & Course Weights

A student’s grade point average (GPA) and class rank shall be computed for the following purposes: (1) to determine honor graduates; (2) to determine if a student is eligible for the diploma seal awarded by the Virginia Board of Education; (3) to communicate to college admissions offices and other agencies designed by the student and/or parent/guardian; and (4) to determine the valedictorian(s) and salutatorian(s) for the graduating class.

The chart below indicates the RPS grading scale and grade values. Honors, Advanced Placement, International Baccalaureate Diploma Program (IBDP), and Dual Enrollment courses are assigned weighted values.

RPS Grading Scale	Final Grade	Standard	Honors / IBMYP*	Advanced Placement (AP)	Dual Enrollment	IBDP
A (Outstanding)	90-100	4	5	6	6	6
B (Above Average)	80-90	3	4	5	5	5
C (Average)	70-79	2	3	4	4	4
D (Below Average)	60-69	1	2	3	3	3
F (Unsatisfactory)	0-59	0	0	0	0	0

** Only IBMYP courses taken in high school (traditionally 9th and 10th grade) will be weighted. Additionally, the above scale applies only to Honors/IBMYP core content courses (e.g. English, Mathematics, Science and History/Social Sciences and World Languages.)*

Attendance and Impact on Grades

Courses in which students miss more than 18 days will lose credit for that course, even if they earned a passing grade. In some cases, students may request a waiver from this requirement and possibly earn credit for the course. Such waivers will only be granted in cases of extenuating circumstances. See the SCORE for more information on the attendance policy and how it may impact grades and graduation progress.

Promotion, Class Cohort and Year of Graduation Designation

Upon entering high school, students are assigned a “Cohort Year,” which is the expected year of graduation; for example, students entering ninth grade in 2019-20 will be assigned a Cohort Year of 2024, meaning they are expected to graduate at the end of the 2023-24 school year. At the end of each academic year, students will receive a grade-level (9th, 10th, 11th, 12th) designation based upon the number of credits earned that are required for high school graduation; and if necessary, the actual “Year of Graduation (YOG),” may be adjusted accordingly.

Students must earn the minimum number of standard credits and verified credits as required for the diploma type of their choice.

- **Standard Credit:** A standard unit of credit awarded when a student passes a high school credit-bearing course.
- **Verified Credit:** Earned when a student passes the SOL test associated with the respective course.

In the event that a student passes a course but fails the SOL test, students will receive course credit, and will be provided remediation opportunities in preparation to retake the SOL test to earn the associated verified credit if they have not fulfilled the graduation requirement for verified credit(s) for that subject area.

Grade-level designation shall be determined as follows, based on the credits earned at the end of the school year. The totals below reflect the minimum number of credits to begin the year with the following grade-level designation (please note these are *not* the total numbers needed to meet graduation requirements).

Standard Diploma

Grade	Cumulative Core Credits Earned (ELA, Math, Science, Social Sciences)	Cumulative Standard Credits Earned (Core plus electives)	Cumulative Verified Credits Earned
9th	>3	>5	0
10th	3	5	1
11th	6	10	2
12th	9	14	3

Advanced Studies Diploma

Grade	Cumulative Core Credits Earned (ELA, Math, Science, Social Sciences)	Cumulative Standard Credits Earned	Cumulative Verified Credits Earned
9th	>3	>8	0
10th	3	8	1
11th	7	14	2
12th	11	18	3

Remediation & Repeating Coursework

Students who fail to successfully complete a course required for graduation are strongly encouraged to enroll in summer school immediately following the school year in which they took the course. If the course is associated with a SOL assessment that would provide a verified credit to meet graduation requirements, students will also receive remediation during summer school and have the opportunity to retake the exam during the summer. RPS strongly encourages students to enroll in remediation opportunities in a timely manner so as not to jeopardize on-time graduation.

Academic Integrity

Students shall not cheat, plagiarize or knowingly make false statements with respect to any assignments or tests. Depending on the seriousness of the violation, the student may not receive credit for the particular piece of work or course in question, and/or may lose credit for the course if appropriate.

A student found using a mobile telephone or any unauthorized device during any testing situation will have the device immediately confiscated and will lose the privilege of using said devices for the remainder of the school year. Test results will be marked as invalid and result in a score of zero.

Distinctions for Academic Performance

Honor Roll

Students can attain honor roll status at the end of each nine-week marking period, semester, and year by earning a grade point average of 3.0 or above and no grade below C.

Class Rank, Valedictorian & Salutatorian

Class rank will be determined by assigning the student with the highest GPA the rank of number one (1); the second highest, the rank of number two (2), etc. In cases where more than one student has the same numerical average, all students with the average will be given the same rank. The next highest average will assure the next rank position. The student with the next highest average will have the rank of three (3) in the class.

Example:

- Student No. 1 – 3.9880 Rank 1
- Student No. 2 – 3.9880 Rank 1
- Student No. 3 – 3.8972 Rank 3
- Student No. 4 – 3.8972 Rank 3

Students are ranked numerically in descending order according to GPA at the end of each high school year in grades nine through eleven and at the end of the first semester of the senior year. All credit bearing courses will be used to compute the GPA and class rank. Courses with the letter grade of “I” or “P/F”, those that are worth no credit and others specifically flagged for exclusion are excluded from GPA calculation. GPA and class rank are reported to colleges and universities on a 4.0 scale at the end of grade 11 and at the end of the first semester of grade 12.

Students transferring during the junior or senior year shall receive a GPA and a standing as to percentage (e.g., top 5%, top 10%, etc.) but shall not be included in the numerical ranking. The GPA is determined as follows:

- $\text{Points} \times \text{Credits} = \frac{\text{Calculated Points Total}}{\text{Total Credits Attempted}} = \text{GPA}$

The student or students with the highest rank at the end of the first semester of the senior year will be the valedictorian(s) of the graduating class. The student or students with the second highest rank at the end of the first semester of the senior year will be the salutatorian(s). In those instances where two or more students have an identical GPA that results in a rank of number one, the students shall be designated co-valedictorians.

Where there are two or more students with an identical GPA that results in a rank of number two, the students shall be designed as co-salutatorians for the class. To be eligible for valedictorian and salutatorian, a student must complete the last four (4) consecutive semesters prior to graduation in the high school from which he/she will be graduating. Long-term homebound, exchange, and early graduation students shall not be eligible for valedictorian and salutatorian.

Scholastic Standout

The Scholastic Standouts program recognizes selected students in fifth, eighth and 12th grades. These students are chosen through a selection process based on outstanding academic achievement, positive attitude towards school, exemplary attendance, strong coping skills, demonstrated leadership ability and engagement in school and community

services. Inspired by John Templeton, a former editor at the Richmond Afro-American newspaper, Scholastic Standouts has recognized over 1,600 RPS students since its inception in 1981.

School/Family Communication of Student Progress

Report Cards and Progress Reports

Parents are provided written information concerning student progress throughout the year. The school year for all comprehensive high schools is divided into quarters of nine weeks each; students receive report cards following each quarter. Interim reports are sent home to parents in the middle of the first and third quarters. Consequently, each parent receives a minimum of six written progress reports for each student each year in addition to numerous opportunities for parent/teacher dialogue through written correspondence, conferences, email, and telephone contacts.

Online Access

Richmond Public Schools grants parents/guardians' access to the Aspen Online Family Information Portal. Access to the Parent Portal provides timely, relevant, and easily accessible information about a student's education. By opening the Parent Portal, families have full access to all of their student's school information and can thus take ownership in their student's education as they move through Richmond Public Schools. Family accounts contain important and confidential information about individual students, so for the security of such data, families are instructed to protect their login information as they would any other personal account.

At the start of the school year, school staff will provide families information about how to access their student's portal account. This account will grant access to 'Grades', 'Attendance', and 'Assignments'. Families will then log into their portal account to confirm access. Families should keep this letter so they can reference it in the future.

The family portal web address is: <https://aspen.rvaschools.net/aspen>

Once an account is activated and a family logs in, they will have access to the following:

Family

All of a family's students will be listed in this tab. If there are errors in any data (e.g., address, phone number, etc.), families should reach out to school front office staff to provide up to date information.

Academics

Select the side-tabs to view student details, contact information, attendance information, etc. Please review this information for accuracy and again, families should notify front office staff if they identify errors in the data.

On the *Academics* tab, families can view the student's current schedule and grades. Select a course to view the details of the course. Click the *Assignments* side-tab to view information about grades for each.

Help

If families have questions or concerns about how to navigate the Aspen Online Family Information Portal, they should reach out to front office staff.

Process for Challenging Grades/Teacher Grade Changes

If a parent or guardian has a question regarding a student grade, they may contact the teacher of the course in question to review the student's grade. If it is determined that the grade was assigned in error, the teacher will submit a grade change request to the school counselor. The school counselor will then adjust the student's grade in the student information system and notify the parent when the change has taken effect.

Student Support Programs

Homebound Instruction

The Virginia Board of Education, through the regulations establishing *Standards for Accrediting Public Schools in Virginia*, requires that “Homebound instruction shall be made available to students who are confined at home or in a health care facility for periods that would prevent normal school attendance based upon certification of need by a licensed physician or licensed clinical psychologist. For students eligible for special education or related services, the individualized education program team must revise the IEP, as appropriate, per 8 VAC 20-131-180 to direct off-site instruction. Credit for the work completed shall be awarded when it is done under the supervision of a teacher licensed by the Virginia Board of Education and meets the requirements of 8 VAC 20-131-110.”

Richmond Public Schools has the responsibility to meet the educational needs to children who are confined to their homes for a variety of reasons and meets these needs through homebound/home-based instruction managed by the Office of Pupil Personnel Services.

Overview of Homebound Services

Homebound instruction services are available to all students who are enrolled in RPS who meet eligibility criteria. The program is designed to provide continuity of educational services between the classroom and home setting for students whose medical needs preclude school attendance. Services may also be used to supplement classroom instruction for health-impaired children whose conditions may prevent consistent attendance (e.g., students receiving dialysis, chemotherapy, radiation treatments, etc.), or for children with disabilities that prevent regular school attendance.

Students must be enrolled in RPS in order to receive RPS-provided homebound instruction.

Homebound instruction is temporary, and not intended to supplant school services. While no specific number of days can be set due to the many complex health issues which may arise, the goal is to always return the student to their school setting as soon as possible. **Homebound instruction is for core coursework only; due to the nature of the program, instruction and support will not be provided for elective classes.** The homebound instructor is responsible for monitoring student progress and preparing a plan for the student’s return to their school.

Overview of Home-based Services

Home-based services are determined by a student’s Individualized Education Plan team. These services may be requested by the Disciplinary Review Hearing Officer for discipline related reasons. Students who have been charged with certain charges as indicated in VA Code 16.1-260G will receive home-based services until charges are reviewed and resolved.

More information about homebound and home-based instruction and services, including information on eligibility, procedures, implementation practices, etc., can be found on the Pupil Personnel Services section of the RPS website and in the *Homebound Homebased Instruction Guide*, located on that same page.

Special Education Services

Programming

RPS provides special education services for students who have been found eligible for service through the eligibility process, offering a continuum of special education services to best support the needs of our students. Students with Individualized Education Programs (IEP) and/or 504 Plans are expected to meet grade-level curriculum standards in general education classes. Although course offerings vary for students with disabilities, some students are unable to participate in the general education classes due to the severity of their unique support needs. However, courses will be closely aligned, while meeting the student's identified learning needs, according to their Individualized Education Program (IEP) and/or 504 Plan. All decisions regarding the placement of a student with a disability will be made by an

Individualized Education Program (IEP) and/or 504 Plan team, in consultation with the parent(s)/guardian(s) of the child, and consistent with the Individuals with Disabilities Education Improvement Act (IDEA) or Section 504 of the American with Disabilities Act (ADA).

Students with Significant Cognitive Impairments

Some students with significant cognitive disabilities require a more restrictive setting, such as an Adaptive Classroom Environment, where the students access a Modified and/or Adaptive Curriculum that could include instruction following the Applied Studies Curriculum Map in collaboration with the Aligned Standards of Learning. High school students completing Modified or Adaptive Curriculum course work will meet the requirements for an Applied Studies Diploma. Students requiring instruction following the Aligned Standards of Learning participate in the Virginia Alternate Assessment Program (VAAP).¹

Section 504 of the Rehabilitation Act of 1973

Section 504 of the Rehabilitation Act protects children and adults with disabilities from exclusion and unequal treatment in schools, jobs, and in the community. RPS students who are found eligible to receive accommodations through a Section 504 Plan must be determined to:

1. Have a physical or mental impairment that substantially limits one or more major life activities; or
2. have a record of such an impairment; or
3. be regarded as having such an impairment.

RPS students who have been found eligible for a Section 504 Plan are provided with appropriate academic adjustments and auxiliary aids and services that are necessary to afford the student an equal opportunity to participate in and access the educational environment.

Credit Accommodations

The State Board of Education has approved Guidelines for Standard Diploma Credit Accommodations for Students with Disabilities as a way to provide alternatives for students to meet the requirements for a Standard Diploma. Credit accommodations for students with disabilities may include:

- Alternative courses to meet the standard credit requirements;
- Modifications to the requirements for locally awarded verified credits;
- Additional tests approved by the Board of Education to earn verified credits;
- Adjusted cut scores on tests to earn verified credits;
- Allowance of work-based learning experiences through career and technical education (CTE) courses.

While credit accommodations provide alternative pathways and flexibility, students receiving credit accommodations must earn both standard and verified credits required to graduate with a Standard Diploma.

Students must meet the following criteria to be eligible to receive credit accommodations for the Standard Diploma:

1. Student must have a current IEP or Section 504 plan with Standards Based content goals.
2. Student has a disability that precludes him or her from achieving and progressing commensurate with grade-level expectations but is learning on grade level content.
3. Student needs significant instructional supports to access grade-level SOL content and to show progress.
4. Based on multiple objective measures of past performance, student might not be expected to achieve the required standard and verified units of credit within the standard time frame.

¹ Some students eligible for an Applied Studies Diploma may not be eligible for instruction following the Aligned Curriculum.

Additional information regarding Credit Accommodations for the Standard Diploma can be found at http://www.doe.virginia.gov/instruction/graduation/credit_accommodations.shtml

English Language Learners

English as a Second Language is the RPS program established to serve students who are identified as English Learners. The purpose of the program is to support English language proficiency for students whose second language is English so they may thrive in a rigorous academic environment and exceed academic standards.

Definition of an English Language Learner

According to the federal definition as described in Section 8101(20) of the Elementary and Secondary Education Act of 1965 (ESEA), as amended by the Every Student Succeeds Act of 2015 (ESSA), an English Learner (EL) in the Commonwealth of Virginia is a student:

- 1) Who is aged 3 through 21;
- 2) Who is enrolled or preparing to enroll in an elementary school or secondary school;
 - a) who was not born in the United States or whose native language is a language other than English; and who comes from an environment where a language other than English is dominant;

OR

 - i) who is a Native American or Alaska Native, or a native resident of outlying areas;
 - ii) and who comes from an environment where a language other than English has had a significant impact on the individual's level of English language proficiency;

AND
- 3) Who is migratory, whose native language is a language other than English, and who comes from an environment where a language other than English is dominant;

AND
- 4) Whose difficulties speaking, reading, writing, or understanding the English language may be sufficient to deny the individual:
 - a) the ability to meet the State's proficient level of achievement on the State assessments described in section 1111 (b) (3) of the ESEA;
 - b) the ability to achieve successfully in the classroom where the language of instruction is English; or
 - c) the opportunity to participate fully in society.

High School Scheduling

English as a Second Language I, English as a Second Language II, English as a Second Language III, and English as a Second Language IV will be offered at the secondary level (grades 6-12) and will be counted as World Language credits starting in the ninth grade. English as a Second Language courses will focus on English Language Acquisition and will support the corresponding grade level English course. More information about these courses is available in the ESL section of the Course Description portion of this guide.

Gifted & Talented Services

Regulations Governing Educational Services for Gifted Students

Richmond Public Schools' Programs for the Gifted & Talented serves as an integral part of the overall RPS mission by providing a continuum of comprehensive services for all students advancing equity, excellence, and student engagement. This continuum is accessible to students beginning in kindergarten through twelfth grade. Such services are an essential component of RPS's commitment to deliver a quality education for students to become global thinkers, effective problem solvers, and strive for personal excellence.

Richmond Public Schools Programs for Gifted & Talented will:

- Develop a culture of academic rigor evidenced by the provision of college preparatory classes, career planning, civic duty, and open access to enrollment in advanced courses across all levels and content areas.
- Provide models of blended learning to support instruction and provide 21st century skills.
- Incorporate and target programs using culturally responsive instructional strategies to promote the acquisition of increasingly complex knowledge and skills in a social climate that fosters collaboration and positive interactions among culturally and linguistically diverse students.

The RPS Programs for the Gifted & Talented offers several options at the high school level that provide challenge and is designed to emphasize the importance of pairing services with student needs with flexible entry points. The goal is to provide opportunities for students to experience challenges that promote continuous academic growth in a nurturing environment. The opportunities provide challenging coursework, as well as unique programs, such as: honors, Advanced Placement, and International Baccalaureate (TJHS only) courses. RPS also offers an Early College Academy in partnership with JSRCC and facilitates the process for students to apply to Summer Residential Governor's Academies.

Student Activities & Eligibility

VHSL Eligibility

Richmond Public Schools is a member of the Virginia High School League, Inc. (VHSL), providing a broad program of interscholastic athletics for students eligible; accordingly, student athletes are subject to the additional academic and student conduct requirements set forth below for students participating in VHSL interscholastic athletic competition.

To be eligible to participate in the school athletic program, a student must be a bona fide student in good standing of the school they represent. A student's academic and behavioral performance is considered in determining whether that student is in good standing in their home school (VHSL 28A-2-1, 28A-2-3).

1. A "regular" student is considered a full-time student who is in regular attendance and is carrying a schedule of subjects which, if successfully completed, will render him/her scholastically eligible for League participation the ensuing semester.
2. Any student who is under penalty of suspension, or whose character or conduct is such as to reflect discredit upon his/her school, is not considered in good standing.

Rising Ninth Graders

All rising ninth graders who otherwise meet the qualifications for participation in VHSL activities will be deemed eligible to participate in VHSL activities for the upcoming school year.

Rising 10th, 11th and 12th Graders

All rising 10th, 11th, and 12th graders who otherwise meet the qualifications for participation in VHSL activities will be deemed eligible to participate in VHSL activities for the first semester of the upcoming school year if:

1. The student's cumulative grade point average at the conclusion of the preceding school year is 2.0 or greater; or
2. The student's most recent semester grade point average was 2.0 or greater.

For eligibility in subsequent semesters, students must achieve:

1. A cumulative grade point average of 2.0 or greater for the preceding school year; or
2. A semester grade point average of 2.0 or greater for the preceding semester to retain eligibility.