



LCS High School

PROGRAM OF STUDIES

2022-23

Every Child, By Name and By Need, to Graduation.

A TRADITION OF EXCELLENCE FOR ALL



LYNCHBURG CITY SCHOOLS

School Board Approved: 1/25/22

Dear Lynchburg City Schools Students and Parents:

Our mission in Lynchburg City Schools (LCS) is Every Child by Name and by Need, to Graduation. We are committed to helping every student reach his or her full potential by offering courses and programs that provide choice allowing them full access to future post-secondary opportunities.

The High School Program of Studies provides academic information that helps plan the course of study for each student. The information ranges from course selection options at the different academic levels, academic and post-secondary career planning, specialized LCS programs such as Early College, Central Virginia Governor's School, National Collegiate Athletic Association (NCAA) eligibility requirements, and the STEM Academy. Virginia Standards of Learning (SOL) information is included as well as graduation requirements, promotion and retention guidelines, and grade point average calculation criteria. Please work collaboratively with your school counselor to develop an academic plan for graduation and career development.

Some of the changes in the 2022-23 Program of Studies include the opportunity for seniors to enroll in the CTE Academy at CVCC. Additionally, course sequencing for Early College 11th and 12th grade students changed in English and Dual Enrollment math taught at the high schools now includes Pre-Calculus I and Pre-Calculus II.

Through these course offerings and our partnership with families, each student will be on the path to achieve future hopes and dreams.

Sincerely,

Crystal M. Edwards, Ed.D.
Superintendent

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I. GENERAL INFORMATION

Grading Scale

The following grading scale is used in grade levels 9-12 for all students. However, for Grade Point Average (GPA) calculation purposes, the ten-point scale for the grade (not considering plus and minus) is used.

A+ 99-100	B+ 88-89	C+ 78-79	D+ 68-69	F 0-59
A 93-98	B 83-87	C 73-77	D 63-67	
A- 90-92	B- 80-82	C- 70-72	D- 60-62	

Differences between Grade Level, Advanced, Advanced Placement, and Dual-Enrollment Courses – Courses are offered at different levels of difficulty beyond the grade level content in order to provide students opportunities for challenging their learning and growing at a more rapid pace. The following provide general differences between the course types. In some cases, additional information is provided in the specific course descriptions:

Grade Level or Regular Course – Course content is at the level of rigor of the Standards of Learning or the defined curriculum (for courses that are not included in the Virginia Standards of Learning). More individualized support is often provided.

Advanced Course – Course content includes the rigor of SOLs, or other standards while also requiring additional content and deeper application of the content. Assignments may include additional work that may also require more self-direction by the student.

Advanced Placement Course – Course content is rapidly paced with additional depth that can require student research and analysis on independent assignments. Lessons are often more complex, abstract, and open-ended than lessons in other courses. The course content aligns with the prescribed content by the College Board, which develops and oversees Advanced Placement curriculum.

Dual-Enrollment Course – Dual-enrollment courses align with college course curriculum for local colleges and universities.

Grade Point Average (GPA) Calculations and Class Rank

The Grade Point Average (GPA) calculation is a way to quantify the overall academic achievement of a student in a single number. The GPA calculation is used for ranking graduating students and determining if the student achieves Summa Cum Laude honors. The GPA is often requested on applications for awards, recognitions, for certain memberships or positions, and on college applications. This value is determined by the grades a student earns and by the level of difficulty of the courses taken.

In the Lynchburg City Schools, there are three levels of courses, and each allocates a different number of quality points for a given grade. For most classes, an “A” is worth 4 points, a “B” is worth 3 points, a “C” is worth 2 points, a “D” is worth 1 point, and an “F” is worth zero points. If a student takes an advanced level course, an additional 0.5 points is added to any grade earned above an “F”. If a student takes an Advanced Placement (AP) course and AP exam (or identified Dual Enrollment courses or CVGS courses), an additional full point is added to any grade earned above an “F”. For GPA purposes, the + and - of a grade letter do not factor in.

Quality Points Per Full Year Credit

Advanced Placement, CVGS, and Dual Enrollment Courses in Core Content Areas	Advanced Courses and Specified Dual Enrollment Courses	All Other Courses
A – 5	A – 4.5	A – 4
B – 4	B – 3.5	B – 3
C – 3	C – 2.5	C – 2
D – 2	D – 1.5	D – 1
F – 0	F – 0	F – 0

The GPA for a year is calculated by averaging the quality points for courses taken that year and dividing that by the number of courses taken that year. The cumulative GPA is calculated by averaging the quality points for high school courses taken for that year and all prior years (including high school level courses that a student may have taken in middle school and in approved summer courses) and dividing that by the total number of those courses.

Students are ranked based on their overall earned GPA. Students are considered for the distinction of Summa Cum Laude, based on their cumulative GPA. Summa Cum Laude is considered the highest level of academic performance and this distinction will be noted on the academic transcript. The thresholds for Summa Cum Laude are noted below for the end of each grade level:

- 9th grade – 4.3
- 10th grade – 4.3
- 11th grade – 4.4
- 12th grade – 4.5 or higher

Advanced Placement (AP) Courses Offered Through LCS

As mentioned previously, due to the rigor and workload, all of these AP courses are weighted at 5.0 quality points for an “A” (with completion of the AP exam). All students completing Advanced Placement (AP) courses must take the associated AP exams in May. **If a student is unable to participate fully in the AP exam for a course, that course will be recognized on the student’s transcript as an advanced level course (weighted at 4.5 rather than 5.0 quality points) and the student must sit for the corresponding course final exam.** In the case of extreme extenuating circumstances, appeals to this practice may be submitted to the Director of Curriculum and Instruction. Any AP course must be taken through an instructor at the high school unless approved by the principal in writing.

The College Board sets AP testing dates one year in advance. Any AP student not testing on those pre-determined dates will be charged a late/unused test fee of up to \$45 unless he/she cannot test due to extreme circumstances beyond his/her control. There is a \$40 fee for taking each AP exam. Reduced fees are available due to family financial needs.

- Advanced Placement Language/Composition
- Advanced Placement Literature
- Advanced Placement American History
- Advanced Placement World History
- Advanced Placement European History
- Advanced Placement Micro and Macro Economics
- Advanced Placement Calculus AB
- Advanced Placement Calculus BC
- Advanced Placement Statistics
- Advanced Placement Latin (Vergil)
- Advanced Placement Spanish Language V
- Advanced Placement French Language V
- Advanced Placement German Language V
- Advanced Placement American Government
- Advanced Placement Comparative Government
- Advanced Placement Human Geography
- Advanced Placement Chemistry
- Advanced Placement Physics I & II
- Advanced Placement Biology
- Advanced Placement Art History
- Advanced Placement Portfolio Art
- Advanced Placement Music Theory
- Advanced Placement Psychology
- Advanced Placement Computer Science
- Advanced Placement Environmental Science
- Advanced Placement Seminar
- Advanced Placement Research
- Advanced Placement African American Studies
- Other courses as noted in the current Virtual Virginia On-Line Program brochure

Dual Enrollment Courses (Overview)

The Dual Enrollment (DE) program with Central Virginia Community College (CVCC) provides highly motivated students the opportunity to experience college-level work while in high school and receive both high school and college credit. Students are encouraged to consider this opportunity while also being aware that the demands of these courses are at the college level.

Dual enrollment courses in the core content areas are weighted at 5.0 quality points. Governor’s School courses are Dual Enrollment and count as 5.0 weighted courses. The College Success Skills course is weighted at 4.0 quality points.

Students enrolled in these courses may earn college credit from CVCC and/or University of Lynchburg by fulfilling course requirements. Regardless of the course grade, the course will appear on the student’s permanent record at CVCC or University of Lynchburg. If a student receives a D or F, it does have the potential to affect college financial aid eligibility and/or guaranteed admissions agreements with four-year colleges and universities. Students enrolled in DE courses need to abide by the policies and procedures of CVCC and University of Lynchburg as well as LCS. Students must qualify for enrollment for CVCC courses by taking, and passing the Virginia Placement Test (VPT) prior to enrollment. Additional application and eligibility information is available. Please see your counselor for more information.

The costs for tuition and the required textbooks for dual enrollment courses taught at the high school, Central Virginia Governor’s School, and the Governor’s STEM Academy will remain the responsibility of the school division. However, there is a \$75 fee for a course withdrawal if the CVCC drop date has passed. This payment is due to the school division within two weeks of dropping the class. Checks should be made payable to LCS and sent to the curriculum and instruction department. Please be aware that timelines for withdrawing from a course are different for DE courses. See Section III for more information on dual enrollment options.

The Early College Program is an opportunity for students to earn a high school diploma and an Associate’s Degree at the same time. Eligible students are selected by a committee at CVCC. The cost of the Early College Program books is covered by LCS but the tuition is the responsibility of each family. There are some opportunities for financial assistance to families with financial hardship. Counselors have the financial hardship forms.

Courses offered by University of Lynchburg may require costs of books and tuition to be covered by the family. Any student seeking to take courses on the CVCC campus on their own and not a part of any LCS approved program must seek prior approval and all costs for books and tuition are the responsibility of the family.

Advanced Courses Offered Through LCS

The following courses are at an advanced level and are weighted at 4.5 quality points for an "A."

- Advanced World Literature & Composition I
- Advanced World Literature & Composition II
- Advanced American & World Literature & Composition
- Advanced English Literature & Composition
- Advanced Composition (Dual Enrollment)*
- Advanced Algebra in the 8th grade
- Advanced Earth Science in the 8th grade
- Advanced Algebra II
- Advanced Geometry with Trigonometry
- Advanced Math Analysis
- Advanced Pre-Calculus I/Advanced Pre-Calculus II (Dual Enrollment)*
- Advanced Chemistry
- Advanced Biology
- Advanced Physics
- Advanced College Biology (Dual Enrollment)*
- Advanced World History & Geography I (to 1500 AD)
- Advanced World History & Geography II (1500 AD to Present)
- Advanced World Geography
- Advanced American History
- Advanced U.S. Government
- Advanced French IV
- Advanced Spanish IV
- Advanced German IV
- Advanced Latin Literature
- Advanced Studio Art
- Advanced Portfolio Art
- Computer Systems Technology II/PC Repair I (Dual Enrollment)
- Robotic Work/Cell Technology (Dual Enrollment)
- Culinary Arts (Dual Enrollment)
- Drafting II (Dual Enrollment)
- Human Diversity in American Schools (Dual Enrollment)
- Foundations of Education & The Teaching Profession (Dual Enrollment)
- Elementary Latin I with Medical Terminology (Dual Enrollment)
- Elementary Latin II with Medical Terminology (Dual Enrollment)

Online Courses

LCS Virtual Academy

Lynchburg City Schools' students have the opportunity to take blended learning courses through the LCS Virtual Academy in partnership with Virtual Virginia, a program of the Virginia Department of Education, and Edgenuity, an online curriculum aligned to the Virginia Standards of Learning.

Students may utilize components of Virtual Virginia materials while studying LCS teacher created courses. Additionally, The Virtual Virginia program offers online Advanced Placement (AP®), world language, core academic, and elective courses to students that may not be available in group settings in the Virtual Academy. Students may participate in these online learning courses if they meet all prerequisite and eligibility criteria, including prior approval by counselors and principals.

An additional component available to students is the Edgenuity curriculum aligned to the Virginia Department of Education Standards. It may be used to supplement the instruction, to be fully implemented as a virtual classroom for smaller courses, or as a means of reinforcement or enrichment, as well as on-line lab opportunities. Edgenuity provides data-driven, personalized instruction, tutoring help, and support so students can catch up, keep up, and get ahead.

Students who are most successful in online courses are those who can work independently with minimal supervision, have good time management skills, and possess a strong desire to learn. A successful online student can stay on task and maintain a regular schedule of logging on and keeping up with the readings, course assignments, homework, and other expectations. Interested students should contact their counselor for more information.

If students are enrolled in AP Virtual Virginia courses, then students must take the associated exams in the spring. Virtual Virginia courses are teacher directed and not self-paced. These virtual AP courses are graded and weighted at a 5.0 for an A (just as other AP courses are), and they are equivalent in rigor and workload to on-site AP courses.

Only students who have completed any and all prerequisites listed for the course in the Lynchburg City Schools High School Program of Studies will be scheduled into a Virtual Virginia course.

1. Students will be scheduled into Virtual Virginia courses (particularly AP courses) for which a section of that same course is not being offered in the high school that year or if there are unavoidable scheduling conflicts. Exceptions can be made by the principal for students with extenuating circumstances.
2. Students who enroll in Virtual Virginia courses and wish to withdraw after 21 calendar days may only do so according to the Virtual Virginia guidelines. Students may request to enroll in a Virtual Virginia course no later than June 30th.

3. The counselor at each school will provide the parents/guardians of students being scheduled into a virtual course with all the information noted in this section. In addition, both the student and the parent/guardian will be required to sign a form indicating that they understand the rigor of the courses, the nature of the instruction, the need for the student to be self-motivated and self-monitoring, and the specifics of the “drop/withdrawal” period. Please note that a “D,” indicating distance learning, will be at the end of each of the Virtual Virginia course numbers. In some cases this will be the only difference between the on-site course number and the Virtual Virginia course number.
4. Students who find they are more suited for in-person instruction and cannot maintain attendance, engagement, and successful grades will be invited to return to their base school to complete the remainder of the school year and forego their opportunity to remain at the Virtual Academy.

Online Courses at Zoned Schools

Virtual Virginia Courses - <http://www.virtualvirginia.org>

Lynchburg City Schools’ students have the opportunity to take courses through Virtual Virginia, a program of the Virginia Department of Education. The Virtual Virginia program offers online Advanced Placement (AP®), world language, core academic, and elective courses to students. **Students may participate in these online learning courses if they meet all prerequisite and eligibility criteria, including prior approval by the high school counselor and principal.**

Students who are most successful in online courses are those who can work independently with minimal supervision, have good time management skills, and possess a strong desire to learn. A successful online student can stay on task and maintain a regular schedule of logging on and keeping up with the readings, course assignments, homework, and other expectations. Interested students should contact their counselor for more information.

If students are enrolled in AP Virtual Virginia courses, then students must take the associated exams in the spring. Virtual Virginia courses are teacher directed and not self-paced. These virtual AP courses are graded and weighted at a 5.0 for an A (just as other AP courses are), and they are equivalent in rigor and workload to on-site AP courses.

Criteria for Participation

1. Typically, it is mostly juniors or seniors that choose to be scheduled into Virtual Virginia courses. Students below the junior grade level may enroll in a Virtual Virginia course, including AP courses, with written permission from the school counselor and principal, in consultation with the Director of Curriculum and Instruction. Permission for students below the junior grade level to take these courses usually only applies to students who have been vertically accelerated in specific content areas as a gifted service option or for students who have transferred in and have completed other prerequisite courses offered.
2. Only students who have completed any and all prerequisites listed for the course in the Lynchburg City Schools High School Program of Studies will be scheduled into a Virtual Virginia course.
3. Students will be scheduled into Virtual Virginia courses (particularly AP courses) for which a section of that same course is not being offered in the high school that year or if there are unavoidable scheduling conflicts. Exceptions can be made by the principal for students with extenuating circumstances.
4. Students will be scheduled into only one Virtual Virginia course during a period.
5. Students will be scheduled into Virtual AP courses during the seven defined periods during the regular school day.
6. Students will not be scheduled into any Virtual AP courses if it would cause them to then have more than seven courses in a given year.
7. Students who enroll in Virtual Virginia courses and wish to withdraw after 21 calendar days may only do so according to the Virtual Virginia guidelines. Students may request to enroll in a Virtual Virginia course no later than June 30th.

The counselor at each school will provide the parents/guardians of students being scheduled into a virtual course with all the information noted in this section. In addition, both the student and the parent/guardian will be required to sign a form indicating that they understand the rigor of the courses, the nature of the instruction, the need for the student to be self-motivated and self-monitoring, and the specifics of the “drop/withdrawal” period. Please note that a “D,” indicating distance learning, will be at the end of each of the Virtual Virginia course numbers. In some cases this will be the only difference between the on-site course number and the Virtual Virginia course number.

If you have any questions about non-weighted or advanced placement courses available through Virtual Virginia, please visit the Virtual Virginia website: <http://www.virtualvirginia.org>. For questions regarding eligibility requirements, please contact your counselor.

Edgenuity and Other Online Courses Through LCS

Lynchburg City Schools also offers courses through outside vendors, such as Edgenuity. Typically, there are courses taken to make up a credit or in a course for which enrollment is too low to be offered in LCS. Enrollment in such a course is only available with written permission of the principal.

Online Courses Outside of LCS

Any student wishing to take an online course outside of LCS for credit must gain prior written permission from the principal. Failure to obtain prior permission may result in the course not transferring into LCS. Courses should only be those found within this LCS Program of Studies. Any associated costs would be the responsibility of the student/family.

Summer Courses (Online)

Courses taken during the summer do not count toward the maximum course load during the fall and spring semesters. Any course taken during the summer that is online must be completed by the summer deadline as prescribed by the school division. The following online courses are planned to be offered through LCS for summer 2021. The counseling department can provide additional information on enrolling. Each course is available for a fee of \$225.

- Online Economics & Personal Finance (10-12th)
- Health/PE 9 Online

Other Courses

Independent Study Courses

Independent study courses provide an opportunity for conscientious and mature students to schedule a course which they otherwise would not be able to take. These courses are scheduled individually, and they require the participation of a certified instructor and the prior written approval of the principal. The student must complete all work and tests assigned. **All independent study courses are graded pass/fail.** The student will receive credit for the course, and the course will appear on the student's transcript, but the course will be graded Pass/Fail and will not count in the cumulative GPA.

Courses Offered Outside LCS

Any student wishing to take a course outside of LCS for credit must gain prior written permission from the principal unless it is offered through an approved program with LCS to which the student has already been admitted (e.g. Governor's School, Early College, and STEM Academy). Failure to obtain prior permission may result in the course not transferring into LCS. Courses should only be those found within this LCS Program of Studies. **Any associated cost would be the responsibility of the student/family.**

Withdrawal from a Course

All requests for a student to be withdrawn from a course shall be made in writing, signed by a parent/guardian, and turned in to the counselor by the end of the 5th school day of the course. Any course from which a student is withdrawn within that time period will not be recorded on the student's report card or transcript. In rare cases, extenuating circumstances may justify a withdrawal from a course after the 5th day. In such a case, the student's transcript will reflect the course and a grade of withdrawal passing (WP) or withdrawal failing (WF) for the course. These designations (WP and WF) are not considered in Grade Point Average calculations. A parent/guardian must file a written request for such consideration with the building principal, and that request must clearly indicate the extenuating circumstances to justify a withdrawal. If the request is to change the level of a course rather than withdraw from a course, that request must be made no later than five days after the first report card has been distributed. In some cases there may not be an alternative level to the same course. For additional procedures, please refer to Lynchburg City School Board Policies and Administrative Regulations IKC-RZ.

Course Load

Students in grades 9-11 must carry the equivalent of seven credit-bearing courses and may elect to carry another approved course in the eighth period. Approval of an additional elective course is based on the student's current standing and the course enrollment numbers. Students that do not choose to elect to carry another approved course in the eighth period will be enrolled in an enrichment or advisory period. All students in grade twelve (senior students) must carry the equivalent of four credit-bearing courses (athletes must carry five courses). Unless prior written permission by the principal is provided, senior students must also carry other approved courses or repeat courses in the other three periods. When scheduling courses that involve travel between different schools, students should be aware of the travel time and the fact that it may reduce the number of courses that could be taken. A senior desiring to carry more or less than seven credit-bearing courses must receive written permission to do so from the school's principal.

Promotion

According to Lynchburg City School Board Policies and Administrative Regulations *Policy IGBEZ Promotion and Retention* high school credit requirements for promotion are as follows. These credits indicated the cumulative amount that must be earned as that point in order to be promoted to the next grade level.

- 9th to 10th Grade (4 credits)
- 10th to 11th Grade (9 credits)
- 11th to 12th Grade (15 credits)

Verified Credit

A verified credit means the student has passed the state required Standards of Learning (SOL) test in addition to the course. Students shall not be required to take an end-of-course SOL test in an academic subject after they have earned the number of verified credits required for that academic content area for graduation, unless such test is necessary in order for the school to meet federal accountability requirements. Verified credits may be earned in the following courses:

English	Math	Science	Social Studies
Reading	Algebra I	Biology	World History I
Writing	Algebra II	Chemistry	World History II
	Geometry	Earth Science	VA & US History
			World Geography

Locally Awarded Verified Credit Option

A verified credit is received when a student passes a high school credit course and the associated Standards of Learning (SOL) end-of-course state test. A locally awarded verified credit is an option available for some students who pass a class but do not pass the associated SOL end-of-course test and do not have enough verified credits to graduate. Locally awarded verified credits apply only to the standard diploma for students who entered 9th grade for the first time prior to 2018-19. For students who entered 9th grade for the first time in 2018-19 or after, one locally awarded verified credit in any subject can be awarded and can count toward any diploma.

To be eligible to earn a local verified credit, a student must:

- pass the high school course but not pass the associated state SOL end-of-course test,
- score at least 375 on any administration of the SOL test having taken the test at least twice, and
- demonstrate achievement in the academic content through a local appeal process.

The appeal process in Lynchburg includes the following:

- A school-based panel will review grades of students eligible for a local verified credit. A local verified credit will be awarded if a student has achieved a final grade of "C" or better for the course.
- Students eligible for a local verified credit who receive a "D" in the course will receive a local verified credit if they receive a grade of "C" or higher on the exam.
- Student not meeting one of the above criteria may review course content and complete a cumulative assessment. Once they receive a passing score on the assessment, they are eligible for a locally verified credit.
- The school-based panel has final authority in determining whether to (a) award the verified credit, (b) deny the verified credit, or (c) suggest participation in a remedial program followed by retesting. Any appeals regarding locally awarded verified credits should be directed to the director of curriculum and instruction.

NOTE: Students with disabilities who qualify for credit accommodations may be awarded local verified credits in any subject area if they meet the criteria above.

Applied Studies Diploma

The Applied Studies Diploma is a diploma option available to students identified as having a disability who complete the requirements of their individualized education programs (IEPs) and meet certain requirements prescribed by the Board of Education pursuant to regulations, but do not meet the requirements for any named diploma.

Certificate of Program Completion

Students who have completed a prescribed course of study as defined by the local school board shall be awarded certificates by local school boards if the students do not qualify for diplomas. This is NOT a high school diploma.

Standard Diploma Course Requirements for Students Entering Ninth Grade for the First Time in 2018-19 and Beyond (8 VAC 20-131-51)

Subject Area	Standard Credits	Verified Credits	Specifications
English	4	2	All students must take the SOL Reading and Writing (or equivalent) tests in high school.
Mathematics	3	1	<p>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 board to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit.</p> <p>All students must take a SOL math test in high school.</p>
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. 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> <p>All students must take the SOL Biology test in high school.</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 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 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> <p>All students must take a SOL history test in high school.</p>
Health & Physical Ed.	2	0	N/A
World Language, Fine Arts or Career Tech	2	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 course credit.
Economics & Personal Finance	1	0	N/A
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	N/A



Additional Requirements for Graduation

- **Advanced Placement, Honors, Dual Enrollment, or Career and Technical Education Credential** - In accordance with the Standards of Quality, students shall either (i) complete an Advanced Placement, honors, or dual enrollment 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 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.
- **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. The LCS Economics and Personal Finance course has an online component that fulfills this requirement.
- **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.
- If taken, the Algebra, Functions, and Data Analysis course must be taken before Algebra II.
- **See your counselor for specifics on Substitute Tests, Locally Awarded Verified Credits and Credit Accommodations in lieu of passing SOL scores.**

Advanced Studies Diploma Course Requirements for Students Entering Ninth Grade for the First Time in 2018-19 and Beyond (8 VAC 20-131-51)

Subject Area	Standard Credits	Verified Credits	Specifications
English	4	2	All students must take the SOL Reading and Writing (or equivalent) test in high school.
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 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. All students must take a SOL math test in high school.
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. Per the Standards of Quality, a computer science course credit earned by students may be considered a science course credit. All students must take the SOL Biology test in high school.
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. All students must take a SOL history test in high school.
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 Ed	2	0	N/A
Fine Arts or Career Tech	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	N/A
Electives	3	0	Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.
Total Credits	26	5	N/A

Additional Requirements for Graduation

- **Advanced Placement, Honors, Dual Enrollment, or Career and Technical Education Credential** - In accordance with the Standards of Quality, students shall either (i) complete an Advanced Placement, honors, or dual enrollment 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. The LCS Economics and Personal Finance course has an online component that fulfills this requirement.
- **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.
- If taken, the Algebra, Functions, and Data Analysis course must be taken before Algebra II.
- See your counselor for specifics on Substitute Tests, Locally Awarded Verified Credits and Credit Accommodations in lieu of passing SOL scores.



Awards for Exemplary Performance

Diploma Seals

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" beginning with the ninth-grade class of 2006-2007 and beyond.

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.

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 Advanced Mathematics & Technology Seal

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, or 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:

- Satisfy the requirement to earn a Modified Standard Diploma, a Standard Diploma or an Advanced Studies Diploma
- Complete Virginia & United States History and Virginia & United States Government courses with a grade of "B" or higher
- Complete 50 hours of voluntary participation in community service or extracurricular activities, such as volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate; participating in Boy Scouts, Girl Scouts or similar youth organizations; participating in Junior Reserve Officer Training Corps (JROTC); participating in political campaigns, government internships, Boys State, Girls State or Model General Assembly; and 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:

- Pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level
- 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:

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

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 and satisfy all Math and Science requirements for the Advanced Studies diploma with a "B" average or better in all course work, and

- successfully complete a 50 hour or more work-based learning opportunity in a STEM area, and
- satisfy all requirements for a Career and Technical Education concentration. A concentration is a coherent sequence of two or more state-approved courses as identified in the course listing within the [CTE 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

Advanced Studies Diploma with Lynchburg Honors Seal (All Students)

Students who wish to earn the Advanced Studies Diploma with Lynchburg Honors Seal must meet all the course and verified credit requirements for the Advanced Studies Diploma. In addition, they must meet the following additional criteria:

1. English must include a minimum of three yearlong courses (the equivalent of six semesters) in courses designed for students with above average skills in reading and writing. Two yearlong courses (the equivalent of four semesters) must be taken during the junior and senior years. Dual enrollment courses are on a semester basis.
2. The four math credits must include Algebra I and three credits above the level of Algebra I. The minimum must include progress through trigonometry/functions.
3. Science credits must include Biology 1 and three course choices from Earth Science, Earth Science II: Astronomy, Biology I, Biology II: Anatomy and Physiology, Biology II: Ecology, Chemistry, Physics, AP Chemistry, AP Physics, AP Biology, AP Environmental, and Dual Enrollment Biology, Dual Enrollment Physics, and Dual Enrollment Chemistry.
4. Social studies credits must include choices from Advanced World History and Geography I (to 1500 AD), Advanced World History and Geography II (1500 AD to Present) or AP World History, Advanced World Geography, AP Human Geography, Advanced American History, AP American History, Advanced U.S. Government or AP Government, AP European History, and AP Microeconomics and Macroeconomics, AP Psychology, Dual Enrollment Political Science and Dual Enrollment US History.

Students must take and pass at least two advanced placement or dual enrollment courses (or one of each) in different content areas during the senior year. These courses may be in English, Math, Science, or Social Studies.

II. COURSE OFFERINGS

The following pages contain the school division's graduation requirements and a listing of all courses in the high school curriculum. This listing contains course titles, course numbers, grade(s) in which students may select a particular course, whether it is a year or semester course, course credit value, prerequisites, and a brief description of each course. Except for several career-technical courses and courses for which there is not sufficient enrollment, most courses are available in both schools. All students who have successfully completed high school courses in middle school receive credit toward graduation as well as credit toward satisfying particular subject area requirements. The courses most typically falling into this category in Lynchburg City Schools are advanced Algebra I, advanced earth science, and the world languages. These courses, as well as any other traditional high school courses that may be taken for credit in middle school, are included in a student's high school Grade Point Average (GPA). For any questions about prerequisites for a course, please see an assigned school counselor. For any questions about prerequisites for a course, please see an assigned school counselor. Additional procedures and practices may be determined at the individual high school. Counselors will make every attempt to honor course requests. There are instances that, due to low enrollment, some courses are not offered or sections of those courses might be collapsed. Certain courses may not be offered every semester or every year. In order to fulfill our mission of "Every Student by Name and By Need," students may utilize components of Virtual Virginia, Edgenuity, and other approved MOPS (Multi Division Online Provider Program) to complete their schedules. These courses may include Advanced Placement (AP®), world language, core academic, and elective courses to students that may not be available in group settings. Students may participate in these courses if courses meet VDOE requirements, they meet all prerequisite and eligibility criteria, including prior approval by counselors and principals.

Academic Support

(These courses can be taken repeatedly for elective credit)

- 7211A/7211B SOL Review – English
- 7212A/7212B SOL Review – Writing
- 7221A/7221B SOL Review – Math
- 7231A/7231B SOL Review – Science
- 7241A/7241B SOL Review – Soc. Stud.
- 1930A/1930B ELL Support
- 1192Y Accelerating – Reading I
- 1130Y Accelerating – Reading II
- 7222Y Math Lab
- 7660Y Foundational Study Skills
- 7620Y Study Skills for Success in Classes

Architecture & Construction

- 8601Y Carpentry I
- 8602Y Carpentry II
- 8603Y Carpentry III
- 6740Y Drafting I
- 6750Y Drafting II
- 6760Y Drafting III
- 8427Y Drafting IV

Art

- 5510Y Art I
- 5520Y Art II: Drawing and Painting
- 5530Y Art II: Three Dimensional
- 5560Y Photography
- 5570Y Digital Photography & Printmaking
- 5580A/5580B Commercial Art
- 5517Y Advanced Studio Art
- 5527Y Advanced Portfolio Art
- 5519Y Advanced Placement (AP) Portfolio Art
- 5529Y Advanced Placement (AP) Art History

Business Management and Administration

- 6160Y Accounting
- 6170Y Advanced Accounting
- 6150Y Business Law
- 6140Y Business Management
- 6340Y Computer Information Systems
- 6260Y Design, Multimedia & Web Technologies
- 3740Y Digital Applications
- 6640Y Programming
- 6641Y Advanced Programming

Computer Science

- 3730Y Foundations of Computer Science
- 3760Y Advanced Placement (AP) Computer Science Principles
- 3729Y Advanced Placement (AP) Computer Science

Drama/Theatre Arts

- 5610Y Introduction to Theatre
- 5670Y Introduction to Film Studies
- 5611Y Musical Theatre Dance
- 5620Y Acting I
- 5630Y Acting II
- 5622A Playwriting
- 5623B Directing
- 5640Y Applied Technical Theatre I
- 5641A/5641B Technical Theatre I Design
- 5642B Technical Theatre I Production
- 5650Y Applied Technical Theatre II
- 5651Y Technical Theatre II

Education & Training

- 6550Y Teachers for Tomorrow I
- 6551Y Teachers for Tomorrow II
- 6339AD Human Diversity in American Schools (DE)
- 6339BD Foundations of Education and the Teaching Profession (DE)

English/Speech

- 1190Y World Literature & Composition I
- 1297Y Advanced World Literature & Composition
- 1100Y World Literature & Composition II
- 1207Y Advanced World Literature & Composition II
- 1110Y American Lit & Comp
- 1217Y Advanced American & World Literature & Composition
- 1319Y Advanced Placement (AP) Language & Composition
- 1120Y English Literature & Composition

- 1227Y Advanced English Literature & Composition
- 1328A/1328B Advanced College Comp (DE)
- 1329Y Advanced Placement (AP) Lit & Comp
- 1310Y Creative Writing
- 1730Y Exploring Language & Culture through Hip Hop
- 1732Y Exploring Language & Culture through Hip Hop II
- 1429Y Advanced Placement (AP) Seminar
- 1439Y Advanced Placement (AP) Research
- 4749Y Advanced Placement (AP) African American Studies
- 5850A/5850B Public Speaking I
- 5860A/5860B Public Speaking II

Finance

- 6151Y Economics & Personal Finance
- 6151YS Economics & Personal Finance (summer online)
- 6151YC Economics and Personal Finance – Longwood Univ.
- 4439A/4449B AP Microeconomics & AP Macroeconomics

Health

- 5250A/5250 B Health & Family Living
- 5240A/5240B Driver's Education & Personal Health & Social Development

Health Sciences

- 8302Y Introduction to Health and Medical Science
- 6810Y Dental Careers I
- 6820Y Dental Careers II
- 8360Y Nurse Aide I
- 8362Y Nurse Aide II
- 5260Y Sports Medicine I
- 5261Y Sports Medicine II

Hospitality & Tourism

- 6444Y Introduction to Culinary Arts
- 6441Y Culinary Arts I
- 6442Y Culinary Arts II
- 6443Y Culinary Arts Specialization

Human Services

- 8340Y Cosmetology I
- 8350Y Cosmetology II

Information Technology

- 8540Y Computer Systems Tech I
- 8550Y Computer Systems Tech II
- 8628Y Cybersecurity Technology Systems
- 8629Y Advanced Cybersecurity Technology Systems

Law, Public Safety, Corrections & Security

- 8702Y Criminal Justice I
- 8703Y Criminal Justice II
- 8337Y Emergency Medical Telecommunications

Leadership

- 7770Y Leadership Training

Manufacturing

- 8450Y Precision Machine Tech I
- 8460Y Precision Machine Tech II/Intro to Machine Tools

Marketing

- 6120Y Entrepreneurship
- 6951Y Marketing

- 6960Y Advanced Marketing
- 6115Y Principles of Business & Marketing
- 6942Y Sports & Entertainment Marketing

Mathematics

- 2090Y Algebra I, Part 1
- 2100Y Algebra I, Part 2
- 2290Y Algebra I
- 2387Y Advanced Algebra I (Grade 8)
- 2110Y Algebra, Functions & Data Analysis
- 2200Y Algebra II
- 2397Y Advanced Algebra II
- 2290AP/2397BP Algebra I/Advanced Algebra II (PETAL)
- 2210Y Geometry
- 2307Y Advanced Geometry with Trigonometry
- 2220Y Trigonometry/Functions
- 2317Y Advanced Math Analysis
- 2328AC/2338BC Advanced College Pre-Calc. I/Advanced Pre-Calc. II
- 2429Y Advanced Placement (AP) Statistics
- 2329Y Advanced Placement (AP) Calculus (AB)
- 2339Y Advanced Placement (AP) Calculus (BC)

Music

- 5340Y Concert Band I
- 5350Y Symphonic Band I
- 5370Y Wind Ensemble
- 5380Y Percussion Techniques
- 5460Y Chorus I
- 5470Y Chorus II - Concert Choir
- 5480Y Chorus III
- 5410Y Orchestra I
- 5420Y Orchestra II
- 5430Y Beginning Midi & Computer Applications in Music
- 5439Y Advanced Placement (AP) Music Theory

Newspaper & Yearbook

- 7410Y Newspaper
- 7420Y Yearbook

Physical Education

- 5991Y PE 9 and Health & Family Living 9
- 5901Y PE 10 and Driver Education
- 5190A/5190B Physical Ed 9
- 5191A/5191B Physical Ed 10
- 5151A/5151B Weight Training I
- 5152A/5152B Weight Training II
- 5161Y Fitness for Life
- 5931YS Foundations of Personal Fitness and Wellness (online)

Reserve Officer Training Corps (ROTC)

- 5750Y Air Force JROTC I
- 5760Y Air Force JROTC II
- 5770Y Air Force JROTC III
- 5780Y Air Force JROTC IV
- 5710Y Marine Corps JROTC I
- 5720Y Marine Corps JROTC II
- 5730Y Marine Corps JROTC III
- 5740Y Marine Corps JROTC IV

Science

- 3387Y Advanced Earth Science (Grade 8)
- 3230Y Environmental Science
- 3200Y Biology I
- 3397Y Advanced Biology I
- 3210Y Biology II Anatomy & Phys.
- 3211Y Biology II Ecology
- 3292Y Earth Science II: Astronomy
- 3290Y Earth Science
- 3220Y Chemistry
- 3307Y Advanced Chemistry
- 3328AC/3328BC Advanced College Biology (DE)
- 3317Y Advanced Physics
- 3449Y Advanced Placement (AP) Biology
- 3459Y Advanced Placement (AP) Chemistry
- 3469Y Advanced Placement (AP) Physics I
- 3479Y Advanced Placement (AP) Physics II
- 3429Y Advanced Placement (AP) Environmental Science

Social Studies

- 4690Y World Geography
- 4367Y Advanced World Geography
- 4290Y World History & Geography I
- 4397Y Advanced World History & Geography I
- 4200Y World History & Geography II
- 4307Y Advanced World History & Geography II
- 4469Y Advanced Placement (AP) World History
- 4210Y American History
- 4317Y Advanced American History
- 4419Y Advanced Placement (AP) American History
- 4220Y U.S. Government
- 4327Y Advanced U.S. Government
- 4429A/4429B Advanced Placement (AP) American Government Politics & Comparative Government Politics
- 4740Y African American History
- 4459Y Advanced Placement (AP) Human Geography
- 4470Y Psychology
- 4479Y Advanced Placement (AP) Psychology

Special Programs

- Central VA Governor's School- Courses on Pages 64-66
- Governor's STEM Academy- Courses on Pages 61-63
- Special Education- Courses on Page 59

Student Intern Programs

- 7130Y Elementary/Middle Student Intern
- 7131Y General Student Intern
- 7110A/7110B Teacher/Office Intern

Technology Education & Engineering

- 8492Y Engineering Exploration
- 8491Y Engineering Studies
- 8403Y Technology Foundations
- 6650Y Technology Transfer
-
- 8415Y Communications Systems
- 7450Y Video & Media Technology

Transportation, Distribution & Logistics

- 8131Y Automotive Technology I
- 8142Y Automotive Technology II
- 8153Y Automotive Technology III

World Languages

- 1590Y French I
- 1500Y French II
- 1510Y French III
- 1527Y Advanced French IV
- 1529Y Advanced Placement (AP) French V
- 1690Y German I
- 1600Y German II
- 1610Y German III
- 1627Y Advanced. German IV
- 1629Y Advanced Placement (AP) German V
- 1790Y Latin I
- 1700Y Latin II
- 1710Y Latin III
- 1737Y Advanced Latin Literature
- 1729Y Advanced Placement (AP) Latin (Vergil)
- 1749AD Elementary Latin I with Medical Terminology (DE)
- 1749BD Elementary Latin II with Medical Terminology (DE)
- 1890Y Spanish I
- 1800Y Spanish II
- 1810Y Spanish III
- 1827Y Advanced Spanish IV
- 1829Y Advanced Placement (AP) Spanish

ENGLISH

The Regulations for Establishing Standards for Accrediting Public Schools in Virginia specifies that students must earn 4 standard units of credit in English in order to earn any type of high school diploma. Students should earn 1 credit in English per year in grades 9-12. Any requests to enroll in any number of English courses for new credit other than one per year must be approved by the principal. Students are required to take a SOL test in writing (Grade 10) and reading (Grade 11).

WORLD LITERATURE & COMPOSITION I

Course: 1190Y

Grade 9. Full Credit Year Course.

These classes emphasize reading comprehension, vocabulary, study skills, oral communication, and composition skills, including grammar, usage, and mechanics, through the study of world literature. Students will read widely and think, speak, and write about what they have read. Emphasis is on enabling students to develop strategies for future academic success.

ADVANCED WORLD LITERATURE & COMPOSITION I

Course: 1297Y

Grade 9. Full Credit Year Course.

Designed for students in the advanced diploma program, these classes emphasize reading, thinking, oral communication, and composition skills, including grammar, usage, and mechanics, through the study of world literature. Students must read and write extensively and participate in in-depth literature study. Vocabulary development, study and test-taking skills, and organization skills necessary to meet the demands of the advanced program are integral parts of these classes.

WORLD LITERATURE & COMPOSITION II

Course: 1100Y

Grade 10. Full Credit Year Course.

With world literature as the vehicle, these classes will follow an integrated approach to language arts, combining reading, grammar, and vocabulary study with an emphasis on writing. Experiences in the classes will reflect the needs of literate adults in the community and stress the processes for writing, speaking, and reading effectively and correctly. Students will take the End-of-Course Standards of Learning (SOL) Writing test. A passing score or equivalent will verify this English credit to meet graduation requirements.

ADVANCED WORLD LITERATURE & COMPOSITION II

Course: 1207Y

Grade 10. Full Credit Year Course.

First semester emphasizes writing instruction through a thematic approach to expository and creative composition genres. Through the study of models and extensive opportunities to write, students improve their writing styles and ability to write different types of compositions. Literature study is used as inspiration for many writing activities. During second semester while continuing to improve writing skills, students engage in an in-depth study of literary works organized in thematic units. Vocabulary development, grammar, usage, and mechanics are stressed in both semesters. Students will take the End-of-Course Standards of Learning (SOL) Writing test. A passing score or equivalent will verify this English credit to meet graduation requirements.

AMERICAN LITERATURE & COMPOSITION

Course: 1110Y

Grade 11. Full Credit Year Course.

These classes combine a study of the development of American literature with instruction in communication skills. Vocabulary study, oral reporting, and frequent writing assignments are based on representative selections from each literary period. Students will take the End-of-Course Standards of Learning (SOL) Reading test. A passing score or equivalent will verify this English credit to meet graduation requirements.

ADVANCED AMERICAN & WORLD LITERATURE & COMPOSITION

Course: 1217Y

Grade 11. Full Credit Year Course.

During the first semester students analyze pieces of literature considered landmarks of American literature while in the second semester the emphasis shifts to landmarks in world literature (e.g. Arthur Miller's *The Crucible*, F. Scott Fitzgerald's *The Great Gatsby*, Mark Twain's *Huckleberry Finn*, and excerpts from Native American, African American authors as well as modern authors and poets). In both semesters students do independent research, read and write extensively, and make oral reports on what they have read and researched. Students will take the End-of-Course Standards of Learning (SOL) Reading test. A passing score or equivalent will verify this English credit to meet graduation requirements.



ADVANCED PLACEMENT (AP) LANGUAGE & COMPOSITION**Course: 1319Y****Grade 11. Full Credit Year Course.**

These classes prepare students to take the College Entrance Examination Board Advanced Placement Language and Composition Test. Emphases of the classes are rhetoric and the structure of language as they relate to effective composition. Students will also cover the 11th grade Virginia Standards of Learning in preparation for the required End-of-Course Standards of Learning tests in reading administered near the end of the school year. Students will take the End-of-Course Standards of Learning (SOL) Reading test. A passing score or equivalent will verify this English credit to meet graduation requirements. Students enrolling should be competent in composition and able to work independently on a variety of writing assignments and projects. All students are required to take the AP examination in May.

ENGLISH LITERATURE & COMPOSITION**Course: 1120Y****Grade 12. Full Credit Year Course.**

These classes combine a study of English literature, culture, and language development with instruction in communication skills. Instruction in writing a variety of multi-paragraph themes is provided along with the usual activities involving vocabulary study, sentence structure, paragraph development, oral reporting, and research.

ADVANCED ENGLISH LITERATURE & COMPOSITION**Course: 1227Y****Grade 12. Full Credit Year Course.**

These classes are an in-depth study of major authors in all literary periods of English literature. Instruction in formal organizational patterns in writing and advanced research skills is integral. Students must do independent research, parallel reading, and oral reporting as well as frequent writing assignments and a research paper. The emphasis during second semester is on error-free writing.

Grades 11-12. One-half Credit Per Semester.

These classes offer students the opportunity to earn six hours of college credit through the dual enrollment program with Central Virginia Community College. A comprehensive survey of major authors in English literature, these classes emphasize the development of writing skills and writing as process, including instruction in formal organizational patterns and style. Students work toward error-free writing and receive instruction in advanced research skills. If taken in grade 11 as a part of the Early College Program, Students will take the End-of-Course Standards of Learning (SOL) Reading test. A passing score or equivalent will verify this English credit to meet graduation requirements. Students should achieve a C or better 1st semester to be placed in the 2nd semester course. Students who have passed the course will receive six semester hours of credit from CVCC for English 111 and 112. Students should work to earn a grade of C or better to ensure these college credits will transfer or count toward a degree.

ADVANCED PLACEMENT (AP) LITERATURE & COMPOSITION**Course: 1329Y**

Grade 12. Full Credit Year Course.

These classes prepare students to take the College Entrance Examination Board Advanced Placement Literature and Composition Test. Emphases are the analytic reading of fiction and poetry and the writing of critical essays. Students enrolling should be competent in composition, experienced in literary interpretation, and able to think abstractly. Students must also be able to work independently on a variety of reading and writing projects. All students are required to take the advanced placement examination in May.

ENGLISH ELECTIVES

CREATIVE WRITING**Course: 1310Y**

Grades 9-12. Full Credit Year Course.

This elective course will expose students to many aspects of the writing process, including generating ideas, writing and revising drafts, and editing. Students will write extensively and participate in helpful critiques of their own work and that of their peers. This course will be designed to allow teachers to work individually with students during conferences. Through frequent writing exercises, students will study voice, imagery, characterization, dialogue, and narration. Students will work in free verse poetry, prose poetry, fiction, and creative nonfiction.

Sequential option: Playwriting

EXPLORING LANGUAGE AND CULTURE THROUGH HIP HOP**Course: 1730Y**

Grades 10-12. Full Credit Year Course.

This elective course will expose students to all five pillars of Hip Hop, with an emphasis on Knowledge. The phrase "Hip Hop" loosely translates to "intelligent movement", and in its early culture, the movement of Hip Hop was founded upon five pillars: MCing (oral), DJing (aural), Graffiti (visual), B-Boying (physical), and Knowledge (Mental). Students will study literary figures that inspired the makers of Hip Hop such as Ralph Ellison, Richard Wright, Chinua Achebe, Toni Morrison, Maya Angelou, Langston Hughes, Nikki Giovanni, and many others. In addition, students will be immersed in the other pillars through a hands-on experience in music production as they create their own instrumental tracks and lyrics, starting from scratch. They will also have the chance to work with local artists who are professionals in the music, dance, and fashion industries to further expand their knowledge.

EXPLORING LANGUAGE AND CULTURE THROUGH HIP HOP II**Course: 1732Y**

Grades 11-12. Full Credit Year Course.

Exploring Hip Hop II expands upon performance, songwriting, and music production skills learned in Exploring Hip Hop I. Students will learn to work on a Digital Audio Workstation (FL Studio) and use recording tools such as microphones, MIDI keyboards, drum machines and acoustic instruments to learn the skills necessary to create music and work in the Music Industry. This course also covers the basics of digital DJing. In addition, students will learn about live performance and should be prepared to perform in class as a singer, rapper, DJ or instrumentalist. In order to take Exploring Hip Hop 2, students must have already taken Exploring Hip Hop 1 and must demonstrate high interest in subject matter, the ability to work independently, and basic knowledge of songwriting and music production. This course requires prior approval from the instructor.

ADVANCED PLACEMENT (AP) SEMINAR**Course: 1429Y**

Grades 10-12. Full Credit Year Course. Prerequisite: None.

AP Seminar is a foundational 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; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-

based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence based arguments. The course culminates in an individual research-based essay of approximately 2,000 words and a presentation, performance, or exhibition with an oral defense; where the student answers 3-4 questions from a panel of trained evaluators and an end-of-course exam (3 hours). This course is the first course in the AP Capstone program. All students must take the AP Seminar examination in May.

ADVANCED PLACEMENT (AP) RESEARCH**Course: 1439Y****Grades 11-12. Full Credit Year Course. Prerequisite: AP Seminar.**

The second course in the AP Capstone program, AP Seminar is prerequisite for AP Research. If you earn scores of 3 or higher in both AP Seminar and AP Research as well as on four additional AP Exams of your choosing, you will receive the AP Capstone Diploma. This signifies outstanding academic achievement and attainment of core academic and research skills. Alternatively, if you earn scores of 3 or higher on the AP Seminar and AP Research Exams only, you will receive the AP Seminar and Research Certificate signifying your attainment of college-level academic and research skills. AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a yearlong mentored, research-based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methods; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. The course culminates in an academic thesis paper of approximately 5,000 words and a presentation, performance, or exhibition with an oral defense. This course is the final course in the AP Capstone program. All students must take the AP Research examination in May.

ADVANCED PLACEMENT (AP) AFRICAN AMERICAN STUDIES**Course: 4749Y****Grades 11-12. Full Credit Year Course.**

African American Studies is a conceptually driven course that introduces students to the exploration of the rich and diverse history and culture of African Americans. The goal of this course is to broaden the knowledge and understanding of students interested in learning about history, citizenship, culture, economics, science, technology, geography, and the political realities of African Americans. These strands should not be taught in isolation but woven together in an integrated study that helps students understand the world in which we live. This course should provide students with an opportunity to engage with the social, economic, and political activities of African Americans in a way that allows them to make deep connections across the content. The historical content of this course should be taught with relevance to contemporary and current issues in order to ensure a deeper understanding for students. All students must take the AP African American Studies examination in May.

SPEECH

PUBLIC SPEAKING I**Course: 5850A, 5850B****Grades 9-12. 1st or 2nd Semester. One-half Credit Course.**

Content in this elective course allows students to include instruction and practice in clarity of oral expression, logical reasoning, and proper organization of material. The student will learn to prepare speeches to inform, convince, persuade, demonstrate and entertain.

PUBLIC SPEAKING II**Course: 5860A, 5860B****Grades 9-12. 1st or 2nd Semester. One-half Credit Course. Prerequisite: Public Speaking I.**

In Public Speaking II, this elective course will allow students to refine oral interpretation skills, expand persuasive speaking skills, perform impromptu speeches, deliver special occasion speeches, and develop expertise in at least one major speech category.

WORLD LANGUAGES

The secondary schools offer a sequential program in French, Spanish, German, and Latin. First-year study for high school credit is available to 8th grade students in French, Spanish, and Latin at all three middle schools. Paul Laurence Dunbar Middle School for Innovation also offers German to 8th graders. Each language in the world languages offerings is designed for any student who has demonstrated a reasonable proficiency in his or her native language and wishes to develop facility in another language. To obtain full benefit of the language program, students are encouraged to begin study in the 8th or 9th grade. College-bound students are advised to investigate the specific world language requirements of colleges in which they have interest. All students should work closely with their counselors in planning their world language programs.

FRENCH I**Course: 1590Y**

Grades 8-12. Full Credit Year Course. Prerequisite: None.

Communicating in French is the highlight of these beginning semesters of language study. Students become involved immediately in using the language to simulate daily life situations. Activities include speaking, listening, and writing, reading, and learning about French culture. Correlated audio-visuals serve as stimuli to involve students in conversations of interest to teenagers.

FRENCH II**Course: 1500Y**

Grades 9-12. Full Credit Year Course. Prerequisite: Successful completion of French I.

Emphasis on the four basic skills of speaking, listening, reading, and writing is continued during second year study. Oral discussions in French based on themes of contemporary interest provide the basis for student involvement. Study of the geography and culture of French speaking countries is an integral part of the language study. Students' use of concepts and vocabulary is cumulative.

FRENCH III**Course: 1510Y**

Grades 10-12. Full Credit Year Course. Prerequisite: Successful completion of French I and II.

This course builds on the vocabulary and grammar bases acquired in levels I and II. Audio-lingual experiences continue to help students develop both aural and oral competency as they listen to more extensive passages and participate in more complex speaking exercises. The focus on reading and writing also increases at this level as students read excerpts from current literature and read and write about the culture of francophone countries.

ADVANCED FRENCH IV**Course: 1527Y**

Grade 11-12. Full Credit Year Course. Prerequisite: Successful completion of French III.

This course focuses on the use of all concepts and vocabulary from previous study in addition to new vocabulary and idioms. Culture-based readings from current events, contemporary and classic excerpts of literature periodicals and selections from literature are the basis for refining composition and reading skills and provide the topics for conversation and oral presentations. Experience in listening to extended passages develops students' comprehension skills and provides practice in using higher level thinking skills.

ADVANCED PLACEMENT (AP) FRENCH V**Course: 1529Y**

Grade 12. Full Credit Year Course. Prerequisite: Successful completion of French IV.

This Advanced Placement Language course is equivalent in content and skills developed to the third year college level. Students engage in intensive drills of extemporaneous speaking, grammar review, analyses of reading material and listening to many types of selections to develop a high level of listening comprehension. All students are required to take AP French examination in May.

GERMAN I**Course: 1690Y**

Grades 9-12, Grade 8, Paul Laurence Dunbar Middle School for Innovation Only. Full Credit Year Course. Prerequisite: None.

In this introductory course, students become involved with the German language through conversations and readings relating to school, family, leisure-time activities, travel, parties, and German speaking countries. Authentic audio-visual aids reinforce aural-oral skills while lending authentic cultural insights.

GERMAN II**Course: 1600Y**

Grades 9-12. Full Credit Year Course. Prerequisite: Successful completion of German I.

German II students continue to broaden their language skills through conversations and reading/writing activities. Topics first semester include vacations, school, home, shopping and sports. During second semester, students discuss health, food, reading materials, money, special occasions, and students' talents.

GERMAN III**Course: 1610Y**

Grades 10-12. Full Credit Year Course. Prerequisite: Successful completion of German II.

The refinement of oral and written communication skills through conversational practice and the authentic readings relating to each course topic constitute the major portion of third-year study. The topics in the course consists of strengths and weaknesses, media, environment, stereotypes, wishes, art, travel, history, volunteering, and plans for the future. During discussions, students learn about levels of language and the appropriateness of each in various situations.

ADVANCED GERMAN IV**Course: 1627Y****Grades 11-12. Full Credit Year Course. Prerequisite: Successful completion of German III.**

At this level of language study, students are expected to have achieved competence in the German language, which is now used in instruction, conversation, reading, and discussion. Students continue to discuss authentic readings related to course topics as well as everyday topics of conversation. In addition, frequent writing assignments enhance skills in grammar and serve to increase vocabulary.

ADVANCED PLACEMENT (AP) GERMAN V**Course: 1629Y****Grade 12. Full Credit Year Course. Prerequisite: Successful completion of German IV.**

This Advanced Placement Language course is equivalent in content and skills developed to the third year college level. Students engage in intensive drills of extemporaneous speaking, grammar review, analyses of reading material and listening to many types of selections to develop a high level of listening comprehension. All students are required to take the advanced placement examination in May.

LATIN I**Course: 1790Y****Grades 8-12. Full Credit Year Course. Prerequisite: None.**

The first-year Latin course provides the foundation for understanding Latin and the basis for learning any world language. Students enlarge their vocabulary, refine grammar in English, and learn about the origins of many of our traditions and institutions while reading the history, myths, and legends of the ancient Romans.

LATIN II**Course: 1700Y****Grades 9-12. Full Credit Year Course. Prerequisite: Successful completion of Latin I.**

Latin II begins with a thorough grammar review based on readings from Roman history and continues to develop the vocabulary and reading comprehension necessary to read Latin. During the second semester, readings from Julius Caesar and other celebrated authors help students learn more about their own traditions and develop reading skills and concepts applicable to Latin or any other language.

LATIN III**Course: 1710Y****Grades 10-12. Full Credit Year Course. Prerequisite: Successful completion of Latin II.**

Latin III is a general introduction to the politics and government of Rome. During first semester, students study the political, environmental, and economic problems of Rome in the 1st century BC through readings from Eutropius and Cicero, among others. In second semester, students read selections from Ovid, Seneca, Catullus, Tacitus, Pliny, and other writers as they explore Latin literature from the 1st century AD through the Middle Ages.

ADVANCED LATIN LITERATURE**Course: 1737Y****Grades 11-12. Full Credit Year Course. Prerequisite: Successful completion of Latin III.**

Students will read and study a variety of prose and poetry selections from a wide range of Latin authors excluding Vergil. Caesar, Catullus, Ovid, Cicero, and Horace will be the subjects of study along with other writers of their eras. Advanced Latin Literature with its inclusion of both prose and poetry and its breadth of authors offers the student a broader preparation for college study and a deeper understanding of classical literature than Advanced Placement Latin Vergil alone.

ADVANCED PLACEMENT (AP) LATIN VERGIL**Course: 1729Y****Grades 11-12. Full Credit Year Course. Prerequisite: Successful completion of Advanced Latin Literature.**

Students will read selected books and individual passages from Vergil's Aeneid and review Caesar's De Bello Gallico to learn about the epic tradition, Roman military history, the legend of the founding of Rome, and the basic precepts of literature. In addition, students will study parallel themes in Classical and English literature. All students are required to take the advanced placement examination in May.

ELEMENTARY LATIN WITH MEDICAL TERMINOLOGY**Course: 1749AD****Grades 11-12. Full Credit Semester Course. University of Lynchburg.**

This is the first part of a two-course sequence in basic Latin. The course covers vocabulary and fundamentals of Latin grammar with simple sentence translation and composition, together with aspects of Roman culture, including history and daily life. Also included is the study of Latin as a source of medical terminology. Placement in Latin courses is determined by score range on the Latin Placement Test required of all students wishing to register for Latin at the University of Lynchburg. It is offered synchronously.

ELEMENTARY LATIN II WITH MEDICAL TERMINOLOGY**Course: 1749BD**

Grades 11-12. Full Credit Semester Course. University of Lynchburg.

This is the second part of a two-course sequence in basic Latin. The course continues the study of vocabulary and Latin grammar from Elementary Latin I, with simple passage translation and composition, together with aspects of Roman culture and history, with emphasis on how medicine intersected with mythology, beliefs about causes and cures for disease. Also included is the study of Latin as a source of terminology in the liberal arts and sciences. Placement in this course is determined by score range on the Latin Placement Test required of all students wishing to register for Latin at the University of Lynchburg. It is offered synchronously.

SPANISH I**Course: 1890Y**

Grades 8-12. Full Credit Year Course. Prerequisite: None.

This introductory course is an initiation into language as a means of active communication for which a reasonable proficiency in understanding, speaking, reading, and writing Spanish is the overall goal. Activities include frequent conversational activities, projects, and dramatizations involve students actively in the language. Correlated audio-visuals serve as stimuli to involve students in conversations of interest to teenagers.

SPANISH II**Course: 1800Y**

Grades 9-12. Full Credit Year Course. Prerequisite: Successful completion of Spanish I.

All fundamental structures of the beginning course are reinforced during second-year study with an increased emphasis on the development of oral skills in active conversation. However, this course expands to encompass more comprehensive materials and structures so that by the end of the two-year sequence, students should be able to use effectively the four linguistic tools. Students continue to broaden their language skills through conversations and reading/writing activities.

SPANISH III**Course: 1810Y**

Grades 10-12. Full Credit Year Course. Prerequisite: Successful completion of Spanish II.

At this level, the Spanish language is used in the classroom for conversational and instructional purposes. Emphasis is placed on increasing the scope of vocabulary, verb tenses, and grammatical structures relating to thematic units. During second semester topics of spontaneous interest and comparative cultures are increasingly emphasized.

ADVANCED SPANISH IV**Course: 1827Y**

Grades 11-12. Full Credit Year Course. Prerequisite: Successful completion of Spanish III.

At this level of language study, students are expected to have achieved competence in the Spanish language, which is now used in instruction, conversation, reading, and discussion. Students discuss authentic readings from periodicals and excerpts of literature related to course topics as well as everyday topics of conversation. Continued listening assignments serve to enhance students' ability to understand audios on a variety of topics and spoken in various dialects.

ADVANCED PLACEMENT (AP) SPANISH V**Course: 1829Y**

Grade 12. Full Credit Year Course. Prerequisite: Successful completion of Spanish IV.

This Advanced Placement Language course is equivalent (in content and skills developed) to the third year college level. Students engage in intensive drills of extemporaneous speaking, grammar review, analyses of reading material and listening to many types of selections to develop a high level of listening comprehension. All students must take the AP Spanish examination in May.

MATHEMATICS

The Regulations for Establishing Standards for Accrediting Public Schools in Virginia specifies that students must earn three standard units of credit in Mathematics for a Standard Diploma and four standard units of credit for an Advanced Studies Diploma. In order to earn a Standard Diploma, students must complete at least two different courses from among Algebra I; Geometry; Algebra, Functions, and Data Analysis (AFDA); Algebra II; or other courses above the level of Algebra II. If taken, AFDA must be completed before Algebra II to meet the math courses approved by the board to satisfy this requirement. In order to earn an Advanced Studies Diploma, students must complete at least four different courses from among Algebra I, Geometry, Algebra II, or other courses above the level of Algebra II. If taken, Algebra, Functions, and Data Analysis (AFDA) must be completed before Algebra II to meet this requirement. A computer science course credit earned by students may be considered a math course credit. Students' requests to enroll in more than one math course for new credit must receive approval from the principal. **SOL tests are available for Algebra I, Algebra II, and Geometry. Students should work with their counselor to determine which test(s) are needed to verify credits for graduation. The federal Every Student Succeeds Act (ESSA) requires all students to take a SOL math test while in high school.**

ALGEBRA I, PART I

Course: 2090Y

Grade 9, Full Elective Credit Year Course. Algebra I, Part I is the prerequisite to Algebra I, Part II. Algebra I, Part I and Algebra I, Part II must be completed to receive full credit.

Algebra I, Part I is the first course of a two-course algebra sequence covering the Algebra I curriculum. In this two-part course, students have additional time to develop algebraic skills needed for higher mathematics. Students will be involved in learning activities that help make connections among algebra, arithmetic, geometry, statistics, and probability. This course includes instruction in properties and basic operations of natural numbers, their algebraic and graphical representation, and linear equations. Hands-on activities, graphing calculators, and computer technology will be used extensively.

ALGEBRA I, PART II

Course: 2100Y

Grade 10, Full Credit Year Course. Prerequisite: Algebra I, Part I. Algebra I, Part II is the second course of a two-course algebra sequence covering the Algebra I curriculum.

In this two-part course, students have additional time to develop algebraic skills needed for higher mathematics. Students will be involved in learning activities that help make connections among algebra, arithmetic, geometry, statistics, and probability. Number patterns, functions, applying equations, inequalities and systems of linear equations and inequalities, probability, statistics and interpreting data will be covered. Hands-on activities, graphing calculators, and computer technology will be used extensively. Algebra I, Part I is the prerequisite to Algebra I, Part II. Algebra I, Part I and Algebra I, Part II must be completed to receive full credit. Students will take the Standards of Learning (SOL) Algebra I test.

ALGEBRA I

Course: 2290Y

Grades 9-10, Full Credit Year Course. Prerequisite: Pre-Algebra and teacher recommendation or Foundations of Algebra.

This one year algebra program includes instruction in properties and basic operations of rational numbers, their algebraic and graphical representation, linear equations, inequalities and systems of linear equations and inequalities. The course also includes the study of polynomials, radical equations, quadratic equations with real solutions, and the concept of functions. Students will take the Standards of Learning (SOL) Algebra I test.

ADVANCED ALGEBRA I

Course: 2387Y

Grade 8, Full Credit Year Course. Prerequisite: Pre-Algebra and teacher recommendation.

This advanced one year algebra program is only available in the 8th grade. It includes instruction in greater depth than the traditional algebra course. Students will attach meaning to the abstract concepts of algebra by using tables and graphs to interpret equations and inequalities and to analyze functions. Matrices will be used to organize and manipulate data. Computers, spreadsheets, and graphing calculators or computer graphing simulators will be used to solve problems. **Students will take the Standards of Learning (SOL) Algebra I test.**

ALGEBRA, FUNCTIONS AND DATA ANALYSIS

Course: 2110Y

Grades 10-12, Full Credit Year Course. Prerequisite: Algebra I or Algebra I, Part II.

Students in this one year course will study functions and their behaviors, systems of inequalities, probability, data analysis and statistics, and simple experimental design. More specifically, the behavior of common function families and the connections between data tables and graphs will be used to interpret data, draw conclusions, and make predictions. In addition, students will learn to calculate basic probabilities in a real-world context and to analyze data in a normal distribution. Topics in the course will be presented with data generated from practical applications. During second semester students will design a simple survey or experiment and then collect, analyze, and present their data and conclusions.

ALGEBRA II**Course: 2200Y****Grades 9-12. Full Credit Year Course. Prerequisite: Algebra I or Algebra I, Part II and teacher recommendation.**

This course includes the study of real numbers, equations including rational and radical expressions, relations and systems and how they are used in mathematical modeling. The second semester of Algebra 2 will include the study of complex numbers, polynomials and rational functions, an introduction to statistics and probability, as well as connections with geometry, physics, chemistry, business, and consumer problems. **Students will take the Standards of Learning (SOL) Algebra II test if needed for graduation.**

ALGEBRA I/ADVANCED ALGEBRA II PETAL**Courses: 2290AP & 2397BP****Grade 9. Full Credit Year Course. Prerequisite: Teacher recommendation and Foundations of Algebra or Pre-Algebra.**

PETAL is a special program offered to selected students in a two period course. This program is a division initiative to address the achievement gap while encouraging underrepresented populations of students to access more rigorous courses. Algebra I is taught first semester. Instruction includes the properties and basic operations of natural numbers, their algebraic and graphical representation, and linear equations. Also included is the study of inequalities and systems of linear equations and inequalities. **Near the end of first semester, students will take the Standards of Learning (SOL) Algebra I test.** Advanced Algebra II is taught during the second semester. This course includes the study of equations, inequalities, relations, functions, systems of equations, polynomials, irrational numbers, complex numbers, and conic sections. The course also includes the study of higher degree polynomial functions, rational functions, exponential and logarithmic functions, statistics and probability. **Students will take the Standards of Learning (SOL) Algebra II test if needed for graduation.**

ADVANCED ALGEBRA II**Course: 2397Y****Grade 9-12. Full Credit Year Course. Prerequisite: Advanced Algebra I.**

This course includes the study of equations, inequalities, relations, functions, systems of equations, polynomials, irrational numbers, complex numbers, and conic sections. This course also includes the study of higher degree polynomials, rational and exponential functions, and statistics and probability. **Students will take the Standards of Learning (SOL) Algebra II test.**

GEOMETRY**Course: 2210Y****Grades 9-12. Full Credit Year Course. Prerequisite: Algebra I.**

This plane geometry course includes the study of perpendicular and parallel lines, angles and their relationships, congruent triangles and parallelograms and other polygonal regions. Also included are similar figures, the Pythagorean Theorem, circles, their tangents and secants, and three-dimensional geometry and transformational geometry. **Students will take the Standards of Learning (SOL) Geometry test if needed for graduation.**

ADVANCED GEOMETRY WITH TRIGONOMETRY**Course: 2307Y****Grade 10. Full Credit Year Course. Prerequisite: Advanced Algebra II.**

This course includes the study of polynomial regions and their areas with special emphasis on right triangles. It also includes the concepts of similarity, volume, coordinate and transformational geometry and construction of plane figures. The course also includes the study of the basic trigonometric functions, the inverse trigonometric functions, trigonometric identities, analytic trigonometry, solving triangles, analytic geometry, and the trigonometry of complex numbers. Graphing calculators will supplement the classroom portion of the course. **Students will take the Standards of Learning (SOL) Geometry test if needed for graduation.**

TRIGONOMETRY/FUNCTIONS**Course: 2220Y****Grades 11-12. Full Credit Year Course. Prerequisite: Algebra II and Geometry.**

This course includes the study of trigonometric functions, their inverses and their graphs, solving triangles, trigonometric identities, trigonometric equations, and mathematical modeling using trigonometric functions with applications. Also included is the study of matrices, sequences and series, probability and statistics, as well as an introduction to pre-calculus.

ADVANCED MATH ANALYSIS**Course: 2317Y****Grades 11-12. Full Credit Year Course. Prerequisite: Advanced Geometry Trigonometry.**

This course includes the study of relations, functions, equations, inequalities, polynomial and rational functions, and a review and extension of trigonometry. Also included are vectors and parametric equations, polar coordinates and complex numbers, conic sections, exponential and logarithmic functions, sequences and series, probability and statistics. Optional topics include iteration, fractals and discrete mathematics graph theory. Graphing calculator techniques are stressed.

ADVANCED COLLEGE PRE-CALCULUS I AND PRE-CALCULUS II**Courses: 2328AC & 2348AS**

Grades 11-12, Dual Enrollment Math Course. One-half Credit Per Quarter. Prerequisite: Trigonometry/Functions or Math Analysis.

The first semester (MTH 161 – Pre-Calculus I) presents a study of college algebra, matrices, and algebraic, exponential, and logarithmic functions. Students should achieve a C or better in order to be placed in the second semester course. The second semester (MTH 162 – Pre-Calculus II) presents trigonometry, trigonometric applications including Law of Sines and Cosines and an introduction to conics. Students who have completed and passed the course will receive 6 semester hours of credit from CVCC for Math 161 and 162.

ADVANCED PLACEMENT (AP) STATISTICS**Course: 2429Y**

Grade 12. Full Credit Year Course. Prerequisite: Trigonometry/Functions or Math Analysis.

Advanced Placement Statistics includes exploratory analysis of data using graphical and numerical techniques to study patterns and departures from patterns. Students will plan a study that will include identifying important variables related to the conjecture and ways to measure the variables. Students will also anticipate patterns using probability and simulation and work with concepts of statistical inference such as: confidence intervals, tests of significance, and special case of normally distributed data. **All students are required to take the AP Statistics examination in May.**

ADVANCED PLACEMENT (AP) CALCULUS AB**Course: 2329Y**

Grade 12. Full Credit Year Course. Prerequisite: Math Analysis.

This rigorous treatment of calculus will include the study of limits, continuity, derivatives, applications of the derivative and integrals. The course will emphasize integration techniques and the calculus of transcendental functions. Extensive graphing calculator techniques will be taught. Other calculus topics, including more integration techniques, arc length and surface area as well as the calculus of parametric equations, will be taught after the Advanced Placement exam. Note: With sufficient student and faculty interest, AP Calculus BC can be offered (2339Y). **All students are required to take the AP Calculus AB examination in May.**

ADVANCED PLACEMENT (AP) CALCULUS BC**Course: 2339Y**

Grade 12. Full Credit Year Course. Prerequisite: Math Analysis.

This is a double-period course. During the first semester students learn the AP Calculus AB content and that content is expanded upon and extended during the second semester. Counts as two courses for purposes of GPA calculation. **All students are required to take the AP Calculus BC examination in May.**

**The Board of Education's Guidelines on Credit Accommodations allow students with disabilities who are eligible for credit accommodations in mathematics to use each part of Algebra I, Parts I and II to earn a standard credit towards the three mathematics credits required for the Standard Diploma only. Two-part courses may also be combined with full-year courses in other Board-approved mathematics courses to meet the requirements for students with disabilities.*

SCIENCE

*The Regulations for Establishing Standards for Accrediting Public Schools in Virginia specifies that students must earn 3 standard units of credit in Science for a Standard Diploma and 4 standard units of credit for an Advanced Studies Diploma. In order to earn a Standard Diploma, students must complete at least two different courses from at least two different science disciplines: earth sciences, biology, chemistry, or physics. Additionally, students must earn one Verified Credit. Students who complete a career and technical education 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 State may substitute the certification, competency credential, or license for (1) the student-selected verified credit, and (2) either a science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. In order to earn an Advanced Studies Diploma, students must complete at least four different courses from among three different disciplines: earth sciences, biology, chemistry, or physics. A computer science course credit earned by students may be considered a science course credit. **SOL tests are available for Biology, Chemistry, and Earth Science. Students should work with their counselor to determine which test(s) are needed to verify credits for graduation. The federal Every Student Succeeds Act (ESSA) requires all high school students to take the Biology SOL test.***

ADVANCED EARTH SCIENCE**Course: 3387Y**

Grade 8. Full Credit Year Course. Prerequisite: None.

This advanced earth science course is available only in the 8th grade. Additional topics and supplemental activities supporting the earth science SOL are included in the course. **Students will take the Earth Science Standards of Learning test.**

ENVIRONMENTAL SCIENCE**Course: 3230Y**

Grade 9-12. Full Credit Year Course. Prerequisite: None.

The Environmental Science course is designed to continue the student investigations integrate the study of many components of our environment, including the human impact on our planet. These outcomes focus on scientific inquiry, the physical world, the living environment, resource conservation, humans' impact on the environment, and legal and civic responsibility. Instruction will focus on student data collection and analysis through laboratory experiences and field work including meaningful watershed educational experiences. Students enrolled in this course may not take Biology II Ecology as a science credit in the future.

BIOLOGY I**Course: 3200Y**

Grades 9-12. Full Credit Year Course Credit. Prerequisite: None. It is preferable that students have completed Environmental Science or Earth Science.

This course includes the study of scientific processes and problem solving, ecology, biochemistry, and cytology (structure, function and reproduction of cells). Also included are human endocrinology, reproduction, genetics, evolution, behavior and taxonomy (classification). **Students will take the Standards of Learning (SOL) Biology test.**

ADVANCED BIOLOGY I**Course: 3397Y**

Grades 9-10. Full Credit Year Course. Prerequisite: It is preferred that students have completed Earth Science or Environmental Science.

The course content closely parallels that described in Biology I. A more quantitative approach may be utilized in dealing with specific problem areas, with additional emphasis placed on the underlying chemical principles for the biological sciences. Students will have an opportunity to conduct original research. **Students will take the Standards of Learning (SOL) Biology test.**

EARTH SCIENCE**Course: 3290Y**

Grades 10-12. Full Credit Year Course. Prerequisite: None. It is preferred that students have completed Biology I.

This laboratory science course teaches foundation skills needed for the study and understanding of all sciences. Topics include maps and landforms, meteorology, geology, oceanography, environmental studies, and astronomy. Also included is the study of the Earth's composition, weathering, deposition, earthquakes, volcanoes, plate tectonics, and geologic time. **Students will take the Standards of Learning (SOL) Earth Science test if needed for graduation.**

BIOLOGY II ANATOMY AND PHYSIOLOGY**Course: 3210Y**

Grades 10-12. Full Credit Year Course. Prerequisite: Biology I.

This year-long course follows Biology I and is a study of human anatomy and physiology.

BIOLOGY II ECOLOGY**Course: 3211Y**

Grades 10-12. Full Credit Year Course. Prerequisite: Biology I.

This year-long course follows Biology I and is a study of the environment and man's impact on it. Students who have taken the Environmental Science course may NOT take this class for a science credit.

CHEMISTRY**Course: 3220Y**

Grades 10-12. Full Credit Year Course. Prerequisite: Biology, Algebra I and Algebra II completed, currently taking Algebra II, or with principal permission.

This course provides an introduction to basic chemical principles and their application. Topics include atomic structure, the periodic table, bonding, chemical equations and reactions, stoichiometry, states of matter, and thermochemistry. A solid knowledge of algebra is necessary for the calculations in this class. **Students will take the Standards of Learning (SOL) Chemistry test if needed for graduation.**

ADVANCED CHEMISTRY**Course: 3307Y**

Grades 10-12. Full Credit Year Course. Prerequisite: Biology, Algebra I and Algebra II completed, currently taking Algebra II, or with principal permission.

The course content is closely aligned with that of Chemistry. However, a more rigorous quantitative approach requires students to investigate, analyze, and summarize chemical reactions, molecular behaviors, and uses of substances. Hands-on experiments with high level math and thinking skills are included. Students will have an opportunity to conduct original research. Students will take the Chemistry Standards of Learning test. However, a more in-depth and rigorous conceptual and quantitative approach requires students to investigate, analyze, and summarize the various topics covered. High level math and thinking skills are essential for success. Hands-on lab work is a critical component designed to connect the abstract to real world experiences. **Students will take the Standards of Learning (SOL) Chemistry test if needed for graduation.**

ADVANCED PLACEMENT (AP) CHEMISTRY**Course: 3459Y**

Grades 11-12. Full Credit Year Course. Prerequisite: Biology; Chemistry.

This course is the equivalent of a first-year college general chemistry course. Topics include the structure of matter, kinetic theory of gases, chemical equilibria, chemical kinetics and the basic concepts of thermodynamics. The summer before provides a brief overview of chemical foundations, kinds of particles, and stoichiometry. Topics throughout the year include detailed studies of types of reactions and solution stoichiometry, the three phases of matter, thermochemistry, atomic structure and periodicity, bonding, properties of solutions, chemical kinetics, chemical equilibrium, acids and bases, solubility, spontaneity, entropy, free energy, and electrochemistry. Students will spend considerable time in individual study and in laboratory work. **All students are required to take the AP Chemistry examination in May.**

ASTRONOMY EARTH SCIENCE II**Course: 3292Y**

Grades 11-12. Full Credit Year Course. Prerequisite: Algebra I and Earth Science or Environmental Science Corequisite: Geometry or higher level mathematics course.

This course introduces students to the composition and structure of the universe. Astronomy is the scientific study of the contents of the entire universe. This course provides the student with a study of the universe and the conditions, properties, and motions of bodies in space. The content includes, but is not limited to, historical astronomy, astronomical instruments, the celestial sphere, the solar system, the earth as a system in space, the earth/moon system, the sun as a star, and stars.

ADVANCED PHYSICS**Course: 3317Y**

Grades 11-12. Full Credit Year Course. Prerequisite: Algebra I and Geometry Corequisite.

Advanced Physics is an algebra-based, introductory physics course. This course deals with mechanics, motion, and waves with emphasis on problem solving. Also included is the study of light, electricity, magnetism, the atom and nuclear forces. Students build on basic physical science principles by exploring in-depth the nature and characteristics of energy and its dynamic interaction with matter. Key areas covered by the standards include force and motion, energy transformations, wave phenomena and the electromagnetic spectrum, electricity, fields, and non-Newtonian physics. The standards stress the practical application of physics in other areas of science, technology, engineering, and mathematics. The effects of physics on our world are investigated through the study of critical, contemporary global topics.

ADVANCED PLACEMENT (AP) PHYSICS I**Course: 3469Y**

Grades 11-12. Full Credit Year Course. Prerequisite: Geometry and be concurrently taking Algebra II or an equivalent course.

AP Physics I is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Students should have completed Geometry and may be concurrently taking Algebra II, or equivalent course. This course requires that 25% of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry based investigations that provide students with opportunities to apply the science practices. **All students are required to take the AP Physics I examination in May.**

ADVANCED PLACEMENT (AP) PHYSICS II**Course: 3479Y**

Grade 12. Full Credit Year Course. Prerequisite: AP Physics I and have taken or be concurrently taking Math Analysis or an equivalent course.

The AP Physics II course is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. Students should have taken or be concurrently taking Math Analysis or Pre-Calculus. This course requires that 25% of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices. **All students are required to take the AP Physics II examination in May.**

ADVANCED COLLEGE BIOLOGY**Courses: 3328AC Biology 101 & 3328BC Biology 102**

Grade 12. Dual Enrollment. One-half Credit Per Semester. Prerequisites: Biology, Chemistry; Geometry.

This is a double-period course. This college level course deals with the fundamental characteristics of living matter from the molecular level to the ecological community with emphasis on general biological principles. Topics addressed include the organization and biochemical functions of cells, genetics, animal and plant physiology, continuity of life and ecological relationships. Appropriate applications of technology will allow for in-depth exploration of selected topics and opportunities for independent student research. Students should achieve a C or better in order to be placed in the second semester course. Students who have completed and passed the course will receive 8 semester hours of credit from CVCC for Biology 101 and 102. **Max. number of students per class 23.**

ADVANCED PLACEMENT (AP) BIOLOGY**Course: 3449Y****Grades 11-12. Full Credit Year Course. Prerequisites: Advanced Biology, Advanced Chemistry; Geometry.**

This course includes the study of the structure and biochemical functions of cells and cellular components, animal and plant physiology, principles of genetics, and the interdependence of organisms in ecosystems. Students will spend considerable time in individual study and in laboratory work. **All students are required to take the Advanced Placement Biology examination in May.**

ADVANCED PLACEMENT (AP) ENVIRONMENTAL SCIENCE**Course: 3429Y****Grades 10-12. Full Credit Year Course.**

Prerequisite: Algebra I, Biology, Chemistry (corequisite) The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry and geography. **All students are required to take the AP Environmental Science examination in May.**

COMPUTER SCIENCE

FOUNDATIONS OF COMPUTER SCIENCE**Course: 3730Y****Grades 10-12. Full Credit Year Course. Prerequisite: Algebra I, Algebra I A & B, or Teacher Recommendation.**

This year-long course has an emphasis on computer programming within the context of broader concepts of computer science. The standards build on concepts developed in prior grade levels. The standards provide a transition from block-based programming to a text-based programming language and familiarize the student with developing and executing computer programs. Teachers select programming languages and environments, problems, challenges, and activities that are appropriate for their students to successfully meet the objectives of the standards. Programmable computing tools will be used to facilitate design, analysis, and implementation of computer programs. Students will also explore computing systems, network and internet protocols, cybersecurity, data analysis, and programming. **This course may be used to fulfill a math, science, or CTE requirement.**

ADVANCED PLACEMENT (AP) COMPUTER SCIENCE PRINCIPLES**Course: 3760Y****Grades 10-12, E. C. Glass. Full Credit Year Course. Prerequisite: Algebra I and Foundations of Computer Science, Computer Programming, or Teacher Recommendation.**

AP Computer Science Principles is designed to introduce students to the central ideas of computer science, to instill ideas and practices of computational thinking, and to have students engage in activities that show how computing changes the world. The course is rigorous and rich in computational content, includes computational and critical thinking skills, and engages students in the creative aspects of the field. Through both its content and pedagogy, this course aims to appeal to a broad audience. Computational thinking practices include connecting computing, creating computational artifacts, abstracting, analyzing problems and artifacts, communications and collaborating. **All students are required to take the AP Computer Science Principles examination in May.**

ADVANCED PLACEMENT (AP) COMPUTER SCIENCE**Course: 3729Y****Grades 10-12, E. C. Glass. Full Credit Year Course. Prerequisite: Algebra I and Foundations of Computer Science, Computer Programming, or Teacher Recommendation.**

A large part of the course is built around the development of computer programs that correctly solve a given problem. At the same time, the design and implementation of computer programs is used as a context for introducing other important aspects of computer science, including the development and analysis of algorithms, the development and use of fundamental data structures, the study of standard algorithms and typical applications, and the use of logic and formal methods. **All students must take the AP Computer Science examination in May.**

SOCIAL STUDIES

The Regulations for Establishing Standards for Accrediting Public Schools in Virginia specifies that students must earn 3 standard units of credit in History and Social Sciences for a Standard Diploma and 4 standard units of credit for an Advanced Studies Diploma. In order to earn a Standard Diploma, students must complete one course in U.S. and Virginia History, one course in U.S. and Virginia Government, and one course in either world history, world geography, or both. Additionally, students must earn one Verified Credit. Students who complete a career and technical education 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 State may substitute the certification, competency credential, or license for (1) the student-selected verified credit, and (2) either a science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. In order to earn an Advanced Studies Diploma, students

must complete at least four different courses students must complete one course in U.S. and Virginia History, one course in U.S. and Virginia Government, and two courses in either world history, world geography, or both. Students' requests to enroll in more than one History or Social Science course for new credit must receive approval from the principal. SOL tests are available for Geography, World History I, World History II, and VA & U.S. History. Students should work with their counselor to determine which test(s) are needed to verify credits for graduation.

WORLD GEOGRAPHY**Course: 4690Y**

Grade 9-12. Full Credit Year Course.

The focus of these classes is the study of the world's peoples, places, and environments, with an emphasis on world regions. Near the end of the school year, the students will take the Virginia World Geography Standards of Learning test. **Students will take the Standards of Learning (SOL) Geography test if needed for graduation.**

ADVANCED WORLD GEOGRAPHY**Course: 4367Y**

Grade 9-12. Full Credit Year Course.

The focus of these classes is the study of the world's peoples, places, and environments, with an emphasis on world regions. In these advanced-level classes students must complete in-depth projects and writing assignments, as well as additional reading assignments and research. **Students will take the Standards of Learning (SOL) Geography test if needed for graduation.**

WORLD HISTORY AND GEOGRAPHY I (to 1500 AD)**Course: 4290Y**

Grade 9. Full Credit Year Course.

These classes cover the historical development of people, places, and patterns of life from early times until about 1500 AD. Geography is emphasized in the study of each civilization. **Students will take the Standards of Learning (SOL) World History I test.**

ADVANCED WORLD HISTORY AND GEOGRAPHY I (to 1500 AD)**Course: 4397Y**

Grade 9. Full Credit Year Course.

These classes cover the historical development of people, places, and patterns of life from early times until about 1500 AD. Geographic influences on history are emphasized in the study of each civilization. In these advanced-level classes students must complete in-depth projects and writing assignments, as well as additional reading assignments and research. **Students will take the Standards of Learning (SOL) World History I test.**

WORLD HISTORY AND GEOGRAPHY II (1500 AD to PRESENT)**Course: 4200Y**

Grade 9-10. Full Credit Year Course.

These classes cover history and geography from the late Middle Ages to the present. Other points of focus are the political boundaries that developed with the evolution of nation-states; the ways in which scientific and technological revolutions produced economic, social and political change; and the people and events of the 19th and 20th centuries as they relate to contemporary issues. This course has an associated SOL test, which can be used to verify a history credit for graduation (if needed). **Students will take the Standards of Learning (SOL) World History II test if needed for graduation.**

ADVANCED WORLD HISTORY AND GEOGRAPHY II (1500 AD to PRESENT)**Course: 4307Y**

Grade 10. Full Credit Year Course.

These classes cover history and geography from the late Middle Ages to the present. Other points of focus are the political boundaries that developed with the evolution of nation-states; the ways in which scientific and technological revolutions produced economic, social and political change; and the people and events of the 19th and 20th centuries as they relate to contemporary issues. Projects, writing assignments, additional reading assignments, and research are requirements of these classes. This course has an associated SOL test, which can be used to verify a history credit for graduation (if needed). **Students will take the Standards of Learning (SOL) World History II test if needed for graduation.**

ADVANCED PLACEMENT (AP) WORLD HISTORY**Course: 4469Y**

Grades 10-12. Full Credit Year Course.

This course is designed for students with a keen interest in history and a desire to earn college credit in high school. Requiring extensive independent reading and writing assignments, this course has as its chronological frame the period from approximately 8000 B.C.E. to the present. Course work focuses on continuity and change across historical periods as students analyze the processes and causes involved in these continuities and changes. Included in the course are the major civilizations in Africa, the Americas, Asia, and Europe. All students are required to take the advanced placement examination in May. Note: These classes may be taken at the 10th grade level for social studies credit in lieu of Advanced World History & Geography II (1500 AD to Present). Eleventh and 12th grade students may take the class for elective credit. **Students will take the Standards of Learning (SOL) World History I or II test if needed for graduation.**

AMERICAN HISTORY**Course: 4210Y**

Grade 11. Full Credit Year Course.

These classes are a chronological study of American history from the Age of Discovery to the present. Although emphasis is placed on political and economic history, content also includes the major issues, movements, people, and events that shaped American culture. **Students will take the Standards of Learning (SOL) U.S. History test if needed for graduation.**

ADVANCED AMERICAN HISTORY**Course: 4317Y**

Grade 11. Full Credit Year Course.

These advanced-level classes provide a comprehensive, in-depth study of American history from the Age of Discovery to the present. Although emphasis is placed on political and economic history, content also includes the major issues, movements, people, and events that shaped American culture. Independent reading and writing assignments, as well as individual research projects, are required. **Students will take the End-of-Course Standards of Learning (SOL) U.S. History test if needed for graduation.**

ADVANCED PLACEMENT (AP) AMERICAN HISTORY**Course: 4419Y**

Grade 11. Full Credit Year Course.

These classes are geared to the student who has a keen interest in history and who wishes to receive college credit while in high school. During 1st semester, emphasis is on the American Revolution, the Jacksonian period, the Civil War, Reconstruction, and the Gilded Age. Second semester focuses on the politics of the Gilded Age, the Populist-Progressive era, World War I, the Depression and the New Deal, World War II, and domestic and foreign policy from Post World War II to the 1980s. Course requirements include basic text and supplementary readings, class lectures and discussions, and writing assignments (including open-ended and document-based questions). **Students will take the Standards of Learning (SOL) U.S. History test if needed for graduation. All students are required to take the advanced placement examination in May.**

UNITED STATES GOVERNMENT**Course: 4220Y**

Grade 12. Full Credit Year Course.

These classes provide students with an understanding of the American and Virginia political systems. Included in this study are the United States and Virginia Constitutions; the structure and operation of the legislative, executive, and judicial departments of the U.S. and Virginia governments; the process of policy-making in economics, foreign affairs, and civil rights issues; and the influence of the public, interest groups, political parties, and the media on decision making. Other points of focus are a comparison of the U.S. political and economic systems to those of other nations and the role of the government in the economy. In addition, special emphasis is given to a unit on individual voting behavior, incorporating current elections.

ADVANCED UNITED STATES GOVERNMENT**Course: 4327Y**

Grade 12. Full Credit Year Course.

This advanced-level government course focuses on the theory and practice of leadership and political behavior from the social scientist point of view as students study topics such as theories of government, federalism, state and local government, and decision-making at the national level. Additional units of study include the American Free Enterprise System, the law and society, and the involvement of the United States in foreign affairs. As in all advanced-level classes, students must be prepared to complete independent reading, writing, and research assignments.

ADVANCED PLACEMENT (AP) AMERICAN GOVERNMENT POLITICS AND COMPARATIVE GOVERNMENT POLITICS**Courses: 4429A & 4429B**

Grade 12, 1st & 2nd Semester. One-half Credit Per Semester

These classes are geared to those students with a keen interest in government and the desire to earn college credit in high school. First semester gives students a critical perspective on politics and government in the United States, involving both the study of general concepts to interpret American politics and the analysis of specific case studies. In 2nd semester, students gain knowledge of the world's diverse political structures and practices as they study five specific countries and compare their key political relationships. Both 1st and 2nd semester classes require student research and analysis. **All students must take both the American Government and AP Comparative Government examinations in May.**

AFRICAN AMERICAN HISTORY**Course: 4740Y**

Grades 9-12. Full Credit Year Course.

In this full-credit, high school elective course designed through the VDOE in partnership with Virtual Virginia, students will examine the role African Americans have played in American history. The activities and assignments in the course promote cultural awareness and critical thinking through the lenses of power, politics, economics, and geography. Students will trace the trials, tribulations, and triumphs of race relations in the United States. The course will be taught in a blended learning environment using online modules through Virtual Virginia in conjunction to direct instruction from an LCS teacher.

ADVANCED PLACEMENT (AP) HUMAN GEOGRAPHY**Course: 4459Y**

Grades 9-12. Full Credit Year Course.

The AP Human Geography course is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012). Students will take the World Geography Standards of Learning test and the AP Human Geography examination in May. **Students will take the Standards of Learning (SOL) Geography test if needed for graduation. All students are required to take the AP Human Geography examination in May.**

PSYCHOLOGY**Course: 4470Y**

Grades 10-12. Full Credit Year Course.

This is a general overview course focusing on the scientific study of both the behavioral and mental processes of human beings and animals. More specifically, we will be covering: history of psychology and scientific thought, biological basis of behavior, research methodology, statistics, sensation and perception, states of consciousness, memory, language and intelligence, developmental psychology, personality, and learning.

ADVANCED PLACEMENT (AP) PSYCHOLOGY**Course: 4479Y**

Grades 11-12. Full Credit Year Course.

The purpose of the course itself is to introduce the systematic and scientific study of the behavior and mental processes of human beings and other animals. Included is a consideration of the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students also learn about the ethics and methods psychologists use in their science and practice. **All students are required to take the AP Psychology examination in May.** There is no prerequisite to this course.

HEALTH (required for graduation)

The Regulations for Establishing Standards for Accrediting Public Schools in Virginia specifies that students must earn two standard units of credit in Health and Physical Education in order to earn any type of high school diploma. The Physical Education Program offers a variety of courses designed to meet individual needs and interests; however, the underlying purpose in all courses is to promote the concept of fitness and wellness for life. All courses will include aerobic exercises and strength training in addition to skills development in the specified sports and/or recreational activities. Completing the Health and Physical Education requirements for grades 9 and 10 are required for graduation.

HEALTH AND FAMILY LIVING**Courses: 5250A & 5250B**

Grades 9-12. 1st or 2nd Semester. One-half Credit Course. Prerequisite: None.

This course fulfills the family life education requirement for students in grade nine. The course includes instruction in disease prevention, first-aid techniques, human growth and development, personal health and wellness, substance abuse, consumer health, and topics related to family living. Attitudes, morality and responsible decision making are discussed in relation to developing a healthy and productive lifestyle from adolescence to old age. Students should enroll in a semester-long health or physical education course only if they need a semester credit and not a full-year credit to fulfill graduation requirements.

DRIVER EDUCATION & PERSONAL HEALTH AND SOCIAL DEVELOPMENT**Courses: 5240A & 5240B**

Grades 9-12. 1st or 2nd Semester. One-half Credit Course. Prerequisite: None

The Driver Education portion will provide the in-class preparation for behind-the-wheel driver training. Personal health and social development fulfills the family life education requirement for grade ten. Students should enroll in a semester-long health or physical education course only if they need a semester credit and not a full-year credit to fulfill graduation requirements. The completion of the state of Virginia's VADETS online driving course does not carry with it any high school credit.

PHYSICAL EDUCATION (required for graduation)

PHYSICAL EDUCATION 9

Courses: 5190A & 5190B

Grades 9-12, 2nd Semester. One-half Credit Course. Prerequisite: None.

This course is designed to develop intermediate and advanced skills in activities selected from among the following: floor or field hockey, lacrosse, softball, volleyball and basketball. Students should enroll in a semester-long health or physical education course only if they need a semester credit and not a full-year credit to fulfill graduation requirements. Once students successfully complete this course, they may not enroll in this same course again for new credit.

PHYSICAL EDUCATION 10

Course: 5191A & 5191B

Grades 9-12, 1st Semester. One-half Credit Course. Prerequisite: None.

This course is designed to develop intermediate and advanced skills in activities selected from among the following: flag football, soccer, basketball, tennis, and track and field. Students should enroll in a semester-long health or physical education course only if they need a semester credit and not a full-year credit to fulfill graduation requirements.

PHYSICAL EDUCATION 9 & HEALTH AND FAMILY LIVING 9

Course: 5991Y

Grade 9. Full Credit Year Course. Prerequisite: None.

This year-long course fulfills one of the two standard units of credit in Health and Physical Education required to graduate. Students will complete one semester of Physical Education, designed to develop intermediate and advanced skills in activities selected from among the following: floor or field hockey, lacrosse, softball, volleyball, and basketball. Students will complete one semester of Health, which will cover the Family Life Education requirement. Included are the studies of disease prevention, first-aid techniques (including CPR and defibrillator training), human growth and development, personal health and wellness, substance abuse, consumer health, and topics related to family living. Attitudes, morality, and responsible decision-making are discussed in relation to developing a healthy and productive lifestyle from adolescence to old age.

PHYSICAL EDUCATION 10 AND DRIVER EDUCATION

Course: 5901Y

Grade 10-12. Full Credit Year Course. Prerequisite: None.

This year-long course fulfills one of the two standard units of credit in Health and Physical Education required to graduate. Students will complete one semester of Physical Education, designed to develop intermediate and advanced skills in activities selected from among the following: flag football, soccer, basketball, tennis, and track and field. The Driver Education portion will provide in-class preparation for behind-the-wheel driver training. Personal Health and Social Development covers 10th grade Family Life Education.

WEIGHT TRAINING I

Courses: 5151A & 5151B

Grades 11-12 (unless recommended by staff). 1st or 2nd Semester. One-half Credit Course. Prerequisite: None.

This introductory course is designed to give students the opportunity to learn weight training concepts and techniques used for obtaining optimal physical fitness. Students will benefit from comprehensive weight training and cardiorespiratory endurance activities. Students will learn the basic fundamentals of weight training, strength training, aerobic training, and overall fitness training and conditioning. Course includes both lecture and activity sessions. Students will be empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime. Any students in Grade 9 recommended to enroll in Weight Training I instead of the semester-long Physical Education 9 must still successfully complete the semester of Health and Family Living. Students in grades 11-12 who are enrolled in Weight Training I and have already completed their physical education credits required for graduation may complete this course for elective credit **if there is space available. Priority will be given to students who have not completed their graduation requirements.** If possible, students in grades 11-12 who are enrolled in Weight Training I should be scheduled into a separate section from 9th grade students enrolled in the course.

Sequential option: Weight Training I and Weight Training II may satisfy the sequential elective requirement if taken after the student has earned the physical education credits required for graduation.

WEIGHT TRAINING II**Courses: 5152A & 5152B****Grades 11-12 (unless recommended by staff). 1st or 2nd Semester. One-half Credit Course. Prerequisite: Staff Recommendation.**

This intermediate course is designed to give students who have completed Weight Training I an opportunity to become more proficient in weight and fitness training concepts and techniques. Students will continue to develop skills in weight training, strength and aerobic training, and overall conditioning. Students in grades 11-12 who are enrolled in Weight Training II may complete the course repeatedly for elective credit. These students must still successfully complete the semester of Driver Education and Personal Health and Social Development. Students in grades 11-12 who are enrolled in Weight Training II and have already completed their physical education credits required for graduation may complete the course for elective credit.

Sequential option: Weight Training I and Weight Training II may satisfy the sequential elective requirement if taken after the student has earned the physical education credits required for graduation. *This course may be taken repeatedly for elective credit if space is available.*

FITNESS FOR LIFE**Course: 5161Y****Grades 11-12. Full Credit Year Course. Prerequisite: PE 9 & 10 or Weight Training I & II.**

This elective course for students who have completed the Health and Physical Education graduation requirements will enable students to obtain the knowledge and skills necessary to develop and maintain a level of fitness and to increase physical competence, self-esteem, and the motivation to pursue lifelong physical activity. Students will gain an understanding of the components of health-related fitness, training principles, and the benefits of being physically active throughout their lives. In addition to practicing basic stretching and aerobic exercises, students will practice the basic fundamentals of walking/jogging; learn the rules and participate in team activities like basketball, volleyball, and softball; one-on-one or doubles sports like tennis and pickleball; and individual sports like Ultimate Frisbee and Frisbee golf.

FOUNDATIONS OF PERSONAL FITNESS AND WELLNESS**Course: 5931YS****Grades 9-12. Summer Only, One Credit. Prerequisite: None.**

This course fulfills one of the standard units of credit in Health and Physical Education required to graduate. Using an online approach, the course covers both health and physical education standards. The course is broken into modules that contain the learning content and activities to be completed. Students will be assigned to a licensed Lynchburg City Schools' Health/Physical Education teacher who will monitor, assist, and evaluate. For the Physical Education component, students will study and engage in applications of movement by (1) developing a personal fitness plan aimed at improving motor skills, movement patterns, strength, flexibility, and endurance and (2) completing online units of study focusing on overall wellness – their physical, mental, and emotional health and development. Units include nutrition and diet, and the functions and structures of various systems of the body, including the digestive, urinary, endocrine, and reproductive systems. Units covering the state's 9th grade Family Life Education SOLs are included. Topics include family living and community relationships; the benefits, challenges, responsibilities, and value of positive relationships for men, women, and children, and communities; abstinence education; the value of postponing sexual activity; human sexuality; human reproduction; dating violence; the characteristics of abusive relationships; steps to take to avoid sexual assault; and the availability of counseling and legal resources. Students will also study the consequences of risky behaviors and disease prevention. **There is a fee for this course.**

CAREER & TECHNICAL EDUCATION

Career and technical education (CTE) prepares students for a wide range of high-wage, high-skill, high-demand careers. CTE is an essential part of the school division's total educational program specifically designed to prepare students for post-secondary education and/or employment. These courses enhance student success by reinforcing the Standards of Learning established for English, mathematics, science, history, and social science.

CTE programs help students develop 21st century workforce readiness skills while guiding their career pathway by entering an advanced training program, community college, or four-year university after graduation.

Courses that have a maximum enrollment due to state regulations will require students to complete an application process. The rubric used for student acceptance will include attendance, grades, behavior, and career goals. An interview may be required for some courses to determine student interest. Shuttle buses are provided for students to travel between high schools. A travel period may be required for off-site courses.

ARCHITECTURE & CONSTRUCTION

Courses in this area can prepare students for careers in designing, planning, managing, building and maintaining the built environment.

CARPENTRY I**Course: 8601Y****Grade 10-11. Prerequisite: Approved Application. Location: Heritage. Periods: 1.**

With an emphasis on safety, students use hand and power tools, cut stock, apply construction mathematics, interpret blueprints, and understand basic rigging. Students will become proficient in identifying types of residential construction components to frame walls, floors, ceilings, roofs, doors, and windows. All students will obtain the required Construction Industry OSHA 10 safety credential. **Sequential options:** Carpentry II

CARPENTRY II**Course: 8602Y**

Grade 11-12. Prerequisite: Carpentry I. Location: Heritage. Periods: 2.

Carpentry II prepares students for a successful transition into postsecondary education or a career in carpentry or related field. Students will become proficient in assembling and installing various types of residential construction components according to industry standards, including forming foundations, framing floors, walls, ceiling, roofs, trusses, roofing materials, stairs, and exterior doors and windows. Industry credentials: NCCER Core

Sequential options: Carpentry I.

CARPENTRY III**Course: 8603Y**

Grade 12. Prerequisite: Carpentry II. Location: Heritage. Periods: 2.

Carpentry III is an advanced course that allows students to gain in-depth knowledge and experience in construction skills. Students explore specialized areas in carpentry, such as building decks and porches, alternative framing, interior finishes, drywall installation and finishing, as well as energy efficiency and green technology. Students explore licensure requirements and entrepreneurial opportunities.

DRAFTING I**Course: 6740Y**

Grades 9-12. Prerequisite: Algebra I. Location: E. C. Glass. Periods: 1.

Students gain the skills necessary to produce and complete accurate manufacturing and construction drawings based on the ideas and sketches of engineers, architects, and designers. Students will focus on performing mechanical drafting and design operations, using manual drafting techniques and Computer Aided Drafting (CAD). Students have the opportunity to compete in regional and state CAD competitions. Industry Credentials: NOCTI Drafting.

Sequential options: Drafting II

DRAFTING II**Course: 6750Y**

Grades 10-12. Prerequisite: Drafting I. Location: E. C. Glass. Periods: 1.

Students master the theory and skills necessary to produce accurate drawings based on the ideas and sketches of engineers, architects, and designers. Students focus on performing mechanical drafting and design operations, using manual drafting techniques and Computer Aided Drafting and Design (CADD), and explore careers in drafting including industry certification options. Emphasis will be on the development of problem-solving skills and assembling professional portfolios. Students have the opportunity to compete in regional and state competitions in CAD and engineering design. Industry credentials: NOCTI Drafting. This course may be taken as a dual enrollment course earning six college credits from CVCC. CVCC course numbers DRF 201 and DRF 202. **Sequential options:** Drafting I, Drafting III

DRAFTING III**Course: 6760Y**

Grades 10-12. Prerequisite: Drafting II. Location: E. C. Glass. Periods: 1.

Students learn the theory and the skills necessary to produce and complete accurate drawings based on the ideas and sketches of engineers, architects, and designers. Students focus on performing architectural drafting and design operations, using manual drafting techniques and Computer Aided Drafting and Design (CADD), and exploring careers in drafting, including industry certification options. Students will have the opportunity to compete in regional and state competitions in architectural design and modeling. Industry credentials: NOCTI Drafting and Architectural Drafting. **Sequential options:** Drafting I, Drafting II

DRAFTING IV**Course: 8427Y**

Grades 11-12. Prerequisites: Drafting III or Approved Application. Location: E. C. Glass. Periods: 1.

Students will further study Drafting competencies using project-based learning. The student will use equipment along with the software learned in previous years to complete advanced level design projects. This class will involve independent design projects that are initiated by the student. Students will have the opportunity to compete in regional and state competitions. The first semester includes study of the evolution and history of robotics with an emphasis on automated and flexible manufacturing. Topics covered will include: machining, welding, electronics, pneumatics/hydraulics, design and mechanics, sensors and controls programming. Students will apply concepts learned in class to mechanical construction with VEX Challenge. During the second semester students study nondestructive examination and testing methods in order to examine an object, material, or system without impairing its future usefulness. Students will use visual and optical testing (VT), liquid penetrant testing (PT), magnetic particle testing (MT), radiographic testing (RT), ultrasonic testing (UT), and eddy current testing (ET) to assess various parameters. Students will also cover the basic fundamentals and application of radiation. There is a fee associated with this class. Financial assistance is available for eligible students. Industry Credentials: Virginia Workplace Readiness Skills.

BUSINESS MANAGEMENT & ADMINISTRATION

Courses in this area can prepare students for careers in Business Management and Administration, careers that encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.

ACCOUNTING

Course: 6160Y

Grades 10-12. Prerequisite: Algebra I. Location: E. C. Glass and Heritage. Periods: 1.

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

Sequential options: Advanced Accounting; Business Law; Business Management; Computer Information Systems; Design, Multimedia and Web Technologies; Entrepreneurship; Principles of Business and Marketing.

ACCOUNTING, ADVANCED

Course: 6170Y

Grades 11-12. Prerequisite: Accounting. Location: E. C. Glass and Heritage. Periods: 1.

Advanced Accounting students gain knowledge of advanced accounting principles, procedures, and techniques used to solve business problems and make financial decisions. Students work in a technology-integrated environment, using accounting and spreadsheet software to analyze, synthesize, evaluate, and interpret business financial data related to inventory, fixed assets, notes/accounts payable and receivable, implementation of a partnership and a corporation, and other specialized accounting systems. Industry Credentials: NOCTI Accounting.

Sequential options: Accounting; Business Law; Business Management; Computer Information Systems; Design, Multimedia and Web Technologies; Entrepreneurship; Principles of Business and Marketing

BUSINESS LAW

Course: 6150Y

Grades 11-12. Prerequisite: None. Location: E. C. Glass and Heritage. Periods: 1.

Students examine the foundations of the American legal system and learn the rights and responsibilities of citizens and businesses. Students gain knowledge and skills by exploring economic and social concepts related to laws governing business and individuals. Focus areas include contracts, consumer protection, criminal law, tort law, international law, family/domestic law, employment law, cyber law, and careers in the legal profession. Industry Credentials: Virginia Workplace Readiness Skills

Sequential options: Accounting; Advanced Accounting; Business Management; Computer Information Systems; Design, Multimedia and Web Technologies; Digital Applications; Entrepreneurship; Principles of Business and Marketing

BUSINESS MANAGEMENT

Course: 6140Y

Grades 10-12. Prerequisite: None. Location: E. C. Glass and Heritage. Periods: 1.

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

Sequential options: Accounting; Advanced Accounting; Business Law; Computer Information Systems; Design, Multimedia and Web Technologies; Entrepreneurship; Marketing; Principles of Business and Marketing

COMPUTER INFORMATION SYSTEMS

Course: 6340Y

Grades 9-12. Prerequisite: Keyboarding or Digital Applications. Location: E. C. Glass and Heritage. Periods: 1.

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, emerging technologies, and career opportunities related to the information technology field. Industry Credentials: Microsoft Office Specialist.

Sequential options: Accounting; Advanced Accounting; Business Law; Business Management; Design, Multimedia and Web Technologies; Digital Applications; Entrepreneurship; Principles of Business and Marketing; Programming; Advanced Programming

DESIGN, MULTIMEDIA, AND WEB TECHNOLOGIES**Courses: 6260Y****Grades 9-12. Prerequisite: Digital Applications or Computer Information Systems. Location: E. C. Glass and Heritage. Periods: 1.**

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

Sequential options: Accounting; Advanced Accounting; Business Law; Business Management; Computer Information Systems; Digital Applications; Entrepreneurship; Principles of Business and Marketing; Programming; Advanced Programming

DIGITAL APPLICATIONS**Course: 3740Y****Grades 9-12. Prerequisite: None. Location: E. C. Glass and Heritage. Periods: 1**

Students develop real-life, outcome-driven approach skills for digital citizenship, basic computer operations, keyboarding, application software (word processing, spreadsheets, multimedia applications, databases), and career exploration. This course promotes skills utilized across the curriculum and offers preparation relevant to 21st century skills and postsecondary education. Industry Credentials: Virginia Workplace Readiness Skills. **Sequential options:** Accounting; Advanced Accounting; Business Law; Business Management; Computer Information Systems; Design, Multimedia and Web Technologies; Entrepreneurship; Principles of Business and Marketing; Programming; Advanced Programming

PROGRAMMING**Course: 6640Y****Grades 9-12. Prerequisite: None. Location: E. C. Glass and Heritage. Periods: 1**

Students explore programming concepts, use algorithmic procedures, implement 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. In addition, students employ hypertext markup language (HTML) or JavaScript to create web pages.

Sequential options: AP Computer Science; Computer Information Systems; Design, Multimedia and Web Technologies; Digital Applications; Advanced Programming

PROGRAMMING, ADVANCED**Course: 6641Y****Grades 10-12. Prerequisite: Programming. Location: E. C. Glass. Periods: 1.**

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.

Sequential options: AP Computer Science; Computer Information Systems; Design, Multimedia and Web Technologies; Digital Applications; Programming

EDUCATION & TRAINING

Courses in this area can prepare students for careers in planning, managing and providing education and training services or related learning support services.

TEACHERS FOR TOMORROW I**Course: 6550Y****Grades 11-12. Prerequisite: Approved Application, 3.0 GPA. Location: E. C. Glass and Heritage. Periods: 1.**

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. **This course may be offered as dual enrollment for three college credits from the University of Lynchburg. The course, Human Diversity in American Schools (6339AD), is an online asynchronous course.**

TEACHERS FOR TOMORROW II**Course: 6551Y****Grade 12. Prerequisite: Approved Application, 3.0 GPA. Location: E. C. Glass and Heritage. Periods: 1.**

Students continue to explore careers in the Education and Training Career 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. **This course may be offered as dual enrollment for three college credits from the University of Lynchburg. The course, Foundations of Education and the Teaching Profession (6339BD), is an online asynchronous course.**

HUMAN DIVERSITY IN AMERICAN SCHOOLS**Course: 6339AD****Grades 11-12. One Credit Semester Course, University of Lynchburg. Prerequisite: 3.0 GPA.**

This course is designed as an introductory level study of the human and relational dimensions of diversity in educational settings found across American schools today. Seven themes serve as a basis from which prospective candidates develop an awareness and understanding of their roles—as both future educators and citizens—of promoting the principles of equity and equal opportunity for all. The themes include: (a) exclusion versus inclusion; (b) intersectionality and identity; (c) equality, equity, and inequity; (d) acceptance, tolerance, and advocacy; (e) social justice; (f) bias (implicit and explicit); and (g) candidate self-reflection. Throughout these themes, candidates examine their own personal beliefs and values about all aspects of human diversity, thereby starting the journey to becoming a culturally competent teacher. Candidates will examine the implications of culturally responsive school design, curriculum, instruction, and learning. - (Fall) - Online - Asynchronous.

FOUNDATIONS OF EDUCATION AND THE TEACHING PROFESSION**Course: 6339BD****Grades 11 & 12. University of Lynchburg. Full Credit Year Course. Prerequisite: Human Diversity in American Schools.**

This course is designed to provide an overview of schools and the teaching profession. Prospective teacher candidates will examine the historical, philosophical, and sociological themes in American Education and investigate current issues affecting schools today. They will explore the legal and ethical aspects of the teaching profession as well as school organization and culture. They will be introduced to the professional standards for teachers. Practical experiences in schools provide the opportunity for observation of theories in practice. - (Spring) - Online - Asynchronous.

FINANCE

ECONOMICS AND PERSONAL FINANCE**Course: 6151Y****Grades 9-12. Prerequisite: None. Location: E. C. Glass and Heritage. Periods: 1.**

Students 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. Students are required to complete the EVERFI online module to satisfy the successful completion on an online course for graduation. Students must also take the W!SE Financial Literacy exam. The course incorporates all economics and financial literacy objectives included in the Code of Virginia §22.1-200-03B.

ECONOMICS AND PERSONAL FINANCE – SUMMER SESSION**Course: 6151YS****Rising Grades 10-12. Prerequisite: None. Location: E. C. Glass and Heritage. Periods: 1.**

This is a summer online course for students that have not taken the course during the school year. Students 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. Students are required to complete the EVERFI online module to satisfy the successful completion of an online course for graduation. Students must also take the W!SE Financial Literacy exam. The course incorporates all economics and financial literacy objectives included in the Code of Virginia §22.1-200-03B. **There is a fee associated with the summer course.**

ECONOMICS AND PERSONAL FINANCE – Longwood University – FINA150**Course: 6151YC****Grades Rising 11-12. Prerequisite: None. Location: Online through Longwood University. Periods: 1**

Students 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. Students must also take the W!SE Financial Literacy exam. The course incorporates all economics and financial literacy objectives included in the Code of Virginia §22.1-200-03B. Students must have a computer with both audio and video capability. Students may be required by the university to have a minimum 3.0 GPA. Students may be responsible for purchasing the required textbook and financial calculator (Texas Instrument BAII Plus recommended). Registration and tuition payment to Longwood University is required. Students could earn three college credits. This is a summer course but may be offered during the school year. Students may be responsible for all costs associated with this course.

ADVANCED PLACEMENT (AP) MICROECONOMICS & MACROECONOMICS**Course: 4439A/4449B****Grades 11-12. Full Credit Year Course.**

The first semester of this course (microeconomics) aims to provide a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economic system. It places primary emphasis on the nature and functions of product markets and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. The second semester (macroeconomics) explores the principles of economics that apply to an economic system as a whole. Particular emphasis will be placed on the study of national income and price-level determination, economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. All students are required to take both AP Microeconomics and AP Macroeconomics examinations in May.

HEALTH SCIENCES

Courses in this area can prepare students for careers in planning, managing, and providing therapeutic services, diagnostic services, health information science, support services, and biotechnology research and development.

INTRODUCTION TO HEALTH AND MEDICAL SCIENCES

Course: 8302Y

Grade 9-11. Prerequisite: None. Location: E. C. Glass and Heritage. Periods: 1.

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 emergency care. Throughout the course, instruction emphasizes safety, cleanliness, professionalism, accountability, and efficiency within the healthcare environment. Industry credentials: Virginia Workplace Readiness Skills.

Sequential options: Emergency Medical Telecommunications, Dental Careers I, Nurse Aide I, Sports Medicine I

DENTAL CAREERS I

Course: 6810Y

Grade 11. Prerequisite: Approved Application. Location: E. C. Glass. Periods: 2.

Students are introduced to careers in dentistry, including dentist (general and specialist), dental hygienist, dental assistant, dental laboratory technician, and dental receptionist. Students practice and learn many of the skills utilized in these professions while attaining the skills necessary to become entry-level dental assistants. Study includes infection control, Centers for Disease Control (CDC) guidelines and Occupational Safety and Health Administration (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.

Sequential options: Dental Careers II, Introduction to Health and Medical Sciences

DENTAL CAREERS II

Course: 6820Y

Grade 12. Prerequisite: Dental Careers I. Location: E. C. Glass. Periods: 2.

Units of study include medical emergencies, oral pathology, dental radiology, nutrition, pharmacology, and advanced laboratory techniques. In addition to attending classes, students have the opportunity to participate in internships at local private dental offices and public health dental facilities, where they observe and/or participate in the delivery of dental care.

Sequential options: Dental Careers I

NURSE AIDE I

Course: 8360Y

Grades 11. Prerequisite: Approved Application. Location: Heritage. Periods: 1.

The course emphasizes the study of nursing occupations as related to the healthcare system. Students study growth and development across the lifespan, simple body structure and function, and medical terminology. Students receive entry-level skill training in patient relationships, recording of vital signs, infection prevention, and general patient care. Students must maintain American Heart Association's Cardiopulmonary Resuscitation (CPR) & Emergency Cardiovascular Care (ECC) training during this course.

Sequential options: Nurse Aide II, Introduction to Health and Medical Sciences

NURSE AIDE II

Course: 8362Y

Grade 12. Prerequisite: Nurse Aide I. Location: Heritage. Periods: 2.

Nurse Aide II emphasizes body systems and diseases as related to advanced clinical care of medical-surgical patients, the chronically ill, and the elderly. Students receive skills training and hands-on clinical experiences in a healthcare setting. Work-based learning in a healthcare facility is part of the course. Students must maintain CPR and ECC training during this course. This course requires students to meet the Virginia Board of Nursing required clock hours to be eligible to take the National Nurse Aide Assessment Program (NNAAP) exam.

Healthcare facilities may require background checks, drug screening, and updated immunization records for students participating in a clinical experience.

Sequential options: Nurse Aide I

SPORTS MEDICINE I**Course: 5260Y****Grades 11-12. Prerequisite: Approved Application. Location: E. C. Glass and Heritage. Periods: 1.**

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. Sports medicine covers three aspects: recognition of injuries, prevention of injuries, and rehabilitation of injuries. Lab work with athletic teams may be required.

Sequential options: Sports Medicine II, Introduction to Health and Medical Sciences

SPORTS MEDICINE II**Course: 5261Y****Grade 12. Prerequisite: Sports Medicine I. Location: E. C. Glass and Heritage. Periods: 1.**

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. Lab work with athletic teams may be required.

Sequential options: Sports Medicine I

HOSPITALITY & TOURISM

Hospitality & Tourism encompasses the management, marketing and operations of restaurants and other food services, lodging, attractions, recreation events and travel related services.

INTRODUCTION TO CULINARY ARTS**Course: 6444Y****Grades 9-10. Prerequisite: None. Location: E. C. Glass and Heritage. Periods: 1.**

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

Sequential options: Culinary Arts I, Culinary Arts II, Culinary Arts Specialization

CULINARY ARTS I**Course: 6441Y****Grades 10-11. Prerequisite: Approved Application. Location: E. C. Glass and Heritage. Periods: 2.**

Culinary Arts I provides students with a foundational understanding of the food service industry and opportunities to build technical skills in food preparation and service. Students examine basic rules of kitchen safety and sanitation, of purchasing and receiving, and of fundamental nutrition. The curriculum incorporates math and science in culinary applications.

Sequential options: Introduction to Culinary Arts, Culinary Arts II, Culinary Arts Specialization

CULINARY ARTS II**Course: 6442Y****Grades 11-12. Prerequisite: Culinary Arts I. Location: E. C. Glass and Heritage. Periods: 2.**

Culinary Arts II students continue to acquire a comprehensive knowledge of the food service industry while refining their technical skills. Students apply kitchen safety and sanitation, nutritional principles, and advanced food-preparation techniques. Students complete work-based learning in venues such as the a la carte kitchen, the dining room, and catered functions.

Sequential options: Introduction to Culinary Arts, Culinary Arts I, Culinary Arts Specialization

CULINARY ARTS SPECIALIZATION**Course: 6443Y****Grade 12. Prerequisite: Culinary Arts I. Location: E. C. Glass and Heritage. Periods: 1.**

The Culinary Arts Specialization course provides students with skills and knowledge to pursue careers in the food service industry. In a hands-on environment, students apply nutritional principles, plan menus, use business and mathematics skills, select and maintain food service equipment, and adhere to safety and sanitation standards. Students specialize in one of the following four areas: Baking and Pastry Food-Preparation Techniques, Catering/Banquet Food-Preparation Techniques, Restaurant Operation Techniques and Quantity Food-Preparation Techniques.

Sequential options: Introduction to Culinary Arts, Culinary Arts I, Culinary Arts II

HUMAN SERVICES

Preparing individuals for employment in career pathways that relate to families and human needs.

COSMETOLOGY I

Course: 8340Y

Grade 11. Prerequisite: Approved Application. Location: Heritage. Periods: 3.

Students study hair, skin, nails and their related care as they practice procedures in a clinical lab setting. The first-year course emphasizes personal safety, professionalism, sanitation and disinfection of equipment and facilities. Students develop skills in shampooing and conditioning hair, as well as styling and cutting hair. Students are introduced to chemical texture services and develop skills in manicure and pedicure procedures. Industry Credentials: Cosmetology students must satisfy a minimum of 840 hours of instruction in a two-year sequence to be eligible to take the Board for Barbers and Cosmetology licensing examination. Upon successful completion of the program, students may earn the Virginia Board for Barbers and Cosmetology license.

Sequential options: Cosmetology II

COSMETOLOGY II

Course: 8350Y

Grade 12. Prerequisite: Cosmetology 1. Location: Heritage. Periods: 3.

Students 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, while gaining experience in providing facials, manicures, pedicures, and nail enhancements. Students are introduced to business management with a focus on managing a salon. Industry Credentials: Cosmetology students must satisfy a minimum of 840 hours of instruction in a two-year sequence to be eligible to take the Board for Barbers and Cosmetology licensing examination. Upon successful completion of the program, students may earn the Virginia Board for Barbers and Cosmetology license.

Sequential options: Cosmetology I

INFORMATION TECHNOLOGY – NETWORKING & CYBERSECURITY

Courses in this area can prepare students for entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services.

COMPUTER SYSTEMS TECHNOLOGY I

Course: 8540Y

Grades 9-11. Prerequisite: Approved Application. Location: Heritage. Periods: 1.

Students enter the world of computer technology and gain practical experience in assembling a computer system. Students will install, configure, and secure various operating systems. Students will troubleshoot computers, peripherals, and use diagnostic software. Students develop skills in computer networking and resource sharing. In addition, students explore the relationships between internal and external computer components.

Sequential options: Computer Systems Technology II

COMPUTER SYSTEMS TECHNOLOGY II

Course: 8550Y

Grades 10-12. Prerequisite: Computer Systems Technology I. Location: Heritage. Periods: 2.

This advanced course provides students with training in procedures for optimizing and troubleshooting concepts for computer systems, subsystems, and networks. Students explore the following: basic network design and connectivity, network documentation, network limitations and weaknesses, and network security, standards, and protocols. Students will gain a basic understanding of emerging technologies including unified communications, mobile, cloud, and virtualization technologies.

Sequential options: Computer Systems Technology I

CYBERSECURITY TECHNOLOGY SYSTEMS

Course: 8628Y

Grades 9-11. Prerequisite: Approved Application. Location: Heritage. Periods: 1.

Students enter the world of computer technology and gain practical experience in assembling a computer system. Students will install, configure, and secure various operating systems. Students will troubleshoot computers and use diagnostic software. They develop skills in computer networking and resource sharing. In addition, students explore the relationships between internal and external computer component.

Sequential options: Advanced Cybersecurity Technology Systems



CYBERSECURITY TECHNOLOGY SYSTEMS, ADVANCED**Course: 8629Y****Grades 10-12. Prerequisite: Approved Application. Location: Heritage. Periods: 2.**

This advanced course provides students with training in procedures for optimizing and troubleshooting concepts for computer systems, subsystems, and networks. Students explore the following: basic network design and connectivity, network documentation, network limitations and weaknesses, network security, standards and protocols. Students will gain a basic understanding of emerging technologies including unified communications, mobile, cloud, and virtualization technologies.

Sequential options: Cybersecurity Technology Systems

LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY

Courses in this area prepare students for careers in planning, managing, and providing legal, public safety, protective services, and homeland security, including professional and technical support services.

CRIMINAL JUSTICE I**Course: 8702Y****Grades 10-11. Prerequisite: Approved Application. Location: E. C. Glass. Periods: 1.**

Students are introduced to occupations within the criminal justice field and examine legal concepts in the criminal justice system. Students learn about causes and responses to crime, and the structure of court systems. Students work with equipment such as duty belts and training weapons to learn safe procedures for making traffic stops. They also utilize fingerprint kits and DNA swab kits to practice identifying, collecting, and packaging physical evidence. This course provides a foundation for career paths that include attorneys, forensics evidence examiners, and law enforcement/corrections officers.

Sequential options: Emergency Medical Telecommunications, Criminal Justice II

CRIMINAL JUSTICE II**Course: 8703Y****Grades 11-12. Prerequisite: Criminal Justice I. Location: E. C. Glass. Periods: 2.**

Students apply knowledge and experience acquired in Criminal Justice I to practical scenarios that include responding to calls for service, crime scene investigation, criminal investigation, and crisis intervention. Students explore trends in correctional standards and in identifying and preventing terror threats. Students demonstrate techniques of crime scene investigation to include photographing, sketching, and securing physical evidence in a mock crime scene, as well as apply workplace readiness skills through participation in a mock hiring process.

Sequential options: Criminal Justice I.

EMERGENCY MEDICAL TELECOMMUNICATIONS**Course: 8337Y**

Grades 10-12. Prerequisite: Approved Application. Location: E. C. Glass. Periods: 1.

This course is designed to develop entry-level skills needed in a telecommunications environment for rescue, fire and police. Students learn their role and responsibilities as a member of the health and public safety environment including the subjects of confidentiality, liability and legal issues involving emergency telecommunicators and their agencies. In addition, instruction may include the basics of medical laboratory procedures, pharmacology fundamentals, medical terminology and concepts, and communication skills essential for providing quality patient care. Industry Credentials: Virginia Workplace Readiness Skills.

Sequential options: Criminal Justice I, Introduction to Health and Medical Sciences

MANUFACTURING

Courses in this area can prepare students for careers in planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

PRECISION MACHINE TECHNOLOGY I**Course: 8450Y**

Grade 11. Prerequisite: Approved Application. Location: E. C. Glass. Periods: 1.

Course content includes safety awareness and the foundations of machining, including how to 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.

Sequential options: Precision Machine Technology II

PRECISION MACHINE TECHNOLOGY II**Course: 8460Y**

Grade 12. Prerequisite: Precision Machine Technology I. Location: E. C. Glass. Periods: 2.

Course content includes metal lathe work, drilling, milling machine, and speed and feed calculations. Drill press work includes drilling and countersinking. Also included is an introduction to computerized vertical milling machine and lathe. CNC machining operations are emphasized.

Sequential options: Precision Machine Technology I

MARKETING

Courses in this area can prepare students for careers in planning, managing, and performing marketing activities to reach organizational objectives.

ENTREPRENEURSHIP**Course: 6120Y**

Grades 9-12. Prerequisite: None. Location: Heritage. Periods: 1.

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 entrepreneurial venture, using design thinking and business model development. Students will learn about financial statements, marketing principles, sales and customer service, and basic economic principles for successful operation.

Sequential options: Accounting, Advanced Accounting, Business Law, Business Management, Computer Information Systems, Principles of Business and Marketing, Marketing, Advanced Marketing, Sports and Entertainment Marketing

MARKETING**Course: 6951Y**

Grades 10-12. Prerequisite: None. Location: Heritage. Periods: 1.

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.

Sequential options: Business Management, Principles of Business and Marketing, Marketing, Advanced Marketing, Sports and Entertainment Marketing, Entrepreneurship

MARKETING, ADVANCED**Course: 6960Y**

Grade 10-12. Prerequisite: Marketing. Location: Heritage. Periods: 1.

Students build on knowledge gained in a prior Marketing course. Students participate in supervisory and management activities focusing on the marketing mix, purchasing, financing, human resources, global marketing, pricing, and emerging technologies. Students will prepare for advancement in marketing careers and postsecondary education.

Sequential options: Marketing, Principles of Business and Marketing, Marketing, Sports and Entertainment Marketing, Entrepreneurship

PRINCIPLES OF BUSINESS AND MARKETING**Courses: 6115Y**

Grades 9-12. Prerequisite: None. Location: Heritage. Periods: 1.

Students explore the role of business and marketing in the free enterprise system and the global economy. They study how the American economy operates as they prepare to make decisions as consumers, wage earners, and citizens. Industry Credentials: Virginia Workplace Readiness Skills.

Sequential options: Accounting; Advanced Accounting; Business Law; Business Management; Computer Information Systems; Digital Applications; Design, Multimedia and Web Technologies; Marketing; Advanced Marketing; Sports and Entertainment Marketing; Entrepreneurship

SPORTS AND ENTERTAINMENT MARKETING**Course: 6942Y**

Grades 10-12. Prerequisite: None. Location: Heritage. Periods: 1.

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

Sequential options: Marketing, Advanced Marketing, Principles of Business and Marketing, Entrepreneurship

TECHNOLOGY EDUCATION & ENGINEERING

Courses in this area can prepare students for careers in planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, and engineering) including laboratory and testing services, and research and development services.

ENGINEERING EXPLORATION**Course: 8492Y**

Grades 9-11. Prerequisite: None. Location: Heritage. Periods: 1.

Students examine technology and engineering fundamentals in relation to solving real-world problems. Students investigate engineering history, including major engineering achievements, and they examine the principle engineering specialty fields and their related careers. Students practice engineering fundamentals, using mathematical and scientific concepts, and they apply the engineering design process through participation in hands-on engineering projects. Students communicate project-related information through team-based presentations, proposals, and technical reports.

Sequential options: Engineering Studies

ENGINEERING STUDIES**Course: 8491Y**

Grades 10-12. Prerequisite: None. Location: Heritage. Periods: 1.

Designed for students who intend to pursue engineering studies in college, Engineering Studies prepares students by emphasizing integration of mathematics, science, and English concepts and skills into engineering problems in a curriculum demanding rigorous study habits. Students are encouraged to become routinely inquisitive through brainstorming and prototyping. Students practice engineering skills and communication of technical information while applying the engineering design process to complete engineering projects.

Sequential options: Engineering Explorations

TECHNOLOGY FOUNDATIONS**Course: 8403Y**

Grades 9-12. Prerequisite: None. Location: Heritage. Periods: 1.

Students use tools to build and control objects and systems using engineering design. Students will learn about materials, energy, and engineering processes. Students design, create, and assess innovations, systems, and products to learn about how and why technology works. This introductory course is a prerequisite for Technology Transfer.

Sequential options: Technology Transfer

TECHNOLOGY TRANSFER**Course: 6650Y**

Grades 10-12. Prerequisite: Technology Foundations. Location: Heritage. Periods: 1.

Students learn how existing technologies developed for one purpose can be applied to a different function. Groups work together, applying science, technology, engineering and mathematics (STEM) concepts to projects. Students engage in hands-on activities to learn that the transfer of a technology from one society to another can cause cultural, social, economic, and political challenges. Industry Credentials: Virginia Workplace Readiness Skills.

Sequential options: Technology Foundations

COMMUNICATIONS SYSTEMS**Course: 8415Y**

Grades 9-12. Prerequisite: None. Location: E. C. Glass and Heritage. Periods: 1.

This Technology Education course provides experiences in the fields of imaging technology, graphic production, video and media, technical design, and various modes of communicating information through the use of data. Students develop critical-thinking and problem-solving skills using the universal systems model. Students also learn about the impact of communication on society and potential career fields relating to communications. Industry credentials: Virginia Workplace Readiness Skills.

Sequential options: Video and Media Technology

VIDEO AND MEDIA TECHNOLOGY**Course: 7450Y**

Grades 10-12. Prerequisite: None. Location: E. C. Glass and Heritage. Periods: 1.

This course offers students a hands-on opportunity to study all aspects of video and media production. Students will conceptualize, plan, and contribute through all production phases: preproduction, production, and postproduction. In addition, students will practice various methods of gathering and recording information and creating novel content to create a variety of video and media productions while operating studio editing software and video and audio equipment. Industry credentials: Virginia Workplace Readiness Skills.

Sequential options: Communications Systems

TRANSPORTATION, DISTRIBUTION & LOGISTICS

Courses in this area can prepare students for careers in planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

AUTOMOTIVE TECHNOLOGY I**Course: 8131Y**

Grades 9-10. Prerequisite: None. Location: E. C. Glass. Periods: 1.

Students explore, handle, and perform basic functions in engine repair, automatic transmission and transaxle, manual drive train 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.

Sequential options: Automotive Technology II

AUTOMOTIVE TECHNOLOGY II**Course: 8142Y**

Grades 10-11. Prerequisite: Automotive Technology I. Location: E. C. Glass. Periods: 2.

Students build upon their basic knowledge of automotive technology, exploring advanced tasks in engine repair, transmissions, suspension, steering systems and brakes. They also learn about electrical and HVAC systems. Upon successful completion of the course, students may be eligible to take the Automotive Service Excellence (ASE) Student Certification examination.

Sequential options: Automotive Technology I

AUTOMOTIVE TECHNOLOGY III**Course: 8153Y**

Grades 11-12. Prerequisite: Automotive Technology II. Location: E. C. Glass. Periods: 2.

This course prepares students to perform automotive diagnosis and repairs in the following areas: engine repair, cooling systems, transmission and transaxle, manual drive trains and axles, suspension and steering, wheel and tire, brakes, electrical/electronic systems, HVAC, and engine performance. Students are provided with more advanced instruction in all systems as they prepare for the Automotive Service Excellence (ASE) certification examinations.

JUNIOR RESERVE OFFICER TRAINING PROGRAMS

Air Force Junior ROTC Program - E. C. Glass High School

The mission of Air Force Junior ROTC is to "Develop citizens of character dedicated to serving their nation and community." The program achieves this through classroom education in air and space fundamentals and hands on learning opportunities. AFJROTC is a citizenship training program designed to educate and train high school cadets in citizenship, promote community service, instill personal responsibility, character, and self-discipline. It teaches orderliness, patriotism, personal honor, and self-reliance. Coursework includes the social and physical sciences. Academic instruction topics range from aircraft design, aerospace propulsion systems, and the history of flight. There is no future obligation to the military services or college level senior ROTC programs. Uniforms are worn one day per week and during special functions.

AIR FORCE JROTC I

Courses: 5750Y

Grades 9-12. Prerequisite: None. Location: E. C. Glass.

The introductory Air Force JROTC course focuses on aerospace science, including aviation history, principles of aircraft flight and navigation, development of aerospace power, aerospace vehicles, rocketry, space and technology programs, and the aerospace industry. Students explore Air Force traditions, customs, character, and the foundations of U.S citizenship. Leadership education develops leadership skills, acquaints students with the practical applications of life skills, and includes a drill and ceremonies component.

Sequential option: Air Force JROTC II

AIR FORCE JROTC II

Courses: 5760Y

Grades 10-12. Prerequisite: Air Force JROTC I. Location: E. C. Glass.

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

Sequential option: Air Force JROTC I

AIR FORCE JROTC III

Courses: 5770Y

Grades 10-12. Prerequisite: Air Force JROTC II. Location: E. C. Glass.

Students explore the Air Force JROTC program, with instruction focusing on aerospace science, including astronomy, space exploration, the development of air power, aerospace vehicles, and rocketry; life skills, career opportunities, and personal wellness. Aerospace science acquaints students with the elements of aerospace and the aerospace environment and introduces them to the history and development of air power. Leadership education develops leadership skills, acquaints students with the practical applications of life skills and includes a drill and ceremonies component. Instruction on effective communication and management techniques, human relations skills, and postsecondary education and career opportunities is also included.

AIR FORCE JROTC IV

Courses: 5780Y

Grades 10-12. Prerequisite: Air Force JROTC III. Location: E. C. Glass.

Students explore the Air Force JROTC program, focusing on aerospace science, the fundamentals of management, and personal wellness. Aerospace science acquaints students with the elements of aerospace and the aerospace environment and introduces them to the history and development of air power. Leadership education includes a drill and ceremonies component.

Marine Corps ROTC Program – Heritage High School

This leadership program is a three-year progression of academic courses that can be selected by anyone regardless of grade level. Participation as a fourth year student is limited to individuals selected by the leadership department chair as exceptional candidates to fill student leadership positions. It is possible to be qualified but not selected due to limited availability of positions.

This program of instruction is designed to emphasize development of positive character traits, self-discipline, responsibility for self and others, and leadership skills. This program is not intended to recruit students for military service. The program develops responsible citizens using the military as a role model for teaching these positive lessons. Instructional goals include curriculum in the subjects of order drill, marksmanship, physical fitness, leadership traits/principles, orienteering and mentorship. All students must maintain a 2.0 GPA to remain active in the program. Course Prerequisites:

- 1. Students must have a completed school physical and be able to participate in physical fitness activities such as calisthenics, running, hiking, climbing, and jumping. Inability to participate must be temporary and documented by appropriate medical authority.*
- 2. Students must conform to U. S. Marine Corps standards regarding wearing of the uniform, haircuts/hairstyle/color, make-up/jewelry, body piercing, tattoos, shave and fingernail polish. Military uniforms are worn once per week and at special functions.*

3. *Students must be willing to follow the direction given by the teacher and students in leadership positions acting in accordance with the rules and articles governing the program.*
4. *Students must be willing to participate in community service activities as extracurricular events necessary for attainment of points required for promotion to higher position within the program. (Simply attending class during the school day will not be sufficient to earn advancement and continuance in the program.)*

MARINE CORPS JROTC I**Courses: 5710Y**

Grades 9-12. Prerequisite: Approved Application. Location: Heritage.

The Marine Corps Junior Reserve Officer Training Corps (JROTC) program is designed to teach leadership skills, character development, self-discipline, and citizenship through the study and practical application of United States Marine Corps (USMC) leadership traits and principles. Students are introduced to general military subjects, leadership, citizenship, personal growth and responsibilities, public service, and career exploration.

Sequential option: Marine Corps JROTC II

MARINE CORPS JROTC II**Courses: 5720Y**

Grades 10-12. Prerequisite: Marine Corps JROTC I. Location: Heritage.

Students are developing and applying knowledge in the second year of the Junior Reserve Officer Training Corps (JROTC) program. JROTC is a program designed to teach leadership skills, character development, self-discipline, and citizenship through the study and practical application of United States Marine Corps (USMC) leadership traits and principles. Specifically, students are developing and applying their knowledge of general military subjects, leadership, citizenship, personal growth and responsibilities, public service, and career exploration in the second year of this program.

Sequential option: Marine Corps JROTC I

MARINE CORPS JROTC III**Courses: 5730Y**

Grades 10-12. Prerequisite: Marine Corps JROTC II. Location: Heritage.

Students are applying and mastering knowledge in the third year of the Junior Reserve Officer Training Corps (JROTC) program. JROTC is a program designed to teach leadership skills, character development, self-discipline, and citizenship through the study and practical application of United States Marine Corps (USMC) leadership traits and principles. Specifically, students are applying and mastering knowledge of general military subjects, leadership, citizenship, personal growth and responsibilities, public service and career exploration.

MARINE CORPS JROTC IV**Course: 5740Y**

Grades 10-12. Prerequisite: Marine Corps JROTC III. Location: Heritage.

Students are mastering knowledge in the fourth year of the Junior Reserve Officer Training Corps (JROTC) program. JROTC is a program designed to teach leadership skills, character development, self-discipline, and citizenship through the study and practical application of United States Marine Corps (USMC) leadership traits and principles. Specifically, students are mastering knowledge of general military subjects, leadership, citizenship, personal growth and responsibilities, public service, and career exploration.



CULTURAL ARTS

Education and engagement in cultural arts are essential parts of the school curriculum and an important component in the educational program of every student in Lynchburg City Schools. Education in cultural arts is an integral part of human development as evidenced by brain research. Our fine arts department focuses on the disciplines of music, theatre, and visual arts. Study in the arts is integral to our society and is a part of the cultural heritage of every American. The arts are what make us most human, most complete as people. The arts develop neural systems that produce benefits ranging from fine motor skills to creativity.

MUSIC

Band classes at the high school level are performance oriented and require the recommendation of the instructor for admission. Participation in performances and rehearsals outside school hours are required. Students will be recommended for the most appropriate program. Marching Band is an after-school activity that begins two weeks before school starts and continues through the fall season. It is extracurricular and carries no academic credit. Marching Band may be activated periodically in the spring and summer. Concerts are performed during the winter and spring. Although all band students are encouraged to perform in the Marching Band, it is not an absolute requirement. Non-band students are also eligible to try out for Marching Band as either musicians or flag and rifle corps members. Chorus classes at the high school include both introductory and performance oriented programs. All require placement by or recommendation of the instructor. Both the Concert Choir (Chorus II) and the Ensemble (Chorus III) require participation in performances and rehearsals during and outside school hours. Orchestra instruction at the high school level is performance oriented and some afternoons and evenings are required for rehearsals and performances.

CONCERT BAND I

Course: 5340Y

Grades 9-12. Full Credit Year Course. Prerequisite: Staff Recommendation.

Topics include developing competency in sight-reading, dynamics, rhythm interpretation, balance, and intonation.

SYMPHONIC BAND I

Course: 5350Y

Grades 9-12. Full Credit Year Course. Prerequisite: Director's Approval.

Content includes the development of individual competency in sight reading, dynamics, rhythmic interpretation, intonation, and the concepts of ensemble performance.

JAZZ ENSEMBLE**Course: 5360Y**

Grades 9-12. Full Credit Year Course. Prerequisite: Director's Approval.

A study of the jazz idiom and the techniques related to playing the different styles with an introduction to basic improvisational skills. Content includes development of individual competency in sight reading, dynamics, rhythm interpretation, balance, and intonation.

WIND ENSEMBLE**Course: 5370Y**

Grades 9-12. Full Credit Year Course. Prerequisite: Director's Approval and Audition.

Content includes a continuing development of skills with a focus on performance at the highest possible level.

PERCUSSION TECHNIQUES**Course: 5380Y**

Grades 9-12. Full Credit Year Course. Prerequisite: Director's Approval and Audition.

Content includes the development of skills on drums, xylophone, timpani, bells, and music literature.

CHORUS I**Course: 5460Y**

Grades 9-12. Full Credit Year Course. Prerequisite: None. Placement by Instructor (no audition required).

Content includes instruction in music fundamentals, three and four part singing, and correct vocal techniques. Placement will be according to vocal range.

CHORUS II - CONCERT CHOIR**Course: 5470Y**

Grades 9-12. Full Credit Year Course. Prerequisite: Staff Recommendation (vocal audition required)

Content includes more difficult part work and public performances.

CHORUS III - ENSEMBLE**Course: 5480Y**

Grades 9-12. Full Credit Year Course. Prerequisite: Staff Recommendation.

Content includes a more extensive variety of music, both for reading skills and public performance, and a particular emphasis on the development of individual skills. Afternoon and evening practices are required in preparation for performances. Choreography and showmanship are included.

ORCHESTRA I**Course: 5410Y**

Grades 9-12. Full Credit Year Course. Prerequisite: Staff Recommendation.

Content includes opportunity for string players to develop greater facility in sight reading, bowing and articulation.

ORCHESTRA II**Course: 5420Y**

Grades 9-12. Full Credit Year Course. Prerequisite: Director's Approval (audition required).

Content includes advanced positions, bowings, and interpretations using standard orchestra and string ensemble music. It is intended for students who have reached a high degree of performance proficiency.

BEGINNING MIDI AND COMPUTER APPLICATIONS IN MUSIC**Course: 5430Y**

Grades 10-12. Heritage High only. Full Credit Year Course. Prerequisite: Some music background required.

This course is an introduction to computer applications currently being used by composers, performers, and music educators. Topics to be covered include music notation and sequencing software, live MIDI performance techniques, educational software, CD ROM interactive applications, Internet resources, and a history of music technology.

ADVANCED PLACEMENT (AP) MUSIC THEORY**Course: 5439Y**

Grades 10-12. Full Credit Year Course. Prerequisite: Staff recommendation based on the ability to read and write musical notation.**Also recommended: concurrent enrollment in a music course.**

This course introduces the student to musicianship, theory, musical materials and procedures. Integrates aspects of melody, harmony, texture, rhythm, form, musical analysis, elementary composition and, to some extent, history and style. Musicianship skills such as dictation and other listening skills, sight-singing, and keyboard harmony may be taught as a part of the course. **All students are required to take the advanced placement examination in May.**

ART

Two semesters of Art I are prerequisite to most other art courses. Although instructional materials are provided, the student is often required to provide materials for individual projects that he/she retains. In addition, a lab fee is often required to cover the costs of consumable materials. Several advanced placement courses are available in the curriculum.

ART I Course 5510Y

Grades 9-12. Full Credit Year Course. Prerequisite: None.

Art I emphasizes the development of the ability to recognize visual arts content, concepts, and skills needed to create, discuss, and understand original works of art. Students will study and use artmaking processes to communicate ideas and personal life experiences. The first semester of this course is an exploration of a variety of media, both two-dimensional and three-dimensional, with the elements of art and the development of basic studio skills as the central focus. The second-semester content includes additional media exploration and studio skills development with a central focus on composition through the study of the design process, including brainstorming, preliminary sketching, planning, reflecting, refining, elaborating, and researching.

ART II: DRAWING AND PAINTING Course: 5520Y

Grades 10-12. Grade 9 with teacher recommendation. Full Credit Year Course. Prerequisite: Art I or Staff Recommendation.

Art II 2-D focuses on both drawing and painting and is designed for students exploring these two types of art. In general, students will extend and refine the ability to investigate and respond to the visual arts. Through the design process, students will examine the importance of content, concepts, and skills involved in the creation of original works of art and design. Drawing content includes the interpretation of the three-dimensional environment to a two-dimensional surface. Realistic, naturalistic, and contemporary drawing is part of the course of study. Subject matter such as still life, figure drawing, perspective studies, and nature. Painting content introduces students to the basic techniques in opaque and transparent media, such as acrylics, oils, and watercolor. Students will receive extensive instruction and practice in brush and media control in both hard edge and blended edge technique.

ART II: THREE DIMENSIONAL Course: 5530Y

Grades 10-12. Grade 9 with teacher recommendation. Full Credit Year Course. Prerequisite: Art I or Staff Recommendation.

Students will explore and use a variety of three-dimensional media. Techniques will include both traditional and contemporary expression. The concepts of relief and in-the-round, in functional and non-functional directions, will be explored as students produce original works of art and design.

PHOTOGRAPHY Course: 5560Y

Grades 10-12. Full Credit Year Course. Prerequisite: Art I or Senior Exemption.

This course is designed so that students explore such fields as Photo Journalism, Computer Graphics, and Fine Art Photography. Composition, lighting and utilizing special effects available in digital cameras are covered. Extensive use of digital photo editing software will be explored. Comfort with computer technology is recommended. Students will need to have a camera available to complete required work.

GRAPHIC ART Courses: 5580A & 5580B

Grades 10-12. 1st or 2nd Semester. Full Credit Year Course. Prerequisite: Art I or Staff Recommendation.

This course covers art as it is used in careers. An exploration of various careers and skills and techniques will be the central focus. Visual design and communication will be explored in various media. Vocabulary, technical skills, and creative direction will be major elements of evaluation. Comfort with computer technology is recommended. Course content will also include study of traditional printmaking processes with an emphasis on design and composition.

ADVANCED STUDIO ART Course: 5517Y

Grades 10-12. Full Credit Year Course. Prerequisite: Two Credits in Art and Staff Recommendation.

This advanced-level course expands on the content presented in the introductory and second-level courses and allows students to explore areas of interest in greater depth. Students will have the opportunity to develop personal directions in the production of their works of art. Students will continue to develop and maintain a portfolio containing works selected on the basis of technical skill, personal style, direction, and intended purpose. This course may be taken repeatedly for elective credit.

ADVANCED PORTFOLIO ART Course: 5527Y

Grades 11 & 12. Full Credit Year Course. Prerequisite: Staff Recommendation.

This course is structured around the continued building of a professional art portfolio which shows evidence of quality, concentration, and breadth of work produced throughout the high school art program. Students may develop a drawing portfolio (using a variety of 2-D media), a two-

dimensional portfolio (using a variety of 2-D media with a design and graphics focus), or a three-dimensional portfolio (using a variety of 3-D media). Students must attend one portfolio day from surrounding colleges. This course may be taken repeatedly for elective credit as long as a new portfolio type is chosen.

ADVANCED PLACEMENT (AP) ART AND DESIGN**Course: 5519Y**

Grades 11 & 12. Full Credit Year Course. Prerequisite: Staff Recommendation.

This college-level course is structured around the portfolio requirements set by the College Board evaluation program. In early May, students submit actual works of art and digital images of works for their portfolios. These works should demonstrate artistic growth and development. Students must submit a portfolio. All portfolios are assessed by six college art professors who apply standardized scoring criteria. Students may develop a drawing portfolio (using a variety of 2-D media), a two-dimensional portfolio (using a variety of 2-D media with a design and graphics focus), or a three-dimensional portfolio (using a variety of 3-D media). This course may be taken repeatedly for elective credit as long as a new portfolio type is chosen.

ADVANCED PLACEMENT (AP) ART HISTORY**Course: 5529Y**

Grades 11 & 12. Full Credit Year Course. Prerequisite: Previous Experience in Advanced Placement.

In this college-level, elective course, students will learn to analyze critically works of art within diverse historical and cultural contexts, considering issues such as politics, religion, patronage, gender, and ethnicity. Students will explore major forms of artistic expression including architecture, sculpture, painting, and other media across a variety of cultures. Additionally, students will learn about the purpose and function of art as they develop their ability to articulate visual and art historical concepts in verbal and written form. This course is for students with a strong desire to explore, study, and write about the history of art. All course activities are in preparation for the AP exam. All students are required to take the AP examination in May.

THEATRE ARTS

Several opportunities are offered for students to develop their knowledge and skills in the dramatic arts, both "behind the scenes" and on stage. An active Drama Club and public performances are important parts of the program. Additional drama courses may be taken through Independent Study.

INTRODUCTION TO THEATRE**Course: 5610Y**

Grades 9-12. Full Credit Year Course. Prerequisite: None.

This course is a basic introduction to acting and other theatre skills. Course content includes units in Theatre History, Technical Theatre, Games, Improvisation, Stagecraft, Theatre Vocabulary and Terminology.

Sequential option: Dance, Acting I, Applied Theatre Tech, Technical Theatre I Design, Technical Theatre I Production

INTRODUCTION TO FILM STUDIES**Course: 5670Y**

Grades 9-12. Full Credit Year Course. Prerequisite: None.

This course is a basic introduction to cinema and the main genres of film. Course content includes History of Cinema, Cinematic Genres, Cinematic Critiques, and Film Acting.

DANCE**Course: 5611Y**

Grades 9-12. Full Credit Year Course. Prerequisite: Introduction to Theatre or Introduction to Film Studies or Staff Recommendation.

This course focuses on student wellness, posture improvement, strength and alignment in addition to teaching the various styles of dance prevalent in the musical theatre. Students will gain a work in each dance style while learning how it has been used to develop and advance musical theatre. This course may be taken repeatedly for elective credit.

ACTING I**Course: 5620Y**

Grades 9-12. Full Credit Year Course. Prerequisite: Introduction to Theatre or Introduction to Film Studies or Staff Recommendation.

This course is intermediate in nature and includes the study of specific acting techniques, physical training and vocal training for the stage. Students will perform daily to apply games and techniques to scene study and performance. The course is designed for students with a focused interest in performance or for developing confidence in public speaking and social-emotional enrichment. This course is fully reliant on daily physical participation and may be taken repeatedly for elective credit.

Sequential option: Acting II

ACTING II**Course: 5630Y**

Grades 11 & 12. Full Credit Year Course. Prerequisite: Acting I and Staff Recommendation.

This course is entirely performance-oriented and is geared toward preparation for VTA and VHSL acting competitions. It prepares individuals for college and summer auditions. Students will work individually on scenework and collectively in a One Act production. This course may be taken repeatedly for elective credit.

Sequential option: Acting I

PLAYWRITING**Course: 5622A**

Grades 11 & 12 or Grade 10 with Staff Recommendation. 2nd Semester Only. One-half Credit Course. Prerequisite: Acting I, Creative Writing, Poetry, Technical Theatre I Design, Introduction to Film Studies or Staff Recommendation.

This course will focus Docudrama, dialogue, the analysis of dramatic form and style; examination of plot, character, and thought; and expression through dialogue and stage directions. It will include the practical application of theory by writing monologues, scenes, character profiles and will culminate in both individual and collaborative writing of short plays.

DIRECTING**Course: 5623B**

Grades 11 & 12. 1st Semester Only. One-half Credit Course. Prerequisite: Acting I, Acting II, Musical Theatre, Technical Theatre I Design or Introduction to Film Studies.

This course offers students an opportunity to learn the techniques of directing a play. Each student will be required to direct two graded scenes in public performance during the semester.

TECHNICAL THEATRE I DESIGN**Course: 5641A & 5641B**

Grades 9-12. 1st or 2nd Semester. One-half Credit Course. Prerequisite: Introduction to Theatre or Introduction to Film Studies.

This course introduces students to the principles of design as they apply to performance and the design process. This is primarily a project-based class in which students will deal with the basic principles of scenic, costume, sound, and lighting design.

Sequential option: Technical Theatre II

TECHNICAL THEATRE I PRODUCTION**Course: 5642B**

Grades 9-12. 2nd Semester Only. One-half Credit Course. Prerequisite: Introduction to Theatre, Introduction to Film Studies and Staff Recommendation.

This course is an introduction to scenic construction, lighting, sound, stage organization, and terminology. Students will study the methods and materials of set construction and the methods of implementing lighting, costumes, props and sound within a production.

Sequential option: Technical Theatre II

TECHNICAL THEATRE II**Course: 5651Y**

Grades 10-12. Full Credit Year Course. Prerequisite: Technical Theatre I Design, Technical Theatre I Production or Staff Recommendation.

This course will focus on advanced design and implementation of elements in the theatre. As part of this course, students will be involved in the backstage aspects of school productions. This course may be taken repeatedly for elective credit.

STUDENT INTERN PROGRAMS

ELEMENTARY OR MIDDLE SCHOOL STUDENT INTERN**Course: 7130Y**

Grades 11 & 12. Full Credit Year Course. Prerequisite: Staff Recommendation.

Content includes assignment to an elementary or middle school teacher one period daily. Students may tutor, help with projects, read stories, or perform clerical duties. In addition, middle school student interns may work in lab settings. Seminars are presented by educators in various fields during the semester. This course offers a career exploration opportunity for students considering elementary education or a child related field. Students must have their own transportation or be assigned to a school within walking distance.

GENERAL STUDENT CAREER INTERN**Course: 7131Y**

Grade 12 Only. Full Credit Year Course. Prerequisite: Staff Recommended and Approved Application.

This course is ONLY available to seniors who want to gain experience in a career field which they are interested in pursuing after high school. Students must submit an application for acceptance in the program to their counselor during the registration process in Grade 11. Students will

choose their internship placement from the list of cooperating businesses or by working with the teacher and business to secure placement. During the first five weeks of the course, students will complete the Workplace Readiness Skills curriculum. Topics include initiative, work ethic, teamwork, confidentiality, independence, communications, problem solving, decision making, computer applications, and employment issues. Students will be required to serve three hours a week in their internship. Students will be responsible for their own transportation.

TEACHER/OFFICE INTERN**Courses: 7110A & 7110B**

Grades As Determined by Administrator. 1st or 2nd Semester. One-fourth Credit. Prerequisite: Staff Recommended.

Course includes opportunities to assist staff. This course is graded as pass or fail. This course may be taken repeatedly for elective credit.

NEWSPAPER & YEARBOOK

NEWSPAPER**Course: 7410Y**

Grades 10-12. Full Credit Year Course. Prerequisite: Staff Recommendation.

Content includes preparation, editing and publication of school newspaper. This course meets daily, just as other credit-bearing courses. This course may be taken repeatedly for elective credit.

YEARBOOK**Course: 7420Y**

Grades 10-12. Full Credit Year Course. Prerequisite: Staff Recommendation.

Content includes preparation, editing and publication of school yearbook. This course meets daily, just as other credit-bearing courses. This course may be taken repeatedly for elective credit.

LEADERSHIP

LEADERSHIP TRAINING**Courses: 7770Y**

Grades 9-12. 1st or 2nd Semester. One-half Credit Course. Full Credit Year Course. Prerequisite: Student Interest and Staff Recommendation.

This is a one semester elective credit course that provides opportunities for students to learn about and engage in leadership activities. This course may be taken repeatedly for elective credit.

ACADEMIC SUPPORT

These courses can be taken repeatedly for elective credit.

SOL REVIEW FOR ENGLISH: READING 11**Courses: 7211A & 7211B**

Grade 12. 1st or 2nd Semester. One-half Credit Course. Prerequisite: Passed English 11 but failed Reading SOL test.

A one semester elective credit course including a review of the standards covered on the English: Reading/Literature/Research SOL test for 11th grade. This course will focus on the content of the test and on study and testing-taking strategies. Specific diagnostic information from practice SOL testing will guide direct teaching and computer-assisted instruction targeting each student's knowledge and skill deficits.

SOL REVIEW FOR ENGLISH: WRITING 11**Course: 7212A**

Grade 12. 1st Semester. One-half Credit Course. Prerequisite: Passed English 11 but failed Writing SOL test.

A one semester elective credit course including a review of the standards covered on the English: Writing SOL test for 11th grade. This course will focus on the content of the test and on study and testing-taking strategies. Specific diagnostic information from practice SOL testing will guide direct teaching and computer-assisted instruction targeting each student's knowledge and skill deficits.

SOL REVIEW FOR MATH**Courses: 7221A & 7221B**

Grades 10-12. 1st or 2nd Semester. One-half Credit Course. Prerequisite: Passed a math course (Algebra 1, Geometry, or Algebra 2) but failed the associated SOL test.

A one semester elective credit course including a review of the math standards covered on the appropriate math SOL test. This course will focus on the content of the test and on study and testing-taking strategies. Specific diagnostic information from practice SOL testing will guide direct teaching and computer-assisted instruction targeting each student's knowledge and skill deficits.

SOL REVIEW FOR SCIENCE**Courses: 7231A & 7231B**

Grades 10-12. 1st or 2nd Semester. One-half Credit Course. Prerequisite: Passed a science course (Earth Science or Biology) but failed the associated SOL test.

A one semester elective credit course including a review of the science standards covered on the appropriate science SOL test. This course will focus on the content of the test and on study and testing-taking strategies. Specific diagnostic information from practice SOL testing will guide direct teaching and computer-assisted instruction targeting each student's knowledge and skill deficits.

SOL REVIEW FOR SOCIAL STUDIES**Courses: 7241A & 7241B**

Grades 10-12. 1st or 2nd Semester. One-half Credit Course. Prerequisite: Passed a social studies course (World History and Geography 1, World History and Geography 2, Geography, or U.S. History) but failed the associated SOL test.

A one semester elective credit course including a review of the social studies standards covered on the appropriate social studies SOL test. This course will focus on the content of the test and on study and testing-taking strategies. Specific diagnostic information from practice SOL testing will guide direct teaching and computer assisted instruction targeting each student's knowledge and skill deficits.

ENGLISH AS A SECOND LANGUAGE (ESL) SUPPORT**Courses: 1930A & 1930B**

Grades 9-12. 1st or 2nd Semester. One-half Credit Course. Prerequisite: Identified ESL students only.

This is a one semester elective credit course that provides additional support to assist students with Limited English Proficiency (LEP) in their acquisition of English language knowledge and skills.

ACCELERATING READING I**Course: 1192Y**

Grade 9. Full Credit Year Course. Prerequisite: Identified students only.

This is an elective credit course that provides additional strategies and skills for students who are working to improve their vocabulary, reading fluency and comprehension.

ACCELERATING READING II**Course: 1130Y**

Grades 10-12. Full Credit Year Course. Prerequisite: Identified students only.

This is an elective credit course that provides additional strategies and skills for students who are working to improve their vocabulary, reading fluency and comprehension.

FOUNDATIONAL STUDY SKILLS**Course: 7660Y**

Grades 9-12.

This is an elective credit course designed to teach students organizational techniques and study skills. Support with time management, studying, taking notes, and organizing academic materials will be provided.

STUDY SKILLS FOR SUCCESS IN ADVANCED COURSES**Course: 7620Y**

Grades 9-12.

This is an elective credit course to support students who are taking an advanced, AP, or Dual Enrollment course with study skills for enhanced success in the advanced course.

MATH LAB**Course: 7222Y**

Grades 9-10. Full Credit Year Course. Prerequisite: Identified students only.

This course is designed to strengthen essential computational, pre-algebraic, and algebraic skills while the student is concurrently enrolled in Algebra 1. The course is provided using a research-based, computer-assisted instructional program with topics aligned with the content in the core Algebra 1 course. This course awards elective credit.

ADDITIONAL COURSES OFFERED TO ELIGIBLE STUDENTS

The following courses are designed to provide students with identified disabilities the knowledge and skills necessary to qualify for a diploma as determined by the IEP team.

READING I (1040Y), Grades 9-12. Full Credit Year Course. Prerequisite: None.

READING II (1041Y), Grades 9-12. Full Credit Year Course. Prerequisite: Reading I

READING III (1042A, 1042B), Grades 9-12. Full Credit Year Course. Prerequisite: Reading II

EDUCATION FOR EMPLOYMENT (6030Y), Grades 9-12. Full Credit Year Course. Prerequisite: None.

WORK EXPERIENCE 1 (6040Y), Grades 9-12. Full Credit Year Course. Prerequisite: Education for Employment.

This is a double-period course. This same course is available in a single period for one-half credit per semester under course number 6041 A&B.

WORK EXPERIENCE II (6050Y), Grades 9-12. Full Credit Year Course. Prerequisite: Work Experience I.

This is a double-period course. This same course is available in a single period for one-half credit per semester under course number 6051.

INTERPERSONAL SKILLS (5050Y), Grades 9-12. Full Credit Year Course. Prerequisite: None.

OCCUPATIONAL SKILLS (5051Y), Grades 9-12. Full Credit Year Course. Prerequisite: None.

RECREATION AND LEISURE SKILLS (5052Y), Grades 9-12. Full Credit Year Course. Prerequisite: None.

FUNCTIONAL ACADEMICS (5053Y), Grades 9-12. Full Credit Year Course. Prerequisite: None.

DAILY LIVING SKILLS (5070Y), Grades 9-12. Full Credit Year Course. Prerequisite: None.

The following courses are designed to provide students with identified disabilities the knowledge and skills necessary to qualify for an Applied Studies Diploma.

FUNCTIONAL MATH (2030Y), Grades 9-12. Full Credit Year Course. Prerequisite: None

FUNCTIONAL READING (1030Y), Grades 9-12. Full Credit Year Course. Prerequisite: None

FUNCTIONAL HISTORY (4030Y), Grades 9-12. Full Credit Year Course. Prerequisite: None

FUNCTIONAL SCIENCE (3030Y), Grades 9-12. Full Credit Year Course. Prerequisite: None

ADAPTIVE PHYSICAL EDUCATION (5071 A & B), Grades 9-12. 1st or 2nd Semester. One-half Credit Per Semester, Prerequisite: None.

CAREER BASED JOB TRAINING (5072 A & B), Grade 9-12. 1st or 2nd Semester. One-half Credit Per Semester, Prerequisite: None.

GENERAL RESOURCE (5040 A & B), Grade 9-12. 1st or 2nd Semester. One-half Credit Per Semester, Prerequisite: None. (Can be taken repeatedly for elective credit)

SUPPORT RESOURCE I (5041 A & B), Grades 9-12. 1st or 2nd Semester. One-half Credit Per Semester, Prerequisite: None

SUPPORT RESOURCE II (5042 A & B), Grades 9-12. 1st or 2nd Semester. One-half Credit Per Semester, Prerequisite: None.

SUPPORT RESOURCE III (5043 A & B), Grades 9-12. 1st or 2nd Semester. One-half Credit Per Semester, Prerequisite: None

For additional information about these courses or the applied studies diploma, please contact the counselor or special education teacher at either high school.

III. SPECIAL PROGRAM OPPORTUNITIES

Gifted Education

The high school program for gifted education is designed to serve those students who are identified as gifted. The program is provided through course offerings listed in the program of studies under the heading of Advanced and Advanced Placement Courses. These courses offer students an opportunity to accelerate their program as well as provide an enriched and in-depth classroom experience. Any interested student may enroll in one or more of these courses as long as he or she has successfully completed any prerequisites. The Lynchburg City Schools also participates in the regional Central Virginia Governor's School (CVGS) for Science and Technology and the state-sponsored Summer Governor's School programs. These programs provide unique opportunities for gifted students to pursue special areas of interest. Students and their parents are encouraged to contact their counselor to learn more about these programs and the opportunities they provide. Course offerings for CVGS are included in another section of this program of studies.

PETAL

Promoting Excellence Through Accelerated Learning (PETAL) is a K-12 program that identifies LCS students with academic potential of achievement at a higher level. It promotes accelerated learning, furthering academic achievement and narrowing the achievement gap. PETAL encourages students to take rigorous, academically demanding classes. The objectives of the PETAL accelerated math program are:

- Carry out programs aimed at reducing the academic achievement disparity in math SOL scores among students
- Accelerate as many capable math students as possible to increase the likelihood that students develop an interest in math or math-related careers
- Provide support when applying to attend institutions of higher education
- Participate in the accelerated blocked math class in ninth grade
- Achieve a possible higher grade point average and class rank in high school (due to "weighted" math courses)
- Increase opportunity for acceptance into colleges

Special Education

Special education programs and services are available to students with disabilities. The special education services are provided based on an individualized education plan which is developed by a student's parent(s) and a school-based instructional team. When a parent, teacher, or counselor suspects a student is disabled, a referral is processed through the building principal to the school-based School Consultation Team. Upon receipt of a referral, the school-based School Consultation Team meets within 10 working days. If the school-based School Consultation Team suspects the child may have a disability, a comprehensive evaluation is completed after securing parent written permission to evaluate. Placement in a special education program or class is contingent on the results of extensive diagnostic testing and assessment as well as the decision of a school-based eligibility committee's review of the assessment results and the eligibility criteria set forth in the *Regulations Governing Special Education Programs in Virginia*.

Students with disabilities shall be eligible to receive a Standard Diploma, Advanced Studies Diploma or Advanced Studies Diploma with Lynchburg Honors Seal upon earning the units of credit prescribed and by passing the Standards of Learning Tests.

Alternative and Adult Education Program Information

Lynchburg City Schools offers a variety of alternative programs available to students on an individual basis. These programs include the Fort Hill Community School, the Empowerment Academy, the homebound programs, RODEO (Reach Out to Develop Educational Opportunities) and other pre-General Educational Development (GED) certificate programs. Students in an alternative program completing requirements for a diploma will be eligible to participate in graduation at either the high school or alternative school, as determined by that program.

AP Capstone

AP Capstone™ is an innovative diploma program from the College Board that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. AP Capstone is built on the foundation of two AP courses—AP Seminar and AP Research—and is designed to complement and enhance the in-depth, discipline-specific study experienced in other AP courses. In AP Seminar, students investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop credible and valid evidence-based arguments. In AP Research, students cultivate the skills and discipline necessary to conduct independent research in order to produce and defend a scholarly academic thesis. Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing will receive the AP Capstone Diploma. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams will receive the AP Seminar and Research Certificate. AP Seminar may also be taken as a stand-alone option. A \$15 unused test fee will be assessed in the event a student is unable to take the test when scheduled.

CVCC Transition Program

The CVCC Transition Program provides high school students with disabilities the opportunity to acquire skills leading to independent living, employment and self-advocacy. This program is available to high school students identified with disabilities through the Individual Education Plan (IEP). For additional information on this program please contact your student's IEP case manager.

Dual Enrollment Courses

****Students may require a travel period for off-site courses****

The Dual Enrollment (DE) program with Central Virginia Community College (CVCC) and the University of Lynchburg provides highly motivated students the opportunity to experience college-level work while in high school and receive both high school and college credit. Dual enrollment courses in the core content areas are weighted at 5.0 quality points. Governor's School courses are Dual Enrollment and count as 5.0. The College Success Skills course is weighted at 4.0 quality points.

Students enrolled in these courses may earn college credit from CVCC and/or University of Lynchburg by fulfilling course requirements. Regardless of the course grade, the course will appear on the student's permanent record at CVCC or University of Lynchburg. **If a student receives a D or F, it does have the potential to affect college financial aid eligibility and/or guaranteed admissions agreements with four-year colleges and universities.** Students enrolled in DE courses need to abide by the policies and procedures of CVCC and University of Lynchburg as well as LCS.

To be eligible for a Dual Enrollment course, and student must:

1. Be a junior or senior
2. Apply to CVCC / University of Lynchburg and meet entrance criteria
3. Demonstrate college readiness (satisfied through 3.0 cumulative GPA or higher, SAT/ACT and/or PSAT assessments)
4. Submit a parent/guardian permission form
5. Have permission of LCS
6. Meet all prerequisite requirements for each dual enrollment course for which enrollment is sought

The costs for tuition and the required textbooks for dual enrollment courses taught at the high school, Central Virginia Governor's School, and the Governor's STEM Academy will remain the responsibility of the school division. However, there is a \$75 fee for a course withdrawal if the CVCC drop date has passed. This payment is due to the school division within two weeks of dropping the class. Checks should be made payable to LCS and sent to the curriculum and instruction department. Please be aware that timelines for withdrawing from a course are different for DE courses. See Section III for more information on dual enrollment options.

Admission Criteria for Dual Enrollment Courses at University of Lynchburg

Course	Requirements
EDUC 110 – Human Diversity in American Schools	3.0 GPA and 3 Satisfactory Teacher Recommendations
EDUC 210 – Foundations of Education and the Teaching Profession	Prerequisite: Human Diversity in American Schools
LATN 103A Elementary Latin I with Medical Terminology	None
LATN 105 Elementary Latin II with Medical Terminology	LATN 101 or LATN 103 or placement test

Any student seeking to take courses on the CVCC campus on their own and not a part of any LCS approved program must seek prior approval and all costs for books and tuition are the responsibility of the family.

Early College Program

****Students may require a travel period for off-site courses****

The Early College Program is designed for juniors and seniors who have exhibited the dedication to academics necessary to complete a college curriculum while also completing their secondary education requirements. Students accepted into the program will have the opportunity to receive their high school diploma and their Associate of Arts and Science degree in General Studies from Central Virginia Community College in two years. Each year's cohort class will consist of up to 24 students. Of the 24 students, eight (8) slots will be reserved for the top eight (8) applicants from each high school (16 total). The final eight (8) slots will be filled by the remaining top eight (8) applicants regardless of high school. A selection rubric based on current high school G.P.A., scores on the Virginia Placement Test in mathematics and English, teacher recommendations, attendance history, and the general quality of the application packet will be used to rank all applicants. CVCC officials will assess and rank the applications. Parents/Families will be responsible for tuition fees to CVCC. There is limited financial support to students with financial need.

Financial hardship forms are available in the counseling office. Lynchburg City Schools will provide transportation to and from the student's high school to CVCC, the campus on which all classes will be held. The school division will also pay textbook costs. All students will complete the same courses, and all students' daily schedules will be the same. CVCC classes will begin at 8:00 a.m. and conclude by 1:00 p.m. A shuttle bus will return

students to their high school campus in time for 7th period and after-school activities in case they choose to participate. All Early College students are eligible to participate in any extra-curricular sports and activities at their high schools. The Early College Program will follow the CVCC calendar for all Early College courses, including observing the same holidays and academic breaks (fall, winter, and spring). CVCC staff will use the 10-point LCS grading scale. No course substitutions may be made. **The tuition for the Early College Program is the responsibility of each family. There are opportunities for financial assistance to families with financial hardship. Counselors have financial hardship forms available each spring.**

Junior Year

CVCC Course Number	LCS Course Number	Course Title	Credits First Sem.	Credits Second Sem.	Course Weight
English 111-112	1328AS/BS	College Composition	3	3	5.0
History 121-122	4318AS/BS	United States History I-II	3	3	5.0
Math 163	2328AS	Pre-Calculus I	3		5.0
Math 261	2338BS	Applied Calculus I		3	5.0
Biology 101-102	3328BS	General Biology I-II	4	4	5.0
Comm. Studies 100	5858AS/BS	Principles of Public Speaking	3	3	5.0
Student Dev. 100	7770AS	College Success Skills	1		4.0
Inform. Technology 152	3748AS	Intro. to Digital Lit. and Computer Apps	3		5.0

Senior Year

CVCC Course Number	LCS Course Number	Course Title	Credits First Sem.	Credits Second Sem.	Course Weight
English 246 & 245	1348AS/1358BS	American Literature/British Literature	3	3	5.0
Political Science 135-136	4328AS/BS	U. S. Government I-II	3	3	5.0
Math 162	2348AS	Pre-Calculus II	3		5.0
Math 245	2428BS	Statistics		3	5.0
Psychology 230	3438AS/BS	Developmental Psychology	3		5.0
Art 101	5528AS	Art Appreciation	3		5.0
Music 121	5428BS	Music Appreciation I		3	5.0
Health 116	5128BS	Intro to Personal Wellness		2	5.0

Lynchburg Regional Governor's XLR8 STEM Academy

****Students may require a travel period for off-site courses****

The STEM Academy is a competitive application program for high school juniors and seniors interested in engineering, mechatronics, biotechnology, health science and cybersecurity. The STEM Academy is a half-day program located on the campus of Central Virginia Community College (CVCC), with CVCC professors, where students take classes in math, science, and their specialty area classes. This is a hands-on, project-based program that offers academic and technical training designed to promote critical thinking, creativity, innovation, and real-world problem-solving skills. Students have opportunities to meet and network with local business and industry leaders and participate in a semester long internship. Students can earn up to 44 dual enrollment credits, industry credentials and up to two Career Studies Certificates. To learn more, visit our website www.xlr8academy.com, contact your school counselor or the STEM Academy Director at scash@xlr8academy.com.

Junior Year- Mechatronics/Engineering Specialty & Biotechnology/Health Science Specialty

- Introduction to Engineering Design
- Principles of Engineering
- Pre-Calculus I or Applied Calculus I
- Statistical Reasoning
- College Chemistry I & II

*Students will be eligible to earn Career Studies Certificate in Engineering Fundamentals for courses taken during junior year

Senior Year- Mechatronics/Engineering Specialty

- Blueprint Reading
- Industrial Safety- OSHA 10
- Digital Electronics

- Applied Calculus I & Pre-Calculus II
- Calculus I & II
- Principles of Physics I & II
- Senior Internship

*Students will be eligible to earn Career Studies Certificate in Mechatronics Fundamentals for courses taken during their senior year

Senior Year- Biotechnology Specialty

- Introduction to Medical Terminology
- Digital Electronics
- Applied Calculus I & Pre-Calculus II
- Calculus I & II
- Human Anatomy & Physiology I & II
- Senior Internship

*Students are eligible to earn Career Studies Certificate in Biotechnology Fundamentals for courses taken during their senior year

Senior Year- Health Science Specialty

- Introduction to Medical Terminology
- Principles of Psychology or Developmental Psychology
- Applied Calculus I & Pre-Calculus II
- Calculus I & II
- Human Anatomy & Physiology I & II
- Senior Internship

*Students are eligible to earn Career Studies Certificate in Health Science Fundamentals for courses taken their senior year

Junior Year- Computer Science/Cyber Security Specialty

- Introduction to Computer Applications & Concepts
- Introduction to Network Concepts
- Network Security Basics
- Network Attacks, Computer Crime & Hacking
- Statistical Reasoning
- Pre-Calculus I or Applied Calculus I
- College Success Skills

Senior Year- Computer Science/Cyber Security Specialty

- Software Design
- Legal Topics in Network Security
- Applied Calculus I & Pre-Calculus II
- Calculus I & II
- Principles of Physics I & II
- Senior Internship

*Students are eligible to earn a Career Studies Certificate in Cyber Security Fundamentals for courses taken during their junior and senior years

XLR8 STEM Academy Courses

XLR8 Course Name	LCS Course	Semester	Grade Level	CVCC Course Name	CVCC Credits	LCS Course Weight
Introduction to Engineering Design (PLTW)	6788AX 6788BX	Fall	11	EGR 115 - Engineering Graphics EGR 123 - Introduction to Engineering Design	4	5.0
Principles of Engineering (PLTW)	6798AX 6798BX	Spring	11	MEC 140 - Introduction to Mechatronics EGR 105 - Introduction to Problem Solving & Technology	4	5.0
Engineering Design and Development (PLTW)	6728AX	Fall Spring	12	DRF 161 - Blueprint Reading SAF 130 - Industrial Safety-OSHA 10	2 1	5.0
Digital Electronics (PLTW)	3787BX	Spring	12	ETR 113 - A.C. and D.C Controls & Circuits	3	5.0
Introduction to Computer Applications & Concepts	6678AX 6678BX	Fall, Spring	11,12	ITE 115 - Introduction to Computer Applications & Concepts	3	5.0
Introduction to Network Concepts	6188AX	Fall	11	ITN 101 - Introduction to Network Concepts	3	5.0
Software Design	6288AX	Fall	11	ITP 100 - Software Design	3	5.0
Network Security Basics	8188AX 8188BX	Fall, Spring	11, 12	ITN 260 - Network Security Basics	3	5.0
Network Attacks, Computer Crime & Hacking	8288AX 8288BX	Fall, Spring	11, 12	ITN 261 - Network Attacks, Computer Crime & Hacking	3	5.0
Network Communication, Security & Authentication	6388AX	Fall	11, 12	ITN 262 - Network Communication, Security & Authentication	4	5.0
Internet/Intranet Firewalls & E-Commerce Security	8388BX	Spring	12	ITN 263 - Internet/Intranet Firewalls & E-Commerce Security	4	5.0
Network Security Layers	6488BX	Spring	12	ITN 264 - Network Security Layers	3	5.0
Legal Topics in Network Security	6588BX	Spring	12	ITN 267 - Legal Topics in Network Security	3	5.0
Medical Terminology	8377AX	Fall	12	HLT 143 - Medical Terminology I	3	5.0
Developmental Psychology	4478BX	Spring	12	PSY 230 - Developmental Psychology	3	5.0
Principles of Psychology	4488BX	Spring	12	PSY 200 - Principles of Psychology	3	5.0
Statistical Reasoning	2379AX	Fall	11	MTH 155 - Statistical Reasoning	3	5.0
Pre-Calculus I	2328AX	Spring	11	MTH 161 - Pre-Calculus I	3	5.0
Applied Calculus I	2338AX 2338BX	Fall, Spring	11, 12	MTH 261 - Applied Calculus I	3	5.0
Pre-Calculus II	2348AX	Spring	12	MTH 162 - Pre-Calculus II	3	5.0
Calculus I	2479AX	Fall, Spring	12	MTH 263 - Calculus I	4	5.0
Calculus II	2479BX	Spring	12	MTH 264 - Calculus II	4	5.0
College Chemistry I	3368AX	Fall	11	CHM 111 - College Chemistry I	4	5.0
College Chemistry 2	3368BX	Spring	11	CHM 112 - College Chemistry II	4	5.0
Physics I	3569AX	Fall	12	PHY 201 - College Physics I	4	5.0
Physics II	3569BX	Spring	12	PHY 202 - College Physics II	4	5.0
Human Anatomy & Physiology I	3579AX	Fall	12	Human Anatomy and Physiology I	4	5.0
Human Anatomy & Physiology II	3579BX	Spring	12	Human Anatomy and Physiology II	4	5.0
College Success Skills	7770AS	Fall	11	College Success Skills	1	4.0
Internship	7720BX	Spring	12	Coordinated Internship	1	4.0

CTE Academy

Seniors may be allowed to enroll in CTE courses at CVCC for programs not offered by Lynchburg City Schools. The CTE Academy is shared with other school divisions in the region. Enrollment may be limited.

Electrical Technology Fundamentals

CVCC Course Name	LCS Course	Semester	Grade	CVCC Code	CVCC Credit	LCS Course Weight
College Success Skills	7770AS	Fall	12	SDV 100	1	4.0
NCCER Core	8518AC	Fall	12	BLD 195	3	5.0
AC and DC Fundamentals I	8528AC	Fall	12	ETR 113	4	5.0
Home Electric Power I	8568AC	Fall	12	ELE 111	3	5.0
Basic Technical Mathematics	2438BC	Spring	12	MTH 111	3	5.0
Home Electric Power II	8569BC	Spring	12	ELE 112	3	5.0
Residential Wiring Methods	8538BC	Spring	12	ELE 127	2	5.0

Emergency Medical Technician Plus

CVCC Course Name	LCS Course	Semester	Grade	CVCC Code	CVCC Credit	LCS Course Weight
CPR for Healthcare Providers	5258AC	Fall	12	EMS 100	1	5.0
Emergency Medical Technician	8333AC	Fall	12	EMS 111	7	5.0
Emergency Medical Technician Clinical	8335AC	Fall	12	EMS 120	1	5.0
College Success Skills	7770BS	Spring	12	SDV 100	1	4.0
Interpersonal Communication	8348BC	Spring	12	CST 126	3	5.0
Personal Conflict and Crisis Management	3448BC	Spring	12	PSY 205	3	5.0

Health Sciences I and II (no math)

CVCC Course Name	LCS Course	Semester	Grade	CVCC Code	CVCC Credit	LCS Course Weight
College Success Skills	7770AS	Fall	12	SDV 100	1	4.0
College Composition I	1328AS	Fall	12	ENG 111	3	5.0
U.S. Government and Politics	4358AC	Fall	12	PLS 135	3	5.0
Principles of Nutrition & Human Develop.	5227AC	Fall	12	HLT 230	3	5.0
Human Anatomy & Physiology I	3579AC	Fall	12	BIO 141	4	5.0
Human Anatomy & Physiology I Lab	--	Fall	12	BIO 141L		5.0
Medical Terminology I	8383AC	Fall	12	HLT 143	3	5.0
College Composition II	1328BS	Spring	12	ENG 112	3	5.0
State and Local Government and Politics	4368BC	Spring	12	PLS 136	3	5.0
Human Anatomy & Physiology II	3579BC	Spring	12	BIO 142	4	5.0
Human Anatomy & Physiology II Lab	--	Spring	12	BIO 142L		
Developmental Psychology	4478BC	Spring	12	PSY 230	3	5.0

Health Sciences I and II (with math)

CVCC Course Name	LCS Course	Semester	Grade	CVCC Code	CVCC Credit	LCS Course Weight
College Success Skills	7770AS	Fall	12	SDV 100	1	4.0
College Composition I	1328AS	Fall	12	ENG 111	3	5.0
U.S. Government and Politics	4358AC	Fall	12	PLS 135	3	5.0
Human Anatomy & Physiology I	3579AC	Fall	12	BIO 141	4	5.0
Human Anatomy & Physiology I Lab	--	Fall	12	BIO 141L		
Quantitative Reasoning or Pre-Calculus	2358AC or 2328AC	Fall	12	MTH 154 MTH 161	3	5.0
Medical Terminology I	8383AC	Fall	12	HLT 143	3	5.0
College Composition II	1328BS	Spring	12	ENG 112	3	5.0

State and Local Government and Politics	4368BC	Spring	12	PLS 136	3	5.0
Human Anatomy & Physiology II	3579BC	Spring	12	BIO 142	4	5.0
Human Anatomy & Physiology II Lab	--	Spring	12	BIO 142L		
Developmental Psychology	4478BC	Spring	12	PSY 230	3	5.0
Statistical Reasoning	2379BC	Spring	12	MTH 155	3	5.0
Pre-Calculus II	2348BC	Spring	12	MTH 162	3	5.0

Heating, Ventilation, and Air Conditioning

CVCC Course Name	LCS Course	Semester	Grade	CVCC Code	CVCC Credit	LCS Course Weight
College Success Skills	7770AS	Fall	12	SDV 100	1	4.0
NCCER Core	8518AC	Fall	12	BLD 195	3	5.0
Air Conditioning and Refrigeration I	8158AC	Fall	12	AIR 121	3	5.0
Circuits and Controls I	8168AC	Fall	12	AIR 134	4	5.0
Air Conditioning Systems I	8178BC	Spring	12	AIR 165	4	5.0
Heating Systems I	8188BC	Spring	12	AIR 154	3	5.0
Basic Technical Mathematics	2438BC	Spring	12	MTH 111	3	5.0

Industrial Maintenance

CVCC Course Name	LCS Course	Semester	Grade	CVCC Code	CVCC Credit	LCS Course Weight
College Success Skills	7770AS	Fall	12	SDV 100	1	4.0
NCCER Core	8518AC	Fall	12	BLD 195	3	5.0
Basic Fluid Mech.-Hydraulics/Pneumatics	8638AC	Fall	12	MEC 161	3	5.0
DC and AC Fundamentals I	8528AC	Fall	12	ETR 113	4	5.0
Principles of Industrial Safety	8617BC	Spring	12	SAF 126	3	5.0
Technical Mathematics	2437BC	Spring	12	MTH 131	3	5.0
Blueprint Reading I	8478BC	Spring	12	DRF 161	2	5.0

Mechatronics

CVCC Course Name	LCS Course	Semester	Grade	CVCC Code	CVCC Credit	LCS Course Weight
Orientation to Electronics & Mechatronics	7780AC	Fall	12	SDV 101	1	4.0
Manufacturing Specialist I	8818AC	Fall	12	IND 195	4	5.0
Manufacturing Technician I	8828AC	Fall	12	IND 295	2	5.0
Basic Fluid Mech-Hydra/Pneumatics	8838AC	Fall	12	MEC 161	3	5.0
Shop Practices and Procedures	8848BC	Spring	12	BLD 105	2	5.0
Industrial Safety - OSHA 10	8618BC	Spring	12	SAF 130	1	4.0
Blueprint Reading I	8478BC	Spring	12	DRF 161	2	5.0
Introduction to Mechatronics	8858BC	Spring	12	MEC 140	3	5.0

Welding Fundamentals

CVCC Course Name	LCS Course	Semester	Grade	CVCC Code	CVCC Credit	LCS Course Weight
College Success Skills	7770AS	Fall	12	SDV 100	1	4.0
Intro to Welding	8648AC	Fall	12	WEL 120	3	5.0
Welding Drawing and Interpretation	8658AC	Fall	12	WEL 150	3	5.0
Gas Metal Arc Welding	8678AC	Fall	12	WEL 160	3	5.0
Arc Welding I	8688BC	Spring	12	WEL 123	3	5.0
Arc Welding II	8698BC	Spring	12	WEL 124	3	5.0
Basic Technical Mathematics	2438BC	Spring	12	MTH 111	3	5.0

Central Virginia Governor's School (CVGS)

***Students may require a travel period for off-site courses**

The Lynchburg City Schools' partners with the Central Virginia Governor's School for Science & Technology (www.cvgs.k12.va.us) to provide opportunities beyond the scope of normal high school curricula to gifted students interested in mathematics, science and technology. CVGS students pursue an innovative curriculum, which allows them to cultivate their special talents in mathematics and science through an individual research program, in-depth laboratory experiences and extensive integration of technology into all courses. Instruction is designed to meet the needs of the gifted learner in a challenging independent learning environment that stimulates critical thinking and creative problem solving and emphasizes the development of time management and collaboration skills. CVGS is one of 19 Academic Year Governor's Schools across the state approved by the Virginia Board of Education and sponsored and evaluated by the Virginia Department of Education.

Students must complete an application and must demonstrate an interest in math, science, and technology as well as the ability to work independently. Selection is competitive, and successful applicants from the Lynchburg City Schools must maintain a high GPA in order to remain in the program.

Students from Amherst County, Appomattox County, Bedford County, Campbell County and Lynchburg City Schools attend the Governor's School. Each school division has an identified number of spots for students. The selection of students is based on procedures and policies developed within each school division. Successful applicants from the Lynchburg City Schools have been students who have received high grades in the most rigorous math and science courses available, who have been extremely successful in other academic areas, and who have strong standardized test scores.

The following courses are offered at the Central Virginia Governor's School. All courses offered at CVGS have a 5.0 weight. In all cases the prerequisite for a course is admission to the Central VA Governor's School. For more information contact your student's counselor or our LCS Supervisor of Math, Science, & Gifted Education at 434-515-5044.

Dually Enrolled Courses

MATH ANALYSIS (1 high school credit)

Course: 2317YG

CVCC Code: MTH 167 (5 college credits for a year-long course). SCED Code: 02110 Pre-Calculus.

Math Analysis is a pre-calculus course that includes an in-depth conceptual analysis of algebraic, polynomial, rational, logarithmic, exponential, and trigonometric functions. Topics include graphical behavior, domains and ranges, roots (real & complex), the first derivative, graphing, application problem solving and data analysis, and an introduction to integration. Parametric equations are presented with a focus on applications and conceptual analysis. Analysis includes required algebraic proofs and/or conceptual explanations in written and oral presentations. Graphing calculators, spreadsheets, and a computer algebra system are used extensively. The study of matrices is included, and optional topics include an introduction to sequences and series. **This course is taught over a full academic year.**

CALCULUS I (1 high school credit)

Course: 2329YG

CVCC Code: MTH 263 (4 college credits for a year-long course). SCED Code: 02121 Calculus.

A college level study of differential calculus; this course includes the study of limits, continuity, derivatives (concept and definition), derivatives of parametric equations and polar curves, differentiation techniques (including inverse trigonometric functions), curve sketching, optimization applications and an introduction to antiderivatives (concept and definition) and definite integrals with applications. **This course is taught over a full academic year.**

CALCULUS I (0.5 high school credit, one semester)

Course: 2329AG OR 2329BG

CVCC Code: MTH 263 (4 college credits). SCED Code: 02121 Calculus.

A college level study of differential calculus; this course includes the study of limits, continuity, derivatives (concept and definition), derivatives of parametric equations and polar curves, differentiation techniques (including inverse trigonometric functions), curve sketching, optimization applications and an introduction to antiderivatives (concept and definition) and definite integrals with applications.

CALCULUS II (0.5 high school credit, one semester)

Course: 2349AG OR 2349BG

CVCC Code: MTH 264 (4 college credits). SCED Code: 02121 Calculus.

A college level study of integral calculus; this course includes the study of Riemann Sums, Trapezoidal and Simpson's Rules, antiderivatives, definite and indefinite integrals (concept and definition), integration technique, applications of integrals, solving differential equations, parametric equations and polar curves, convergence of sequences and series, and Taylor and Maclaurin Series.

CALCULUS III (VECTOR CALCULUS) (0.5 high school credit, one semester)**Course: 2429BG****CVCC Code: MTH 265 (4 college credits). SCED Code: 02122 Multivariate Calculus. Virginia Course Code: 3178 Multivariate Calculus.**

Vector calculus includes vector-valued functions, functions of several variables, vector fields, partial derivatives and multiple integrals. Computational techniques, geometry and theoretical structure, creative problem solving, and proofs are emphasized.

HUMAN ANATOMY & PHYSIOLOGY (1 high school credit)**Courses: 3339AG & 3339BG****CVCC Courses: BIO 141 (4 college credits) first semester; BIO 142 (4 college credits) second semester. SCED Code 03053 Anatomy and Physiology (year-long). Virginia Course Code: 4330 BIO II-Anatomy/Physiology.**

This college level course provides an overview of cellular physiology and reviews many human organ systems including the nervous, respiratory, circulatory, digestive, skeletal, endocrine, muscular, urinary, reproductive, and lymphatic systems. Students will explore organ systems through the use of interactive modeling and will discuss current medical cases with local health care professionals.

DUAL ENROLLMENT PHYSICS (1 high school credit)**Courses: 3669AC & 3669BC****CVCC Code: PHY 201 (4 credits) first semester; PHY 202 (4 credits) second semester SCED Code: 03152 Physics 2.****Virginia Course Code: 4610 Local Science Elective.**

This college level course incorporates basic calculus and vector analysis. The curriculum includes Newtonian mechanics, conservation of energy, fluid mechanics, harmonic motion, circuits, magnetic fields, heat and thermodynamics, light and optics, nuclear physics, and modern physics. Concepts are further explored through inquiry-based laboratories, engineering applications, data analysis, project-based assignments, computational and programming applications using Python, and analysis of physics research.

Non-Dually Enrolled Courses

CVGS PHYSICS (1 high school credit)**Course: 3219YG****Not Dual Enrollment. SCED Code: 03152 Physics Advanced Studies.**

This course is an advanced level science class exploring the particle and wave nature of everyday phenomena. The physics curriculum includes dimensional analysis, velocity, linear acceleration, Newton's Laws, Rotational Motion, Energy, Waves, Sound, Electricity, and Magnetism. Concepts are explored and applied through hands-on laboratories and using computer-based modeling. These investigations require data collection, analysis, and computer simulations that demonstrate the interdisciplinary relations among physics, life sciences, mathematics, and technology. The development of problem solving skills, analytical thinking, and effective communication are also emphasized.

RESEARCH (1 high school credit)**Course: 3217YG****Not Dual Enrollment. SCED Code: 03212 Scientific Research and Design.**

This unique course is an introduction to the research process including literature research, project design, elementary statistical analysis, scientific writing and multimedia presentations. Each student completes an individual research project. Students design a study, collect and analyze data, and report the results in paper, PowerPoint, poster and web page formats. The statistical analysis of data is conducted using Microsoft Excel. During the second semester students complete a 36-hour internship.

CONNECTIONS IN MATHEMATICS (0.5 high school credit per semester)**Courses: 2228AG & 2228BG****Not Dual Enrollment. SCED Code: 02102 Discrete Mathematics. Virginia Course Code: 3154 Discrete Mathematics.**

This course provides students with introductory experiences in symbolic logic, graph theory, probability, voting schemes and apportionment methods in the first semester and examines topics in economics, personal finance, and mathematical proofs in the second semester. Emphasis is placed on conceptual understanding, solving real world applications, using technology, and fostering mathematical reasoning and communication.

SENIOR SEMINAR (1 high school credit)**Course: 3227YG****Not Dual Enrollment. SCED Code: 22999 Miscellaneous Other. Virginia Course Code: 9826 Local Elective I.**

During the first six-weeks period students participate in an engineering design-build-test project with local engineers serving as mentors. For the next four six-weeks periods, students explore and use sophisticated technologies choosing from among biotechnology, computer-aided design and 3D printing, desktop publishing, electron microscopy, writing iPad applications, scientific photography, microbiology, nuclear science, and robotics. Students end the course with a six-week period of using technology in the completion of the Senior Science Scenario capstone project.

Please visit the Central Virginia Governor's School website at: <http://www.cvgs.k12.va.us/> for course descriptions and any additional information regarding the Central Virginia Governor's School.

NCAA College Athletic Eligibility Standards

All Potential college student-athletes are subject to academic initial-eligibility standards, which take into account standardized test scores, number of core courses taken in high school and the grades earned in those core courses. In addition to NCAA requirements, they also must also meet the unique acceptance requirements of the college or university they plan to attend (those requirements may exceed NCAA standards).

Division I student-athletes are also subject to progress-toward-degree rules that require them to advance toward graduation each year.

Your school counselor is the main source of information concerning becoming eligible to compete in athletics at the collegiate level. The following steps will assist you in becoming a successful college athlete:

Grade 9

- Ask your counselor for a list of your high school's [NCAA core courses](#) to make sure you take the right classes.

Grade 10

- With the help of your counselor, register with the NCAA Eligibility Center at eligibilitycenter.org.

Grade 11

- Check with your counselor to make sure you will graduate on time with the required number of [NCAA core courses](#).
- Take the [ACT or SAT](#) and submit your scores to the NCAA using code 9999.
- At the end of the year, ask your counselor to upload your [official transcript](#) to the NCAA Eligibility Center.

Grade 12

- Finish your last [NCAA core courses](#).
- Take the [ACT or SAT](#) again, if necessary, and submit your scores to the NCAA using code 9999.
- Complete all academic and [amateurism](#) questions in your NCAA Eligibility Center account at eligibilitycenter.org.
- After you graduate, ask your counselor to submit your final [official transcript](#) with proof of graduation to the NCAA Eligibility Center.



Contact the [NCAA Eligibility Center](#) concerning COVID-19 waiver criteria.

Sequential Electives

The following sequences are approved to meet the sequential electives requirement of the Standard Diploma or Applied Studies Diploma. Please see the graduation requirements charts for more detailed information.

Architecture & Construction		
Carpentry I	Followed by	Carpentry II, Carpentry III
Drafting I	Followed by	Drafting II, Drafting III, Drafting IV
Business, Management, Admin, & Finance		
Accounting	Followed by	Advanced Accounting, Business Law, Business Management, Computer Information Systems, Design, Multimedia & Web Technologies, Entrepreneurship, Principles of Business & Marketing
Accounting II	Followed by	Business Law, Business Management, Computer Information Systems, Design, Multimedia & Web Technologies, Entrepreneurship, Principles of Business & Marketing
Business Law	Followed by	Accounting, Advanced Accounting, Business Management, Computer Information Systems, Design, Multimedia, & Web Technologies, Digital Applications, Entrepreneurship, Principles of Business & Marketing
Business Management	Followed by	Accounting, Advanced Accounting, Business Law, Computer Information Systems, Design, Multimedia, & Web Technologies, Entrepreneurship, Principles of Business & Marketing
Computer Information Systems	Followed by	Accounting, Advanced Accounting, Business Management, Business Law, Design, Multimedia, & Web Technologies, Digital Applications, Entrepreneurship, Principles of Business & Marketing, Programming, Advanced Programming
Design, Multimedia, & Web Technologies	Followed by	Accounting, Advanced Accounting, Business Law, Business Management, Computer Information Systems, Digital Applications, Entrepreneurship, Principles of Business & Marketing, Programming, Advanced Programming
Digital Applications	Followed by	Accounting, Advanced Accounting, Business Law, Business Management, Computer Information Systems, Design, Multimedia, & Web Technologies, Entrepreneurship, Principles of Business & Marketing, Programming, Advanced Programming
Programming	Followed by	AP Computer Science, Computer Information Systems, Design, Multimedia, & Web Technologies, Digital Applications, Advanced Programming
Education & Training		
Human Diversity in American Schools	Followed by	Foundations of Education and the Teaching Profession
Health Sciences		
Sports Medicine I	Followed by	Sports Medicine II
Dental I	Followed by	Dental II
Nurse Aide I	Followed by	Nurse Aide II, Intro to Health and Medical Sciences
Hospitality & Tourism		
Culinary Arts I	Followed by	Culinary Arts II
Culinary Arts II	Followed by	Culinary Arts III
Human Services		
Cosmetology I	Followed by	Cosmetology II
Information Technology		
Computer Systems Technology I	Followed by	Computer Systems Technology II
Cybersecurity Systems Technology	Followed by	Cybersecurity Systems Technology, Advanced

Research		
AP Capstone Seminar	Followed by	AP Capstone Research
Law, Public Safety, Corrections, & Security		
Criminal Justice I	Followed by	Criminal Justice II
Manufacturing		
Precision Machine Technology I	Followed by	Precision Machine Technology II
Marketing		
Entrepreneurship	Followed by	Accounting, Advanced Accounting, Business Law, Business Management, Computer Information Systems, Principles of Business and Marketing, Marketing, Advanced Marketing, Sports & Entertainment Marketing
Marketing	Followed by	Advanced Marketing or Sports & Entertainment Marketing
Principals of Business & Marketing	Followed by	Accounting, Advanced Accounting, Business Law, Business Management, Computer Information Systems, Digital Applications, Design, Multimedia, & Web Technologies, Marketing, Advanced Marketing, or Sports & Entertainment Marketing, Entrepreneurship
Technology Education & Engineering		
Drafting I	Followed by	Drafting II, Drafting III, Drafting IV: Drafting and Robotics
Engineering Studies	Followed by	Engineering Explorations
Technology Foundations	Followed by	Technology Transfer
Communications Systems	Followed by	Video & Media Production
Video & Media Production	Followed by	Communications Systems
Transportation & Distribution		
Automotive Technology I	Followed by	Automotive Technology II
JROTC		
Marine Corps JROTC I	Followed by	Marine Corps JROTC II
Air Force JROTC I	Followed by	Air Force JROTC II
Cultural Arts		
Orchestra I	Followed by	Orchestra II
Concert Band I	Followed by	Symphonic Band I
Concert Band I Symphonic Band I	Followed by	Jazz Ensemble, Wind Ensemble, Percussion Ensemble
Chorus I	Followed by	Chorus II
Chorus II	Followed by	Chorus III
Art I	Followed by	Art II: Drawing and Painting, Art II: Three Dimensional
Introduction To Theater	Followed by	Dance, Acting I, , Technical Theatre I Design, Technical Theatre I Production
Acting I	Followed by	Acting II
Technical Theatre I Design	Followed by	Technical Theatre II
Technical Theatre I Production	Followed by	Technical Theatre II
English Electives		
Creative Writing	Followed by	Playwriting
Exploring Language & Culture	Followed by	Exploring Language & Culture Through Hip-Hop II

Note: Taking Orchestra II, Concert Band I, Yearbook or Chorus I twice for elective credit may fulfill the sequential elective requirement as long as the student is progressing through a set of skills outlined in the curriculum.

World Languages (only courses not needed for graduation can count as a sequential elective)		
French I	Followed by	French II
German I	Followed by	German II
Latin I	Followed by	Latin II
Spanish I	Followed by	Spanish II
French IV	Followed by	French V
German IV	Followed by	German V
Latin IV	Followed by	Latin V
Spanish IV	Followed by	Spanish V
Elementary Latin I with Medical Terminology	Followed by	Elementary Latin II with Medical Terminology

Graduation Requirements for First-Time Transfers into a Virginia Public High School

Graduation requirements – in compliance with [8VAC 20-131-60](#) – for a student transferring into a Virginia public school for the first time in grades 9-12, depends on the grade the student is transferring into and when in the school year the student is transferring.

A student is considered to have transferred:

- At the beginning of the school year if 20 or fewer hours of instruction have been completed.
- During the school year if more than 20 hours of instruction has been completed.

Federal law requires each student to be tested in mathematics at least once during high school, therefore some students will be required to complete a mathematics end-of-course test in high school if one was not completed prior to enrolling in a Virginia public high school.

Students entering a Virginia high school during the tenth grade or later may benefit by having to earn a reduced number of verified credits, as stated in 8VAC20-131-60.G, and summarized in the following table.

A student entering a Virginia high school for first time:	Prior to 2018-2019 school year:	2018-2019 school year:	2019-2020 school year:	2020-2021 school year:	2021-2022 school year and thereafter:
At the beginning of or during ninth grade	All requirements for the Standard Diploma and Advanced Studies Diploma	All requirements for the Standard Diploma and Advanced Studies Diploma	All requirements for the Standard Diploma and Advanced Studies Diploma	All requirements for the Standard Diploma and Advanced Studies Diploma	All requirements for the Standard Diploma and Advanced Studies Diploma
At the beginning of or during tenth grade	All diploma requirements except: For a <u>Standard Diploma</u> , only four verified credits required: English (1), mathematics (1), history (1), and science (1) For an <u>Advanced Studies Diploma</u> , only six verified credits required: English (2), mathematics (1), history (1), science (1), and student-selected (1) science (1), and student-selected (1)	All diploma requirements except: For a <u>Standard Diploma</u> , only four verified credits required: English (1), mathematics (1), history (1), and science (1) For an <u>Advanced Studies Diploma</u> , only six verified credits required: English (2), mathematics (1), history (1), science (1), and student-selected (1)	All requirements for the <u>Standard Diploma</u> and <u>Advanced Studies Diploma</u>	All requirements for the <u>Standard Diploma</u> and <u>Advanced Studies Diploma</u>	All requirements for the <u>Standard Diploma</u> and <u>Advanced Studies Diploma</u>

A student entering a Virginia high school for first time:	Prior to 2018-2019 school year:	2018-2019 school year:	2019-2020 school year:	2020-2021 school year:	2021-2022 school year and thereafter:
At the beginning of eleventh grade	<p>All diploma requirements except:</p> <p>For a <u>Standard Diploma</u>, only four verified credits required: English (1), mathematics (1), history (1), and science (1)</p> <p>For an <u>Advanced Studies diploma</u>, only six verified credits required: English (2), mathematics (1), history (1), science (1), and student-selected (1)</p>	<p>All diploma requirements, except:</p> <p>For a <u>Standard Diploma</u>, only four verified credits required: English (1), mathematics (1), history (1), and science (1)</p> <p>For an <u>Advanced Studies diploma</u>, only six verified credits required: English (2), mathematics (1), history (1), science (1), and student-selected (1)</p>	<p>All diploma requirements except:</p> <p>For a <u>Standard Diploma</u>, only four verified credits required: English (1), mathematics (1), history (1), and science (1)</p> <p>For an <u>Advanced Studies diploma</u>, only six verified credits required: English(2), math (1), history (1), science (1), and student-selected (1)</p>	<p>All requirements for the <u>Standard Diploma</u> and <u>Advanced Studies Diploma</u></p>	<p>All requirements for the <u>Standard Diploma</u> and <u>Advanced Studies Diploma</u></p>
During eleventh grade	<p>All diploma requirements except:</p> <p>For a <u>Standard Diploma</u>, only two verified credits required: English (1), and student-selected (1). The student-selected credits must be in mathematics.</p> <p>For an <u>Advanced Studies Diploma</u>, only four verified credits required: English (1), and student-selected (3). One of the student-selected credits must be in mathematics.</p>	<p>All diploma requirements except:</p> <p>For a <u>Standard Diploma</u>, only two verified credits required: English (1), and student-selected (1). The student-selected credits must be in mathematics.</p> <p>For an <u>Advanced Studies Diploma</u>, only four verified credits required: English (1), and student-selected (3). One of the student-selected credits must be in mathematics.</p>	<p>All diploma requirements except:</p> <p>For a <u>Standard Diploma</u>, only two verified credits required: English (1), and student-selected (1). The student-selected credits must be in mathematics.</p> <p>For an <u>Advanced Studies Diploma</u>, only four verified credits required: English (1), and student-selected (3). One of the student-selected credits must be in mathematics.</p>	<p>All diploma requirements except only two verified credits required: English and mathematics, if mathematics testing required by federal law, otherwise verified credit may be of student's own choosing</p>	<p>All diploma requirements of for the <u>Standard Diploma</u> and <u>Advanced Studies Diploma</u>, except only two verified credits required: English and mathematics, if mathematics testing required by federal law, otherwise verified credit may be of student's own choosing</p>

A student entering a Virginia high school for first time:	Prior to 2018-2019 school year:	2018-2019 school year:	2019-2020 school year:	2020-2021 school year:	2021-2022 school year and thereafter:
At the beginning of twelfth grade	<p>All diploma requirements except:</p> <p>For a <u>Standard Diploma</u>, only two verified credits required: English (1), and student-selected (1). The student-selected credits must be in mathematics if mathematics testing is required by federal law.</p> <p>For an <u>Advanced Studies Diploma</u>, only four verified credits required: English (1), and student-selected (3). One of the student-selected credits must be in mathematics.</p>	<p>All diploma requirements except:</p> <p>For a <u>Standard Diploma</u>, only two verified credits required: English (1), and student-selected (1). The student-selected credits must be in mathematics if mathematics testing is required by federal law.</p> <p>For an <u>Advanced Studies Diploma</u>, only four verified credits required: English (1), and student-selected (3). One of the student-selected credits must be in mathematics.</p>	<p>All diploma requirements except:</p> <p>For a <u>Standard Diploma</u>, only two verified credits required: English (1), and student-selected (1). The student-selected credits must be in mathematics if mathematics testing is required by federal law.</p> <p>For an <u>Advanced Studies Diploma</u>, only four verified credits required: English (1), and student-selected (3). One of the student-selected credits must be in mathematics</p>	<p>All diploma requirements except:</p> <p>For a <u>Standard Diploma</u>, only two verified credits required: English (1), and student-selected (1). The student-selected credits must be in mathematics if mathematics testing is required by federal law.</p> <p>For an <u>Advanced Studies Diploma</u>, only four verified credits required: English (1), and student-selected (3). One of the student-selected credits must be in mathematics.</p>	<p>All diploma requirements for the <u>Standard Diploma</u> and <u>Advanced Studies Diploma</u>, except only two verified credits required: English and mathematics, if mathematics testing required by federal law, otherwise verified credit may be of student's own choosing</p>
During twelfth grade	<p>Students should be given every opportunity to earn a diploma following the graduation requirements in <u>8VAC20-131-50</u>. If not possible, arrangements should be made for the student's previous school to award the diploma. If these arrangements cannot be made, a waiver of the verified credit requirements may be requested to the VDOE.</p>	<p>Students should be given every opportunity to earn a diploma following the graduation requirements in <u>8VAC20-131-50</u>. If not possible, arrangements should be made for the student's previous school to award the diploma. If these arrangements cannot be made, a waiver of the verified credit requirements may be requested to the VDOE</p>	<p>Students should be given every opportunity to earn a diploma following the graduation requirements in <u>8VAC20-131-50</u>. If not possible, arrangements should be made for the student's previous school to award the diploma. If these arrangements cannot be made, a waiver of the verified credit requirements may be requested to the VDOE.</p>	<p>Students should be given every opportunity to earn a diploma following the graduation requirements in <u>8VAC20-131-50</u>. If not possible, arrangements should be made for the student's previous school to award the diploma. If these arrangements cannot be made, a waiver of the verified credit requirements may be requested to the VDOE.</p>	<p>Students should be given every opportunity to earn a diploma following the graduation requirements in <u>8VAC20-131-51</u>. If not possible, arrangements should be made for the student's previous school to award the diploma. If these arrangements cannot be made, a waiver of the verified credit requirements may be requested to the VDOE.</p>

The Lynchburg City School Division does not discriminate in admission to, or access to, or treatment or employment in its educational programs, services, or activities based on race, color, national origin, sex, disability, or age in accordance with state Inquiries regarding this policy may be directed to the Director of Human Resources, 915 Court Street, P.O. Box 2497, Lynchburg, Virginia 24505-2497; telephone number (434) 515-5050.

Course Numbers for Transfer Courses

When possible, transfer courses should be equated to corresponding courses in the Program of Studies, and those courses should be transcribed with a "T" appended to the course number.

However, in some cases courses approved for credit in other states might not have an equivalent match in this Program of Studies. In those cases, a generic course number indicating the grade and content area can be used. All such courses are weighted at 4.0 for an "A." The course numbers in the table below represent the first semester courses. By placing a "B" where the "A" is the second semester course numbers can be derived.

Subject Area	Grade 9	Grade 10	Grade 11	Grade 12
English	1190YT	1100YT	1110YT	1120YT
Math	2190YT	2100YT	2110YT	2120YT
Science	3190YT	3100YT	3110YT	3120YT
History	4190YT	4100YT	4110YT	4120YT
Elective	5190YT	5100YT	5110YT	5120YT



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