A TRADITION OF EXCELLENCE FOR ALL



# LCS High School Program of Studies 2017-2018

Every child, by name and by need, to graduation.

Lynchburg City Schools Mission Statement Adopted August 7, 2012

School Board Approved: February 9<sup>th</sup>, 2017



#### Dear Lynchburg City Schools Students and Parents:

Our mission in Lynchburg City Schools (LCS) is Every Child by Name and by Need, to Graduation. An essential component of our commitment to helping students reach future goals is by offering a wide array of courses and programs that students can choose from to help them gain full access to their future post-secondary endeavors.

The High School Program of Studies handbook contains academic information that will help in planning a course of study. Please take the time to review the information presented in this handbook. The information ranges from specific course selection options and the different academic levels, academic and post-secondary career planning, specialized LCS programs such as Early College Program, Central Virginia Governor's School (CVGS), National Collegiate Athletic Associate (NCAA) eligibility requirements, Virginia Standards of Learning (SOL) information, graduation requirements, promotion and retention guidelines, and grade point average calculation criteria. Development of a comprehensive academic and career plan is best accomplished from the collaboration of students, parents, teachers, principals, and counselors. Please be in contact with your child's school counselor in order to receive support in creating an individualized plan for your child.

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

Sincerely,

Dr. Scott Brabrand, Ed. D

Superintendent



### Lynchburg City School Board (as of 2/7/17)

Dr. Scott Brabrand
Superintendent of Schools

Dr. Regina T Dolan-Sewell District 1 (Vice Chairman)

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#### HIGH SCHOOLS OF LYNCHBURG CITY SCHOOLS

#### E.C. Glass High School

2111 Memorial Avenue Lynchburg, VA 24501 Phone: (434) 515-5370 Dr. Tracy Richardson, Principal

#### **Heritage High School**

3020 Wards Ferry Road Lynchburg, VA 24502 Phone: (434) 515-5400 Mr. Timothy Beatty, Principal

#### **Fort Hill Community School**

1350 Liggates Road Lynchburg, VA 24502 Phone: (434) 515-5150 Ms. Cathy Viar, Director

#### **Empowerment Academy**

601 12th St. Lynchburg, VA 24504 Phone: (434) 515-5140 Ms. Kacey Crabbe, Director

### **TABLE OF CONTENTS**

I. GENERAL INFORMATION	4-9
Grade Point Average (GPA) Calculations	4
Calculating the GPA	5
Advanced Placement (AP) Courses offered through LCS	6
Online Courses	7
Summer Courses and Independent Study Courses	8
Withdrawal from a Course before the End of the Semester	8
Promotion and Course Load	8
Graduation Requirements	9-13
II. COURSE OFFERINGS	14-52
Economics	16
Englisn	16-18
Speech	18
World Languages	18-20
Mathematics Instructional Sequence Options	21-24
Mathematics	25-27
Science	27-29
Computer Science	29
Social Studies	30-35
Health & Physical Education	35-36
Career-Technical Education	37
Architecture & Construction	
Arts, A/V Technology & Communications	38
Business, Management, Administration & Finance	
Education & Training	
Health Sciences	40-41
Hospitality & Tourism	41
Human Services	41
Information Technology	42
Law, Public Safety, Corrections & Security	42
Manufacturing	
Marketing, Sales & Service	43
Science, Technology, Engineering & Mathematics (STEM)	43-44
Transportation, Distribution & Logistics	45
Marine Corps Junior ROTC	45-46
Air Force Junior ROTC	46
Music	46-47
Art	47-48
Drama	49-50
Student Intern Program	50
Newspaper & Yearbook	50
Leadership	
Positive Parenting Program	50-51
Academic Support	51-52
Courses for the Applied Studies Diploma	52-53
III. SPECIAL PROGRAM OPPORTUNITIES	
AP Capstone	54
Dual Enrollment Courses	54
Early College Program	55
Lynchburg Regional Governor's STEM Academy	56-57
Other CVCC Opportunities	
CVCC Transition ProgramCentral Virginia Governor's School (CVGS)	58
Central Virginia Governor's School (CVGS)	58
NCAA & NAIA College Freshman Athletic Eligibility Standards	
Sequential Electives	
Transfer Credits	62-63
First-Time Transfers to a Virginia Public School	64

#### I. GENERAL INFORMATION

#### **Grading Scale**

All courses follow a nine-week grading period. For most classes, credits are earned on a yearly basis, with some as a semester basis. The following grading scale will be used in grade levels 9-12 for all students:

A = 90 - 100

B = 80 - 89

C = 70 - 79

D = 60 - 69

F = 59 and below

**NOTE**: A student must be enrolled in a LCS for two full years in order to be eligible for valedictorian or salutatorian or other similar recognitions.

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 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 course curriculum for Central Virginia Community College. See page 57 for more information.

#### **GRADE POINT AVERAGE (GPA) CALCULATIONS**

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 is often requested on applications for awards, recognitions, 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 (or identified Dual Enrollment courses or CVGS courses), an additional full point is added to any grade earned above an "F". With an AP course, a student must take the AP exam. With taking the AP exam, the student will have the additional 1.0 weight for the course. In addition, if a student scores 3 or higher on an AP exam, the course has an additional 0.5.

#### **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
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

#### CALCULATING GRADE POINT AVERAGE (GPA)

#### For students who are NOT seniors in 2017-2018 -

As approved by the School Board in February 2017, the following applies to all students who are entering the 2017-2018 school year as juniors or younger.

The quality points for each course are determined by the grade earned in the course and then adding any additional point values for higher level courses:

- Additional 0.5 for advanced courses (It is the expectation that a student takes the AP exam as part of the AP course, but if for some reason it is not taken, the course only has an additional .5) [Maximum 4.5 points for course]
- Additional 1.0 for specified dual enrollment courses and AP course with an exam taken. [Maximum 5.0 points for course]
- Additional 1.5 for AP courses in which the student scores a 3 or higher on the exam (Note, this additional 0.5 for exam score is not available for students in their senior year due to the fact that they will have graduated before AP scores are available). [Maximum 5.5 points for course]

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 for a student 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.

With regard to rank using the GPA, students are first considered for the distinction of Summa Cum Laude, based on the cumulative GPA to that point in their high school career. Summa Cum Laude is considered the highest level of academic performance and students with that distinction share the class rank of 1st. Rank order below Summa Cum Laude is then determined by exact GPA level, with the highest GPA below Summa Cum Laude being ranked with a number one more than the total number of students at Summa Cum Laude (e.g. If there are 4 students at Summa Cum Laude and ranked 1st, then the students with the highest GPA that is not Summa Cum Laude would be ranked 5th).

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

#### For students who ARE SENIORS in 2017-2018

Students who are entering the 2017-2018 school year as seniors will continue to use the previous GPA calculation that was in place prior to the School Board update to GPA calculation in February 2016. The 2017-2018 school year will be the final year the previous formula will be used for any student.

For these students, to calculate the GPA for a given semester or year, the following approach is used if all of the classes are regular-weighted classes (no advanced or AP courses) or if there are fewer than seven classes taken: Total the Quality Points (QP) earned for the grade in each class. Divide this sum by the number of classes taken. For example, if a student had 7 graded classes and earned four "A's" and three "B's," the calculation would be 4+4+4+3+3+3 = 25 Total Quality Points which, when divided by seven total classes, yields a GPA of 3.57.

To calculate the GPA for a given semester or year, the following approach is used if there are seven courses and at least one of them is a course weighted above 4.0 (e.g. advanced, Advanced Placement):

Total the Quality Points earned for the grade in each class, using the chart above for each course weighting. Divide this sum by the number of classes taken. For example, if a student had seven graded classes, with one being an AP course and two being advanced courses, and earned all A's, the calculation would be 5+4.5+4.5+4+4+4 = 30 total Quality Points which, when divided by seven total classes yields a GPA of 4.29. However, there is one additional step.

A formula adjustment was created in the previous decade when there were only six required courses per semester with an option for a seventh course that was an elective. An additional component was added to the formula to neutralize the impact on the GPA of choosing a seventh course as an elective.

To calculate the additional component, add the Extra Quality Points (the .5 or 1.0 values for courses that are weighted above 4.0) and divide by 42. In this example, there are Extra Quality Points of 1.0 for the one AP course and two 0.5 points for the two advanced courses, which equals 2.0 Extra Quality Points.

This is then divided by 42, which equals .05. This .05 is added to the 4.29 calculated above to yield a GPA of approximately 4.34.

#### ADVANCED PLACEMENT (AP) COURSES OFFERED THROUGH LCS

As mentioned previously, due to the rigor and work load, 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 (unless a senior exam exemption applies). In the case of extreme extenuating circumstances, appeals to this practice may be submitted to the Assistant Superintendent of Student Learning and Success. Any AP course must be taken through an instructor at the high school unless approved by the principal in writing. There is a fee for taking each AP exam. Reductions 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
- Other courses as noted in Edgenuity and in the current Virtual Virginia On-Line Program brochure
- Advanced Placement Seminar
- Advanced Placement Research

#### **DUAL ENROLLMENT COURSES**

The dual enrollment program with Central Virginia Community College allows students who are enrolled in certain courses in the high schools to receive both high school and college credit. All dual enrollment core content courses and electives are weighted at 5.0 quality points. All Governor's School courses are Dual Enrollment and count as 5.0. Dual enrollment courses in career and technical fields are weighted at 4.5 quality points. The College Success Skills course is weighted at 4.0 quality points. Student interest defines which courses will be taught on a yearly basis. Students enrolled in these courses may earn college credit from CVCC by fulfilling course requirements and completing the course with a grade of C or better. Students must qualify for enrollment for these courses by taking the CVCC placement test or by ACT/SAT qualifying scores a semester prior to enrollment within dual enrollment course for admission approval. The costs for required textbooks for dual enrollment courses will remain the responsibility of the school division. There is no tuition charged for dual enrollment classes taught in high schools. However, there is a \$75 fee for a course withdrawal. For more information, please contact the appropriate counselor at your student's school.

#### ADVANCED COURSES OFFERED THROUGH LCS

The following courses are at an advanced level. Due to the rigor and work load, all of these courses are weighted at 4.5 quality points for an "A." Some courses are weighted at 5.0 quality points and are noted with an asterisk (\*).

- 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 8<sup>th</sup> grade
- Advanced Earth Science in the 8<sup>th</sup> grade
- Advanced Algebra II
- Advanced Geometry with Trigonometry
- Advanced Math Analysis
- Advanced Pre-Calculus/Applied Calculus (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 Building Trades II/Carpentry I (Dual Enrollment)
- Advanced Computer Systems Technology II/PC Repair I (Dual Enrollment)
- Advanced Precision Machining II/Machine Tools I (Dual Enrollment)
- Advanced Robotic Work/Cell Technology (Dual Enrollment)
- Advanced Early Childhood Education II (Dual Enrollment)
- Advanced Culinary Arts (Dual Enrollment)
- Advanced Teachers for Tomorrow

#### ONLINE COURSES

#### 1. VIRTUAL VIRGINIA COURSES - http://www.virtualvirginia.org

#### **Advanced Placement Courses**

In addition to the AP courses offered locally, the Lynchburg City Schools' high schools recognize and participate in Virginia's VIRTUAL AP SCHOOL. Students may participate in these distance learning courses if students meet all prerequisite and eligibility criteria, including prior approval by the high school principal. If students are enrolled in AP virtual courses, then students must take the associated exams in May. 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 work load to on-site AP courses, however, not all virtual courses are at the advanced placement level. Students who are most successful in online or televised courses are those who can work independently with minimum supervision, have good time management skills, and 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.

#### **Criteria for Participation**

- 1. Typically, it is mostly juniors or seniors that choose to be scheduled into Virtual AP courses. Students below the junior grade level may enroll in a Virtual course, including AP courses, with permission from the school counselor and principal.
- 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 AP course.
- 3. Students will typically only be scheduled into Virtual AP courses for which a section of that same course is not being offered in the high school that year. Exceptions can be made by the principal.
- 4. Students will be scheduled into only one Virtual AP 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. The student must obtain written prior approval by the high school principal for any Virtual Virginia course.
- 8. Students who enroll in Virtual Virginia courses and withdraw after 21 calendar days must pay the State administrative withdrawal fee of \$75.00.

#### **Regular Courses**

These are also regular courses available (with a maximum 4.0 pts), including:

- World Mythology (4410AD)
- Arabic I (1410AD)
- Chinese I (1420AD)
- Creative Writing (1310AD)
- Psychology (3430AD)

#### **Virtual Virginia Additional Information**

After three weeks from the start of the course, students will only be allowed to drop the course per the Virtual Virginia guidelines. They will complete the course and the grade that they earn will be transcribed and included in their GPA calculation. 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. The counselor at each school will contact the parents/guardians of each student enrolled in a Virtual course prior to the end of the first three weeks of the course in order to remind them of the deadline for dropping the course

Please note that a "D," indicating distance learning, will be at the end of each of the Virtual AP course numbers. In some cases this will be the only difference between the on-site AP course number and the Virtual AP course number. AP Human Geography 4459AD (and BD) is not available in the LCS High School Program of Studies. Students may enroll in online AP courses due to scheduling conflicts or low enrollment. Interested students should contact their school counselor for more information.

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

#### 2. 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.

#### 3. 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.

#### SUMMER COURSES

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 principal.

The following online courses are planned to be offered through LCS for summer 2017.

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

#### 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 instructor must meet with the student at least once a week, and 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**

As noted in the proceeding section, any virtual course that a student wishes to take outside of the LCS offerings must have prior written approval from the principal. Similarly, any non-virtual course LCS offerings must have principal approval 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).

#### WITHDRAWAL FROM A COURSE BEFORE THE END OF THE SEMESTER

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 guidance department by the end of the 15<sup>th</sup> school day of the semester. If a student is withdrawn after the 15th school day of the semester, the student's transcript will reflect the course and a grade of withdrawal passing (WP) or withdrawal failing (WF) for the semester. 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. For additional procedures, please refer to Lynchburg City School Board Policies and Administrative Regulations 6-58.

#### **COURSE LOAD**

Students in grades 9-11 must carry the equivalent of seven credit-bearing courses. All students in grade twelve (senior students) must carry the equivalent of four credit-bearing 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. Students in grades 9-12 should not carry more than seven credit-bearing courses. A student desiring to carry more or less than seven credit-bearing courses must receive written permission to do so from the school's principal.

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.

#### **PROMOTION**

According Lynchburg City School Board Policies and Administrative Regulations Policy 7-25 <u>Promotion, Retention, Acceleration</u> 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.

9<sup>th</sup> to 10<sup>th</sup> Grade (4 credits) 10<sup>th</sup> to 11<sup>th</sup> Grade (9 credits) 11<sup>th</sup> to 12<sup>th</sup> Grade (15 credits)

#### **GRADUATION REQUIREMENTS**

The Regulations for Establishing Standards for Accrediting Public Schools in Virginia specifies the standards that all students must meet in order to earn the Applied Studies Diploma, the Standard Diploma, and the Advanced Studies Diploma. These standards can be changed from one year to another, and each student must meet the requirements in place the year he or she first entered the ninth grade. There are additional local requirements to earn the Advanced Studies Diploma with a Lynchburg Honors Seal.

#### The following requirements are in effect.

#### ADVANCED STUDIES DIPLOMA

Discipline Area	Standard Units of Credit Required	Verified Credits Required
English	4	2
Mathematics <sup>1</sup>	4	2
Laboratory Science <sup>2</sup>	4	2
History and Social Sciences <sup>3</sup>	4	2
World Languages <sup>4</sup>	3	
Health and Physical Education	2	
Fine Arts or Career and Technical Education	1	
Economics and Personal Finance	1	
Electives	3	
Student Selected Test <sup>5</sup>		1
Total <sup>6</sup>	26	9

- 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. If taken, Algebra, Functions, and Data Analysis must be completed before Algebra II to meet this requirement.
- 2. Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics.
- 3. Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and two courses in either world history or geography or both.
- 4. Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.
- 5. A student may utilize additional tests for earning verified credit in computer science, technology, career or technical education, economics, or other areas as prescribed by the board in 8 VAC 20-131-110.
- 6. Students must successfully complete one virtual course, which may be a noncredit-bearing course, or may be a course required to earn this diploma that is offered online.

#### **GRADUATION REQUIREMENTS (continued)**

#### 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 six semesters in courses designed for students with above average skills in reading and writing. Four of these semester courses must be taken during the junior and senior years.
- 2) The four math credits must include Algebra 1 and three credits above the level of Algebra I. The minimum must include progress through trigonometry/functions.
- 3) Science credits must include choices from Earth Science, Biology I, Biology II, Anatomy and Physiology, Biology II, Ecology, Chemistry, Physics, AP Chemistry, AP Physics, AP Biology, and Dual Enrollment Biology.
- 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, World Geography, 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.
- 5) 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

#### STANDARD DIPLOMA

Discipline Area	Standard Units of Credit Required	Verified Credits Required
English	4	2
Mathematics <sup>1</sup>	3	1
Laboratory Science <sup>2,6</sup>	3	1
History and Social Sciences 3,6	3	1
Health and Physical Education	2	
World Languages, Fine Arts or Career and Technical Education <sup>7</sup>	2	
Economics and Personal Finance	1	
Electives <sup>4</sup>	4	
Student Selected Tests <sup>5</sup>		1
Career and Technical Education Credential <sup>8</sup>		
Total 9, 10	22	6

<sup>&</sup>lt;sup>1</sup>Courses completed to satisfy this requirement must include at least two different course selections from among: Algebra I, Geometry, Algebra, Functions, and Data Analysis, Algebra II, or other mathematics courses above the level of Algebra II. The board must approve courses to satisfy this requirement. If taken, Algebra, Functions, and Data Analysis must be completed before Algebra II to meet this requirement.

<sup>&</sup>lt;sup>2</sup>Courses completed to satisfy this requirement must include course selections from at least two different science disciplines: earth sciences, biology, chemistry, or physics, or completion of the sequence of science courses required for the International Baccalaureate Diploma. The board must approve courses to satisfy this requirement.

<sup>&</sup>lt;sup>3</sup>Courses completed to satisfy this requirement must include U.S. and Virginia History, U.S. and Virginia Government, and one course in either world history or geography or both. The board must approve courses to satisfy this requirement.

<sup>&</sup>lt;sup>4</sup>Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.

<sup>&</sup>lt;sup>5</sup>A student may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics or other areas as prescribed by the board in 8VAC20-131-110.

#### **GRADUATION REQUIREMENTS (continued)**

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

<sup>7</sup>Pursuant to § 22.1-253.13:4 of the Code of Virginia, credits earned for this requirement must include one credit in fine or performing arts or career and technical education.

<sup>8</sup>Students must earn a career and technical education credential approved by the Board of Education that could include, the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.

<sup>9</sup>Students must successfully complete one virtual course, which may be a noncredit-bearing course or a required or elective credit-bearing course that is offered online.

<sup>10</sup>For students with IEPs or 504 Plans, the Board of Education shall establish, through guidelines, credit accommodations to the standard and verified credit requirements for a Standard Diploma. The student's Individual Education Program (IEP) or 504 Plan would specify any credit accommodations that would be applicable for the student.

#### SEQUENTIAL ELECTIVES REQUIREMENT

Students earning the Applied Studies Diploma must successfully complete two sequential electives to satisfy graduation requirements. Courses used to satisfy this requirement may be in any discipline as long as the courses are not specifically required for graduation. Courses used to satisfy the one-credit requirement in the fine arts or career and technical education <u>may also</u> be used to partially satisfy this requirement. For example, if a student selects Art I to satisfy the fine arts or career and technical education requirement, then Art I and a second course in the art sequence <u>may also</u> be used to satisfy the sequential electives requirement. The second course could then also count toward the six other required elective credits. Courses to satisfy the sequential elective requirement do not have to be completed in consecutive years, and they may be semester or year-long courses. Exploratory courses may not be used to meet the sequential elective requirement, but introductory courses <u>may</u> be used. Specifically approved sequences of courses meeting this requirement can be found on pg 61 of this document.

Questions regarding sequential electives may be directed to the counselor of your student's school.

#### **VERIFIED CREDITS**

To receive a standard diploma, students must pass six Standards of Learning (SOL) tests. Students entering ninth grade after 2003-04 must pass English: Reading/Literature/Research, English: Writing, one math, one science, one history/social studies, and one other SOL test or substitute test. All students seeking an advanced studies diploma must pass nine Standards of Learning (SOL) tests including the 2 English, 2 math, 2 science, 2 history, and one other.

#### LOCALLY AWARDED VERIFIED CREDIT OPTION

The current Regulations for Establishing Standards for Accrediting Public Schools in Virginia provide for locally awarded verified credits in science and history/social studies for students in the ninth grade class of 2003-2004 and beyond who are working toward a standard diploma (8 VAC 20-131-110 B.3).

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 science or history/social studies class but do not pass the associated SOL end-of-course test and do not have enough verified credits to graduate with a standard diploma. Locally awarded verified credits apply only to the standard diploma. No locally awarded verified credit may be used for the advanced studies diploma. Locally awarded verified credits apply only to science and history/social studies. No locally awarded verified credits are available for math, reading, or writing.

To be eligible to earn a local verified credit in science or history/social studies, 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,
- · be working toward a standard diploma, and
- demonstrate achievement in the academic content through a local appeal process.

#### **GRADUATION REQUIREMENTS (continued)**

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 science or history course.
- Students eligible for a local verified credit who receive a "D" in the science or history course will receive a local verified credit if they receive a grade of "C" or higher on the exam.
- Students not meeting one of the above criteria may review course content and complete a released SOL test. Once they receive a perfect score on the released test, they are eligible for a locally verified credit. Students may use notes when completing the released test. This option is available until the student scores 100%.
- 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 assistant superintendent of Student Learning &
  Success.

**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. Any students who entered 9<sup>th</sup> grade for the first time prior to fall of 2013, please see school counselor for requirements.

#### **APPLIED STUDIES DIPLOMA**

Students identified with disabilities who complete the requirements of their individualized education programs shall be awarded special diplomas by local school boards if they do not fulfill any other diploma requirements.

#### 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.

#### AWARDS FOR EXEMPLARY PERFORMANCE

Students who complete the requirements for a diploma may be eligible for the following seals if they meet the requirements as defined in the *Regulations Establishing Standards for Accrediting Public Schools in Virginia*:

- 1. 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), or dual enrollment courses shall receive the **Governor's Seal** on the diploma.
- 2. Students who complete the requirements for a Standard Diploma or Advanced Studies Diploma with an average grade of "A" shall receive a **Board of Education Seal** on the diploma.
- 3. The Board of Education's **Career and Technical Education Seal** will be awarded to students who earn a Standard or Advanced Studies Diploma <u>and</u>
  - a. 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
  - b. Pass an examination or an occupational competency assessment in a career and Virginia Department of Education technical education concentration or specialization that confers certification or occupational competency credential from a recognized industry, trade or professional association or
  - c. 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.

#### AWARDS FOR EXEMPLARY PERFORMANCE (continued)

- 4. The Board of Education's Seal of Advanced Mathematics and Technology will be 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
    - a. pass an examination in a career and technical education field that confers certification from a recognized industry, or trade or professional association; or
    - b. acquire a professional license in a career and technical education field from the Commonwealth of Virginia; or
    - c. pass an examination approved by the board that confers college-level credit in a technology or computer
- 5. The Board of Education's Seal for Excellence in Civics Education will be awarded to students who earn either a Standard or Advanced Studies Diploma and: (i) complete Virginia and United States History and Virginia and United States Government courses with a grade of "B" or higher; and, (ii) have good attendance and no disciplinary infractions as determined by local school board policies and, (iii) complete 50 hours of voluntary participation in community service or extracurricular activities. Activities that would satisfy the requirements of clause (iii) of this subdivision include:
  - a. volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate;
  - b. participating in Boy Scouts, Girl Scouts, or similar youth organizations;
  - c. participating in JROTC;
  - d. participating in political campaigns or government internships, or Boys State, Girls State, or Model General Assembly;
  - e. participating in school-sponsored extracurricular activities that have a civics focus.
  - f. any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement.
- 6. The Board of Education's **Seal of Biliteracy** certifies attainment of a high level of proficiency by a graduating high school student in one or more languages in addition to English, and certifies that the graduate meets one of the following criteria:
  - a. The Board of Education's Seal of Biliteracy will be awarded to students who earn either a Board of Education- approved diploma and (i) pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level; and (ii) be proficient at the intermediate-mid level or higher in one or more languages other than English, as demonstrated through an assessment from a list to be approved by the Superintendent of Public Instruction.
  - b. For purposes of this article, "world languages" means a language other than English, and includes American Sign Language.

#### II. COURSE OFFERINGS LISTED IN THE PROGRAM OF STUDIES INTRODUCTION

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, the same courses are available in both schools. Whether or not a particular course is actually taught, however, depends upon the number of students enrolling in that course. 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).

#### **Summary of Course Offerings**

Courses for the Applied Studies Diploma are on page 52-53 (DE=Dual Enrollment)

Academic Support – pgs 51-52
7211 SOL Review – English
7212 SOL Review – Writing
7221 SOL Review – Math
7231 SOL Review – Science
7241 SOL Review – Soc. Stud.
7610 SAT Prep
1930 ELL Support
1192 Accelerating – Reading I
1130 Accelerating – Reading II
7222 Math Lab
(These courses can be taken
repeatedly for elective credit)
Architecture & Construction -

### pgs 37-38

6760 Drafting III 8431 Construction Technology 8240 Building Trades I 8250 Building Trades II

#### Art - pgs 47-48

5510 Art I 5520 Drawing 5530 Painting I 5540 Painting II 5550 Sculpture I 5551 Sculpture II 5560 Photography 5570 Digital Photography & **Printmaking** 

5580 Commercial Art 5517 Adv. Studio Art 5519 AP Portfolio Art 5529 AP Art History

#### Arts, A/V Technology & Communications - pg 38

8561 Communication System 7450 Video & Media Technology

#### Business, Management, Administration & Finance-pgs 38-

6160 Accounting I 6170 Accounting II 6140 Business Management

6150 Business Law

#### Business, Management, Administration & Finance-pg 39

3740 Computer Applications 6340 Computer Information Systems

6260 Design, Multimedia & Web **Technologies** 

6240 Keyboarding

6250 Keyboarding Applications 6370 Principles of Business & Marketing

#### Central Va. Governor's School pq 58

3217 Research Course 3219 Physics

2317 Math Analysis/Pre-Calculus (DE)

3329 College Anatomy & Phys (DE)

3227 Senior Tech Seminar

3729 College Comp Science (DE) 2329 Calculus-Single Variable I & II (DE)

2228 Connections in Math

#### Computer Science - pgs 29

3750 Intro to Computer Science 3760 Computer Science II 3729 AP Computer Science

#### Drama - pgs 49-50

5610 Intro to Theatre

5611 Musical Theatre Dance

5620 Acting I 5630 Acting II

5621 History of Musical Theatre

5622 Playwriting 5623 Directing

5640 App Tech Theatre I 5641 Tech Theatre I Design

5360 Jazz Ensemble

5642 Tech Theatre I Production

5650 App Tech Theatre II 5651 Tech Theatre II

5652 Costuming

#### Economics - pg 16

6151 Personal Finance & **Economics** 4439A AP Microeconomics 4449B AP Macroeconomics

#### Education & Training - pgs 39-40

6541 Early Childhood Ed I 6542 Early Childhood Ed II 6550 Teachers for Tomorrow

#### English/Speech-pgs 16-18

1190 World Lit & Comp I 1297 Adv. World Lit & Comp 1100 World Lit & Comp II 1207 Adv. World Lit & Comp II 1110 American Lit & Comp 1217 Adv. American & World Lit & Comp 1319 AP Language & Comp

1120 English Lit & Comp 1227 Adv. English Lit & Comp 1328 Adv. College Comp (DE) 1329 AP Lit & Comp 5850 Public Speaking I 5860 Public Speaking II 1310 Creative Writing 1730 Exploring Hip Hop 1429 AP Seminar 1439 AP Research

#### Health - pg 35

5240 Driver's Ed & Personal Health 5250 Health & Family Living

#### Health Sciences - pg 40-41

8337 Emergency Medical **Telecommunications** 6810 Dental Careers I 6820 Dental Careers II 8360 Nurse Aide I 8362 Nurse Aide II 5260 Athletic Training I 5261 Athletic Training II

#### Hospitality & Tourism - pg 41

6440 Intro to Hospitality, Tourism & Recreation

6441 Culinary Arts I

6442 Culinary Arts II

6443 Culinary Arts Specialization

#### Human Services - pg 41

8340 Cosmetology I

8350 Cosmetology II

#### Information Technology pg 42

8540 Computer Systems Tech I

8550 Computer Systems Tech II

8553 Cyber Security

7140 Information Tech Assistant I

7150 Information Tech Assistant II

#### Law, Public Safety, Corrections and Security pg 42

8702 Criminal Justice I

8703 Criminal Justice II

#### Leadership - pg 50

7770 Leadership Training

#### Manufacturing - pg 43

8440 Manufacturing Systems

8450 Precision Machine Tech I

8460 Precision Machine Tech II/Intro to Machine Tools

#### Marketing Sales & Service - pg 43

6942 Sports, Entertainment, & Rec

6951 Marketing I

6960 Marketing II

#### Mathematics - pgs 24-27

2101 Alg, Functions & Data Analysis

2090 Algebra I, Part 1

2100 Algebra I, Part 2

2290 Algebra I

2387 Adv Algebra I

2200 Algebra II

2397 Adv Algebra II

2210 Geometry

2307 Adv Geometry w/Trig

2220 Trig/Functions

2317 Adv Math Analysis

2328 Adv Pre-Calc/Applied Calc

2429 Adv Placement Statistics

2329 Adv Placement Calculus (AB)

2339 Adv Placement Calculus (BC)

2397PY Adv Algebra II PETAL

#### Music - pgs 46-47

5340 Concert Band I

5350 Symphonic Band I

5370 Wind Ensemble

5380 Percussion Ensemble

5460 Chorus I

#### Music - pgs 46-47

5470 Chorus II - Concert Choir

5480 Chorus III

5410 Orchestra I

5420 Orchestra II

5430 Beginning Midi & Computer Applications in Music

5439 AP Music Theory

#### Newspaper & Yearbook - pg 50

7410 Newspaper

7420 Yearbook

#### Physical Education - pgs 35-36

5140 Physical Ed Drill

5190 Physical Ed 9

5191 Physical Ed 10

5151 Weight Training I

5152 Weight Training II

5161 Fitness for Life

5931YS Foundations of Personal Fitness and Wellness

#### Positive Parenting Program-pg 50-51

5241 Family Health & Social Dev. 7480 Child Development & Care

7481 Nutrition & Food Preparation

#### **Reserve Officer Training Corps** (ROTC) - pgs 45-46

5710 MCJROTC Leadership Ed I

5720 MCJROTC Leadership Ed II

5730 MCJROTC Leadership Ed III

5740 MCJROTC Leadership Ed IV

5750 AFJROTC Leadership Ed I

5760 AFJROTC Leadership Ed II

5770 AFJROTC Leadership Ed III

5780 AFJROTC Leadership Ed IV

#### Science - pgs 27-29

3200 Biology I

3210 Biology II Anatomy & Phys.

3211 Biology II Ecology

3220 Chemistry

3290 Earth Science

3292 Astronomy: Earth Science II

3307 Adv. Chemistry

3357 Adv. Scientific Research

3328 Adv. College Biology (DE)

3387 Adv. Earth Science (gr. 8)

3397 Adv. Biology I

3317 Adv. Physics

3449 AP Biology

3459 AP Chemistry

3469 AP Physics I

3479 AP Physics II

3429 AP Environmental Science

#### Science, Technology,

#### Engineering & Math - pgs 43-44

6740 Drafting I

6750 Drafting II

6760 Drafting III

6770 Adv. Robotic Work/Cell Tech

6640 Tech Foundations

6650 Tech Transfer

#### Social Studies - pgs 30-35

4690 World Geo

4367 Adv. World Geo

4290 World History & Geo I

4397 Adv. World History & Geo I

4200 World History & Geo II

4307 Adv. World History & Geo II

4469 AP World History

4210 American History

4317 Adv. American History

4419 AP American History

4220 US Govt

4327 Adv. US Govt

4429 AP American Govt Politics & Comparative Govt Politics

4409 AP European History

4740 African-American Studies

4459 AP Human Geography

4250 Introduction to Psychology

3439 AP Psychology

#### Student Intern Programs - pg 50

7110 Teacher/Office Intern

7130 Elem./Middle Student Intern

7131 General Student Intern

#### **Transportation, Distribution &** Logistics - pg 45

8141 Intro to Auto Service Tech

8140 Auto Service Tech I

8150 Auto Service Tech II

#### World Languages - pgs 18-20

1590 French I

1500 French II

1510 French III

1527 Adv. French IV

1529 AP French V

1690 German I

1600 German II

1610 German III

1627 Adv. German IV

1629 AP German V

1790 Latin I

1700 Latin II

1710 Latin III

1737 Adv. Latin Literature

1729 AP Latin (Vergil)

1890 Spanish I

1800 Spanish II

1810 Spanish III

1827 Adv. Spanish IV

1829 AP Spanish V

Any prerequisite listed for a course in any content area may be waived pending principal's approval. Please contact your student's counselor for any questions regarding prerequisites for courses.

#### **ECONOMICS**

#### PERSONAL FINANCE & ECONOMICS (6151Y), Grades 9-12, Full Credit Year Course Prerequisite: None Students

explore many facets of financial decision-making involved in daily life. Skills in money management, record keeping, and banking are enhanced through the study of basic concepts of economics, insurance, credit, and other related topics. Students need to take the WISE Financial literacy exam to meet diploma requirements.

#### PERSONAL FINANCE & ECONOMICS (E6151YS), Rising Grades 10-12, Full credit is offered as a summer online course. *Prerequisite: None*

Students explore many facets of financial decision-making involved in daily life. Skills in money management, record keeping, and banking are enhanced through the study of related topics. Students need to take the W!SE Financial literacy exam on campus to meet diploma requirements.

## ADVANCED PLACEMENT (AP) MICROECONOMICS & MACROECONOMICS (4439Y), 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 examinations in May.

#### **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.

### WORLD LITERATURE & COMPOSITION I A & B (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.

#### **ENGLISH** (continued)

### ADVANCED WORLD LITERATURE & COMPOSITION I (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 (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. Near the end of the school year, students will take the End-of-Course Standards of Learning test in writing.

#### ADVANCED WORLD LITERATURE & COMPOSITION II

(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. Near the end of the school year, students will take the End-of-Course Standards of Learning test in writing.

### AMERICAN LITERATURE & COMPOSITION (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. Near the end of the school year, students will take the 11th grade Standards of Learning tests in literature. Near the end of the school year, students will take the End-of-Course Standards of Learning test in literature.

#### **ENGLISH** (continued)

### ADVANCED AMERICAN & WORLD LITERATURE & COMPOSITION (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. Plato's *Republic*, Shakespeare's *King Lear*, and Hugo's *Les Miserables*). In both semesters students do independent research, read and write extensively, and make oral reports on what they have read and researched. **Near the end of the school year, students will take the End-of-Course Standards of Learning test in literature.** 

### ADVANCED PLACEMENT (AP) LANGUAGE & COMPOSITION (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 11<sup>th</sup> grade Virginia Standards of Learning in preparation for the required End-of-Course Standards of Learning tests in literature administered near the end of the school year. 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 (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 (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.

#### **ENGLISH** (continued)

## ADVANCED COLLEGE COMPOSITION (1328A), Dual Enrollment English (1328B), Grades 11-12, 1st or 2nd Sem., One-half Credit. (5.0 GPA for A)

These classes offer students achieving a grade of C or better 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, near the end of the school year, students will take the End-of Course Standards of Learning test in literature. Students must achieve a C or better 1st semester to be placed in the 2<sup>nd</sup> semester course. Students who have completed the course with a grade of C or better receive 6 semester hours of credit from CVCC for English 111 and 112. Students must qualify for enrollment for this course by taking the CVCC placement test or by ACT or SAT qualifying scores. Because this course is a dual enrollment course, certain fees may apply. (See page 54 for details)

### ADVANCED PLACEMENT (AP) LITERATURE & COMPOSITION (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.

### CREATIVE WRITING (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.

#### **ENGLISH (continued)**

### EXPLORING HIPHOP THROUGH LITERATURE, HISTORY, & CULTURE (1730Y), Grades 9-12, Full Credit Year Course

This elective course is to 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.

### ADVANCED PLACEMENT (AP) SEMINAR (1429Y), Grades 11-12, Full Credit Year Course

AP Seminar is a foundational course that engages students 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. There are no prerequisites for the AP Seminar course. The course culminates in an Individual research-based essay of 2,000 approximately 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).

#### ADVANCED PLACEMENT (AP) RESEARCH (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, researchbased investigation to address a research

#### **ENGLISH** (continued)

-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.

#### **SPEECH**

### PUBLIC SPEAKING I (5850A, 5850B), Grades 9-12, 1<sup>st or</sup> 2nd Sem., One-half Credit.

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 (5860A, 5860B), Grades 9-12, 1st or 2nd Sem., One-half Credit. 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 8<sup>th</sup> grade students in French, Spanish, and Latin at all three middle schools.

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 8<sup>th</sup> or 9<sup>th</sup> 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 (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.

#### **WORLD LANGUAGES**

(continued)

#### FRENCH II (1500Y), Grades 9-12, Full Credit Year Course

Prerequisite: 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 (1510Y), Grades 10-12, Full Credit Year Course Prerequisite: French 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 (1527Y), Grade 11 or 12, Full Credit Year Course Prerequisite: 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 periodicals and selections from literature are the basis for refining composition and reading skills and provide the topics for conversation. Experience in listening to extended passages develops students' comprehension skills and provides practice in using higher level thinking skills.

## ADVANCED PLACEMENT (AP) FRENCH V (1529Y), Grade 12, Full Credit Year Course Prerequisite: French IV (May be waived by recommendation of instructor.)

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.

#### GERMAN I (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 everyday chores, school, family, leisure-time activities, foods, weather, travel, parties, and shopping. During the second semester, students read longer narratives in the target language about important cities, states, German-speaking regions, and holidays. Authentic audio-visual aids reinforce aural-oral skills while lending authentic cultural insights.

#### **WORLD LANGUAGES**

(continued)

#### GERMAN II (1600Y), Grades 9-12, Full Credit Year Course

Prerequisite: German I

German II students continue to build facility with the language through conversations and reading/writing activities. Topics first semester include vacations, school, health, home, employment, and clothing. During second semester, students discuss leisure time activities, cars, famous Germans, and selected German-speaking cities.

### GERMAN III (1610Y), Grades 10-12, Full Credit Year Course Prerequisite: German II

The refinement of oral and written communication skills through conversational practice and the reading of selections by modern German authors constitute the major portion of third-year study. Students read and discuss German children's literature, poetry, current events from newspaper and magazine articles, and short stories. During discussions, students learn about levels of language and the appropriateness of each in various situations.

#### ADVANCED GERMAN IV (1627Y), Grades 11 & 12, Full

Credit Year Course Prerequisite: German III At this level of language study, students are expected to have achieved facility in the German language, which is now used in instruction, conversation, reading, and discussion. Students continue to discuss German literature and everyday topics of conversation. In addition, frequent writing assignments enhance skills in grammar and serve to increase vocabulary.

#### ADVANCED PLACEMENT (AP) GERMAN V (1629Y), Grade 12, Full Credit Year Course Prerequisite: German IV (may be waived by recommendation of instructor)

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 (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.

#### WORLD LANGUAGES

(continued)

#### LATIN II (1700Y), Grades 9-12, Full Credit Year Course

Prerequisite: 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 (1710Y), Grades 10-12, Full Credit Year Course Prerequisite: 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 Sallust 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 (1737Y), Grades 11 or 12, Full Credit Year Course Prerequisite: Latin III

Students will read and study a variety of prose and poetry selections from a wide range of Latin authors, excluding Vergil. 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. Taught alternate years with Advanced Placement Latin Vergil A & B.

#### ADVANCED PLACEMENT (AP) LATIN VERGIL (1729Y), Grades 11 or 12, Full Credit Year Course Prerequisite: Latin Ш

Students will read selected books and individual passages from Vergil's Aeneid and Ceasar'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. Taught alternate years with Advanced Latin Literature.

#### SPANISH I (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. Frequent conversational activities, projects, and dramatizations involve students actively in the language.

#### **WORLD LANGUAGES**

(continued)

### SPANISH II (1800Y), Grades 9-12, Full Credit Year Course

Prerequisite: 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 However, this course expands to conversation. 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.

#### SPANISH III (1810Y), Grades 10-12, Full Credit Year Course Prerequisite: 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.

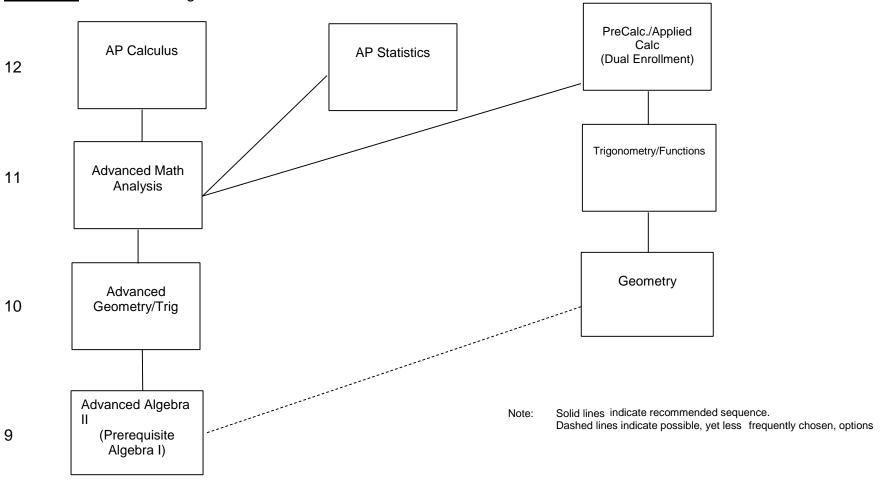
#### SPANISH IV (1827Y), Grades 11 or 12, Full Credit Year Course Prerequisite: Spanish III

Conversation and composition are stressed as students converse about daily occurrences in addition to reading and reacting to literature and historical/cultural accounts.

#### ADVANCED PLACEMENT (AP) SPANISH V (1829Y), Grade 12, Full Credit Year Course Prerequisite: Spanish III (May be waived by recommendation of instructor)

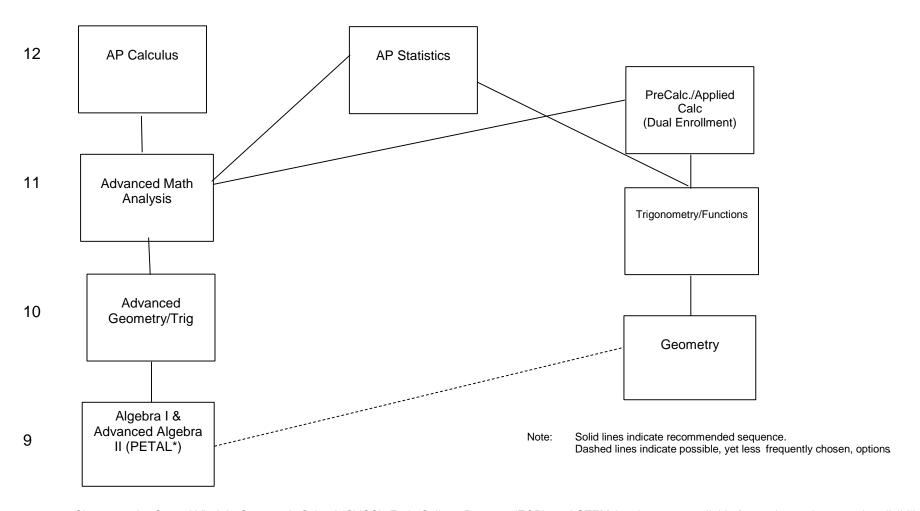
Students will read extensively, take notes from lectures, listen to taped lectures, describe series of pictures, and refine grammatical structures. In addition, students will spontaneously initiate, respond to, and discuss themes related to literature. Throughout both semesters of the course, students will learn to develop a main idea in composition and draw conclusions from what they see, read, or hear. All students are required to take the advanced placement examination in May.

#### **OPTION 1** – Advanced Algebra II in 9<sup>th</sup> Grade



Classes at the Central Virginia Governor's School (CVGS), Early College Program (ECP), and STEM Academy are available for students who meet the eligibility requirements and have been selected for the program. Please refer to the section on the Program of Studies for additional information.

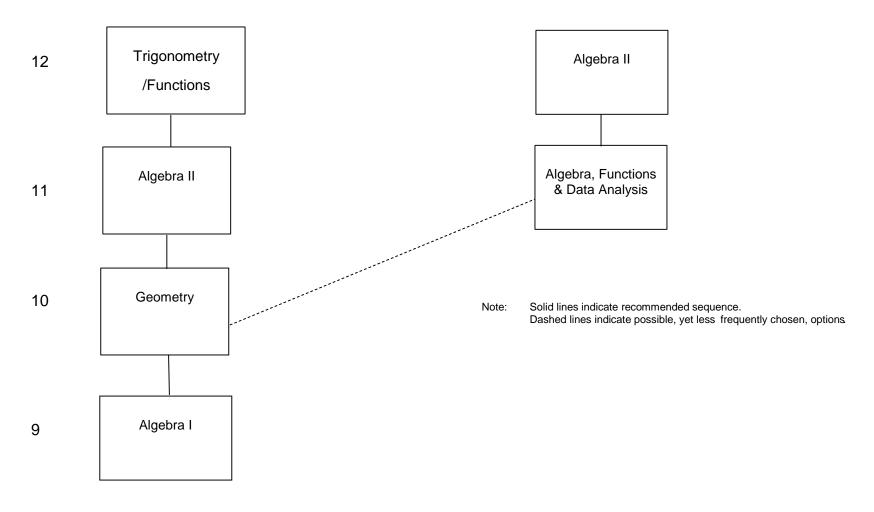
#### OPTION 2 - PETAL - Algebra I/Advanced Algebra II in 9th Grade



Classes at the Central Virginia Governor's School (CVGS), Early College Program (ECP), and STEM Academy are available for students who meet the eligibility requirements and have been selected for the program. Please refer to the section on the Program of Studies for more information.

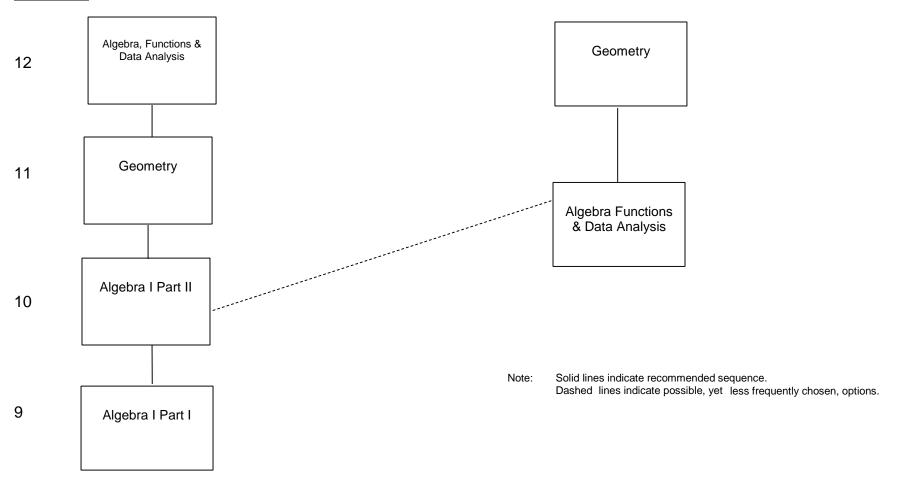
<sup>\*</sup>PETAL – Admission to PETAL requires meeting selection criteria. See your counselor for additional information.

#### **OPTION 3** – Algebra I in the 9<sup>th</sup> Grade



Classes at the Central Virginia Governor's School (CVGS), Early College Program (ECP), and STEM Academy are available for students who meet the eligibility requirements and have been selected for the program. Please refer to the section on the appropriate. See your counselor for more information. Program of Studies for more information. Additional options may be

#### OPTION 4 - Algebra I Part I in the 9th Grade



Classes at the Central Virginia Governor's School (CVGS), Early College Program (ECP), and STEM Academy are available for students who meet the eligibility requirements and have been selected for the program. Please refer to the section on the Program of Studies for more information. Additional options may be appropriate. See your counselor for more information.

#### **MATHEMATICS**

The Regulations for Establishing Standards for Accrediting Public Schools in Virginia specifies that students must earn 3 standard units of credit in Mathematics 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 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 this requirement. Additionally, students must earn one Verified Credit. 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. Additionally, students must earn two Verified Credits. Students' requests to enroll in more than one Math course for new credit must receive approval from the principal.

#### ALGEBRA, FUNCTIONS, AND DATA ANALYSIS (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 I, PART I (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.

#### **MATHEMATICS** (continued)

### ALGEBRA I, PART II (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. Near the end of the school year, students will take the Algebra I Standards of Learning test.

## ALGEBRA I (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. Near the end of the school year, students will take the Algebra I Standards of Learning test.

## ADVANCED ALGEBRA I (2387Y), Grade 8, Full Credit Year Course Prerequisite: Pre-Algebra and teacher recommendation.

This advanced one year algebra program is only available in the 8<sup>th</sup> 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. Near the end of the school year, students will take the Algebra I Standards of Learning test.

## ALGEBRA II (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 and matrices, 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. Near the end of the school year, students will take the Algebra II Standards of Learning test.

#### **MATHEMATICS** (continued)

#### ADVANCED ALGEBRA II (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. Near the end of the school year, students will take the Algebra II Standards of Learning test.

### **GEOMETRY (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. Near the end of the school year, students will take the Geometry Standards of Learning test.

#### ALGEBRA I; ADVANCED ALGEBRA II, PETAL (2290PY), Grade 9, Full Credit Year Course Prerequisite: Teacher recommendation and Foundations of Algebra or Pre-Algebra

This is a two-year math program taught in one year during a two-period block. 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 Algebra I Standards of Learning test. Advanced Algebra 2 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. Near the end of second semester students will take the Algebra II Standards of Learning test.

#### ADVANCED GEOMETRY WITH TRIGONOMETRY (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. Near the end of the school year, students will take the Geometry Standards of Learning test.

#### **MATHEMATICS** (continued)

## TRIGONOMETRY/FUNCTIONS (2220Y), Grades 11 or 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 (2317Y), Grades 11 or 12,

Full Credit Year Course Prerequisite: Trigonometry
This course includes the study of relations

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 PRE-CALCULUS & APPLIED CALCULUS (2328Y), Grades 11-12, Dual Enrollment Math, Full Credit Year Course (5.0 GPA for A) Pre-requisite: Trigonometry/ Functions or Math Analysis

The first semester (MTH 163 – Pre-calculus I) presents a study of college algebra, matrices, and algebraic, exponential, and logarithmic functions. Students must achieve a C or better in order to be placed in the second semester course. The second semester (MTH 271 – Applied Calculus I) presents limits, continuity, differentiation of algebraic and transcendental functions with applications, and an introduction to integration. Students who have completed the course with a grade of C or better receive 6 semester hours of credit from CVCC for Math 163 and 271. Students must qualify for enrollment for this course by taking the CVCC placement test or by ACT or SAT qualifying scores. Because this course is a dual enrollment course, certain fees may apply. (see page 2 for details)

## ADVANCED PLACEMENT (AP) STATISTICS (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.

#### **MATHEMATICS** (continued)

ADVANCED PLACEMENT (AP) CALCULUS AB (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. All students are required to take the AP Calculus AB examination in May. 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). The course will be graded and weighted at 5.0.

ADVANCED PLACEMENT (AP) CALCULUS BC (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. Additionally, students must earn two Verified Credits.

#### **SCIENCE** (continued)

### EARTH SCIENCE (3290Y), Grades 9-12, Full Credit Year Course *Prerequisite: None*

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. Near the end of the school year, students will take the earth science Standards of Learning test.

### ADVANCED EARTH SCIENCE (3387Y), Grade 8, Full Credit Year Course *Prerequisite: None*

This advanced earth science course is available only in the 8<sup>th</sup> grade. Additional topics and supplemental activities supporting the earth science SOL are included in the course. Near the end of the school year, students will take the Earth Science Standards of Learning test.

BIOLOGY I (3200Y), Grades 9-12, Full Credit Year Course Credit Prerequisite: None-It is preferable that students have completed 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). Near the end of the school year, students will take the Biology Standards of Learning test.

ADVANCED BIOLOGY I (3397Y), Grades 9 & 10, Full Credit Year Course Prerequisite: It is preferable that students have completed Earth 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. Near the end of the school year, students will take the Biology Standards of Learning test.

BIOLOGY II ANATOMY AND PHYSIOLOGY (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 (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.

CHEMISTRY (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. Near the end of the school year, students will take the Chemistry Standards of Learning test.

#### **SCIENCE** (continued)

ADVANCED CHEMISTRY (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. Near the end of the school year, students will take the Chemistry Standards of Learning test.

### ADVANCED PLACEMENT (AP) CHEMISTRY (3459Y), Grades 11 or 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. 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 (3292Y), Grades 11 or 12, Full Credit Year Course Prerequisite: Earth Science, Chemistry I or Physics I Co-requisite; 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 (3317), Grades 11 or 12, Full Credit

Year Course Prerequisite: Algebra I and Geometry Co-requisite 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 standards include force and motion, transformations, wave phenomena and the electromagnetic spectrum, electricity, fields, and non-Newtonian physics. The standards stress the practical application of physics in other areas science. technology, engineering. of mathematics. The effects of physics on our world are investigated through the study of critical, contemporary global topics.

#### **SCIENCE** (continued)

ADVANCED PLACEMENT (AP) PHYSICS I (3469Y), Grades 11 or 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 (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 **Physics** inquiry-based understanding of through 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 (3328Y), Dual Enrollment, Grade 12, Full Credit Year Course (5.0 GPA for

A) 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 must achieve a C or better in order to be placed in the second semester course. Students who have completed the course with a grade of C or better receive 8 semester hours of credit from CVCC for Biology 101 and 102. Students must qualify for enrollment for this course by taking the CVCC placement test or by ACT or SAT qualifying scores. Because this course is a dual enrollment course, certain fees may apply. (See page 2 for details) Maximum number of students per class 23.

#### **SCIENCE** (continued)

## ADVANCED PLACEMENT (AP) BIOLOGY (3449Y), Grades 11 or 12, Full Credit Year Course Prerequisites: Biology, 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 AP Biology examination in May.

### ADVANCED PLACEMENT (AP) ENVIRONMENTAL SCIENCE (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.

#### ADVANCED SCIENTIFIC RESEARCH (3357Y), Grades 10-12, Full Credit Year Course Prerequisite: Biology and Chemistry

This elective course involves a year-long commitment to designing and carrying out an experiment based on a scientific research problem. Each student will choose a research idea to explore. Students are introduced to research and the use of scientific method, statistics, types of investigations and basic laboratory techniques. Students conduct their own research as much as possible and gather and statistically analyze their data and report their findings to the scientific community. Students are assessed on and will self-assess their own oral presentations, portfolios and written reports. Students will enter their projects in the Central Virginia Regional Science Fair.

#### COMPUTER SCIENCE

### COMPUTER PROGRAMMING (6640Y), Grades 9-12, E.C Glass. Full Credit Year Course Prerequisite: Algebra I

Exploring Computer Science is a yearlong course consisting of 6 units, approximately 6 weeks each. The course was developed around a framework of both computer science content and computational practice. Assignments and instruction are contextualized to be socially relevant and meaningful for diverse students. Units utilize a variety of tools/platforms, and culminate with final projects around the following topics: Human Computer interaction; problem solving; web design; computing and data analysis; and robotics.

#### AP COMPUTER SCIENCE PRINCIPLES (3760Y), Grades 10-

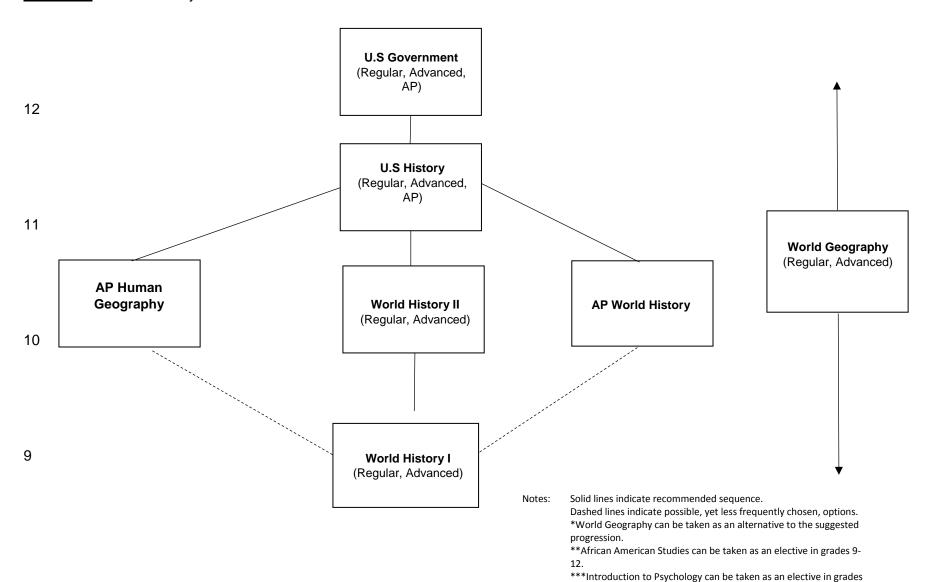
12, E.C Glass. Full Credit Year Course Prerequisite: Algebra I AP Computer Science Principles is designed to introduce students to the central ideas of computer science, to instill ideas and practices of computational thinking, and to have students engage in activities that show how computing changes 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 advanced placement examination in May. This course may be able to qualify for math, science, or career tech credit for a Standard or Advanced Studies Diploma. See your school counselor for information.

# ADVANCED PLACEMENT (AP) COMPUTER SCIENCE (3729Y), Grades 10-12, E.C Glass. Full Credit Year Course Prerequisite: 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 are required to take the AP examination in May. This course may be able to qualify for math, science, or career tech credit for a Standard or Advanced Studies Diploma. See your school counselor for information.

#### **Social Studies Instructional Sequence Options**

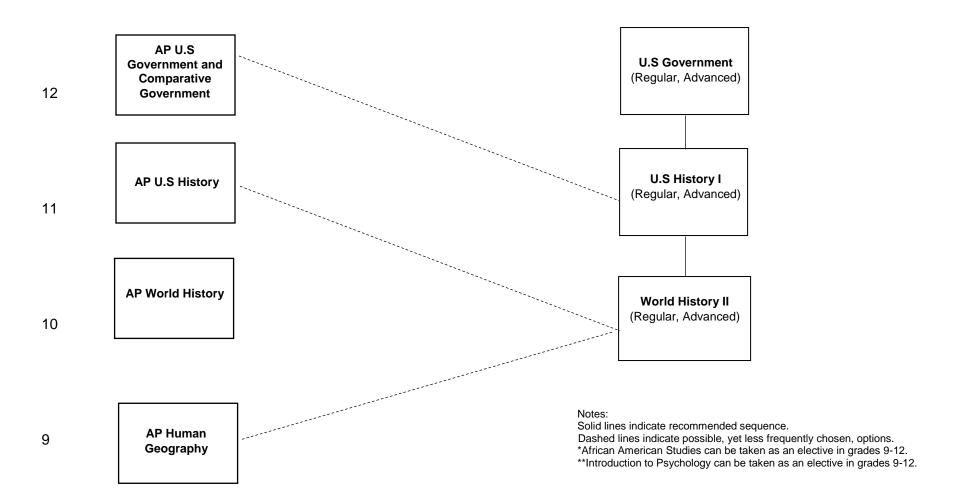
#### **OPTION 1** – World History I in the 9<sup>th</sup> Grade



9-12.

#### **Social Studies Instructional Sequence Options**

#### **OPTION 2** – AP Human Geography in 9<sup>th</sup> Grade



#### **Social Studies Instructional Sequence Options**

#### **OPTION 3** – World Geography in the 9<sup>th</sup> Grade

AP U.S **Government and U.S Government** Comparative (Regular, Advanced) Government 12 AP U.S History **U.S History** (Regular, Advanced) 11 **World History II AP World History** (Regular, Advanced) 10 9 **World Geography** Solid lines indicate recommended sequence.

Dashed lines indicate possible, yet less frequently chosen, options. (Regular, Advanced) \*African American Studies can be taken as an elective in grades 9-12.
\*\*Introduction to Psychology can be taken as an elective in grades 9-12.

#### **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. Additionally, students must earn two Verified Credits. Students' requests to enroll in more than one History or Social Science course for new credit must receive approval from the principal.

### WORLD GEOGRAPHY (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.

### ADVANCED WORLD GEOGRAPHY (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. Near the end of the school year, the students will take the Virginia World Geography Standards of Learning test.

### WORLD HISTORY & GEOGRAPHY I (to 1500 AD) (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. These classes are designed primarily for students seeking the standard high school diploma. Near the end of the school year, students will take the World History and Geography I Standards of Learning test.

#### **SOCIAL STUDIES** (continued)

### ADVANCED WORLD HISTORY & GEOGRAPHY I (to 1500 AD) (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. Near the end of the school year, students will take the World History and Geography I Standards of Learning test.

### WORLD HISTORY & GEOGRAPHY II (1500 AD to PRESENT) (4200Y), Grade 9 or 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 19<sup>th</sup> and 20<sup>th</sup> centuries as they relate to contemporary issues. **Near the end of the school year, students will take the World History and Geography II Standards of Learning test.** 

### ADVANCED WORLD HISTORY & GEOGRAPHY II (1500 AD to PRESENT) (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 19<sup>th</sup> and 20<sup>th</sup> centuries as they relate to contemporary issues. Projects, writing assignments, additional reading assignments, and research are requirements of these classes. **Near the end of the school year, students will take the World History and Geography II Standards of Learning test.** 

### ADVANCED PLACEMENT (AP) WORLD HISTORY (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). Tenth grade students choosing this option will take the World History and Geography II Standards of Learning test near the end of the school year. Eleventh and 12th grade students may take the class for elective credit.

#### **SOCIAL STUDIES** (continued)

### AMERICAN HISTORY (4210AY), 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. Near the end of the school year, students will take the Virginia/U.S. History Standards of Learning test.

### ADVANCED AMERICAN HISTORY (4317Y), Grade 11, Full Credit Year Course

These advanced-level classes provide a comprehensive, indepth 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. **Near the end of the school year, students will take the Virginia/U.S. History Standards of Learning test.** 

### ADVANCED PLACEMENT (AP) AMERICAN HISTORY (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). All students are required to take the advanced placement examination in May. In addition, near the end of the school year, students will take the Virginia/U.S. History Standards of Learning test.

### UNITED STATES GOVERNMENT (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.

#### **SOCIAL STUDIES** (continued)

### ADVANCED UNITED STATES GOVERNMENT (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 (4429A) & COMPARATIVE GOVERNMENT POLITICS (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 2<sup>nd</sup> 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 1<sup>st</sup> and 2<sup>nd</sup> semester classes require student research and analysis. All students are required to take both advanced placement examinations in May.

### ADVANCED PLACEMENT (AP) EUROPEAN HISTORY (4409Y), Grades 11-12, Full Credit Year Course

These elective classes are 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, course work includes an in-depth study during 1<sup>st</sup> semester of the major events and trends in Europe from approximately 1450 to the Napoleonic Period with significant emphasis placed on intellectual, cultural, and social-economic history. Study 2<sup>nd</sup> semester continues from the Napoleonic Period to the present. All students are required to take the advanced placement examination in May.

### AFRICAN-AMERICAN STUDIES (4740Y), Grades 9-12, Full Credit Year Course

This elective course in African American Studies provides a thematic study of African American History from African origins to the present. Students will study the history and culture of African Americans and their contributions and roles in American History. An emphasis throughout the course is on how African American culture has impacted United States History. This course is taught through a variety of literature and with multiple opportunities for class discussion, expository writing, and collaborative projects.

#### **SOCIAL STUDIES** (continued)

### ADVANCED PLACEMENT (AP) HUMAN GEOGRAPHY (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). Near the end of the school year, students will take the World Geography Standards of Learning test and the AP Human Geography examination in May.

### INTRODUCTION TO PSYCHOLOGY (4250Y), Grades 9-12, 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 pf psychology and scientific thought, biological basis of behavior, research methodology, statistics, sensation and perception, states of conscious, memory, language and intelligence, developmental psychology, personality, and learning.

### ADVANCED PLACEMENT (AP) PSYCHOLOGY (3439Y) Grades 11 or 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.

#### **HEALTH** (required for grad.)

The Regulations for Establishing Standards for Accrediting Public Schools in Virginia specifies that students must earn 2 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. Two semesters of physical education are required for graduation.

#### **HEALTH** (continued)

## DRIVER EDUCATION AND PERSONAL HEALTH & SOCIAL DEVELOPMENT (5240A, 5240B) Grades 9-12, 1st or 2nd Sem., One-half Credit. *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.

### HEALTH AND FAMILY LIVING (5250A, 5250B), Grades 9-12 1st or 2nd Sem., One-half Credit. *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.

## PHYSICAL EDUCATION (required for grad.)

PHYSICAL EDUCATION DRILL (5140A, 5140B), Grades 9-12, 1st or 2nd Sem., One-half Credit. Prerequisite: Enrollment in ROTC I or completion of ROTC I.

This course is designed to develop knowledge and skills related to flexibility, strength training, personal fitness, and drill activities.

### PHYSICAL EDUCATION 9 (5190A, 5190B), Grades 9-12, 2<sup>nd</sup> Sem., One-half Credit. *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.

#### PHYSICAL EDUCATION 10 (5191A, 5191B), Grades 9-12, 1st Sem., One-half Credit. 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 ED. (continued)

# PHYSICAL EDUCATION 9 AND HEALTH & FAMILY LIVING 9 (5991Y), Full Credit Year Course, Grade 9 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 decisionmaking are discussed in relation to developing a healthy and productive lifestyle from adolescence to old age.

# PHYSICAL EDUCATION 10 AND DRIVER EDUCATION (5901Y), Full Credit Year Course, Grade 10-12 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 10<sup>th</sup> grade Family Life Education.

Students in grades 9 and 10, may enroll in Weight Training I or II instead of the semester-long Physical Education 9 or 10. These students must still successfully complete the semester of Health and Family Living in Grade 9 and the semester of Driver Education and Personal Health and Social Development in Grade 10. These courses may be taken repeatedly for elective credit.

## WEIGHT TRAINING I (5151A, 5151B) Grades 9-12, 1st or 2nd Sem., One-half Credit. 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. Students in Grade 9 may enroll in Weight Training I instead of the semester-long Physical Education 9. These students must still successfully complete the semester of Health and Family Living in Grade 9. 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 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.

### PHYSICAL ED. (continued)

## WEIGHT TRAINING II (5152A, 5152B) Grades 9-12, 1st or 2nd Sem., One-half Credit. Prerequisite: None

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. Students in Grade 10 who have successfully completed Weight Training I may enroll in Weight Training II instead of the semester-long Physical Education 10. These students must still successfully complete the semester of Driver Education and Personal Health and 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. If possible, students in grades 11-12 who are enrolled in Weight Training II should be scheduled into a separate section from 10th grade students enrolled in the course.

## FITNESS FOR LIFE (5161A, 5161B) Grades 9-12, 1<sup>st</sup> or 2<sup>nd</sup> Sem., One-half Credit. *Prerequisite: None*

This course will enable students to obtain the knowledge and skills necessary to develop and maintain a health enhancing 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. Students will participate in activities that will increase physical fitness levels and develop health practices that value physical activity and its contribution to lifelong fitness. Students will exhibit a physically active lifestyle through participation in one or more lifetime sports or activities of their own choosing.

# PHYSICAL EDUCATION (continued)

# FOUNDATIONS OF PERSONAL FITNESS & WELLNESS (5931YS) Grades 9-12, <u>Summer Only</u>, 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.

#### CAREER-TECHNICAL EDUCATION

Career and Technical Education is an essential part of the school division's total educational program specifically designed to prepare students for gainful employment and/or post-secondary education or training. These courses are designed to enhance and support the academic curriculum by reinforcing the Standards of Learning established for English, mathematics, science, history, and social science.

Career and Technical Education provides sequences of career-related courses designed to help students develop skills needed for entry-level employment, advanced technical training programs, and continuing education on the college and university level.

Every program is designed to help students develop 21\*-century workforce readiness skills, such as, reasoning, problem-solving, decision-making, teamwork, work ethic, and demonstrating independence and initiative.

Courses that must maintain a maximum pupil-to-teacher ratio of 20 students to one teacher, due to safety regulations, will require students to fill out a "First Choice Form". A rubric will be utilized for student acceptance into that program. The rubric will include topics of attendance, grades, behavior, and career goals.

Shuttle buses are provided for students to travel between high schools if needed. Students may require a travel period 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.

CONSTRUCTION TECHNOLOGY (8431Y), Grades 10 & 11, Heritage High, Full Credit Year Course Prerequisite: None

Students will be introduced to three general areas of study including carpentry, electrical wiring, and plumbing in this course. Students will design, build, and test scale model structures and work with projects that help them to understand the jobs of architects, carpenters, electricians, plumbers, surveyors, contractors, design engineers, and a variety of other construction careers. *Maximum number of students per class 20.* 

Sequential options: None

BUILDING TRADES I (8240Y), Grade 11, Heritage High, Full Credit Year Course Prerequisite: Approved Application

This is a double-period course. This course is designed to prepare individuals to erect, install, maintain and repair buildings and other structures. Carpentry, masonry, electricity, and plumbing will be emphasized. Also included is instruction in cost estimating, cutting, fastening, and fitting various materials, using hand and power tools and following technical specifications and blueprints. *Maximum number of students per class 20.* 

Sequential options: Building Trades II

# ARCHITECTURE & CONSTRUCTION (continued)

BUILDING TRADES II (8250Y) Grade 12, Heritage High, Full Credit Year Course Prerequisite: Building Trades I (8240Y)

This is a double-period course. Course content includes construction, customer relations, job pricing, custom construction, and installing interior millwork. Building Codes will be stressed in carpentry, painting, electrical, plumbing and masonry. The course also includes special emphasis on job opportunities, project management, and job integrity in the construction trades. *Maximum number of students per class 20.* This course may be taken as a dual-enrollment course earning 6 college credits from Central Virginia Community College under the course numbers 8258AC, 8258BC (CVCC course numbers are BLD 149 (3 credits) and BLD 249 (3 credits).

# ARTS, A/V TECHNOLOGY & COMMUNICATIONS

Courses in this area can prepare students for careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

# COMMUNICATION SYSTEMS A & B (8561A, 8561B) Grades 10-12, Heritage High, 1<sup>st</sup> or 2<sup>nd</sup> Sem. One-half Credit.

Prerequisite: None

This is an introduction class for students preparing for jobs as advertising artists, and illustrators. Students learn both hand and computer generated layout and illustration used for brochures, posters, catalogues, advertisements and logos. Students learn skills in the areas of advertising design, illustration, printing advertisements, digital photography, and digital imaging.

Sequential options: Video and Media Technology

#### VIDEO AND MEDIA TECHNOLOGY (7450Y) Grades 10-12, E.C. Glass and Heritage High, Full Credit Year Course *Prerequisite: None*

This course offers students an opportunity to study all aspects of video and media production, from planning and writing for production to operating studio and editing equipment. Students practice various methods of gathering news and information from individuals, research, and online resources. In addition, students are introduced to analog and digital principles of film production.

Sequential options: Communication Systems

# BUSINESS, MANAGEMENT, ADMINISTRATION & FINANCE

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

## ACCOUNTING I (6160Y), Grades 10-12, Full Credit Year Course *Prerequisite: None*

Content includes theory of basic bookkeeping, use of journals and ledgers, worksheets, and income statements. Also included is the preparation of financial records, taxes and payroll projects; special problems related to sales and purchases. Students learn fundamental accounting procedures using a manual system.

**Sequential options**: Accounting II, Business Law, Business Management, Computer Applications, Computer Information Systems, Design, Multimedia, & Web Technologies, Keyboarding Applications, Principals of Business & Marketing.

# ACCOUNTING II (6170Y), Grades 11 or 12, Full Credit Year Course Prerequisite: Accounting I (6160 A & B) and Keyboarding (6240)

Content includes management of financial records through various business activities, partnership accounting, and general ledger. Students use manual accounting skills to analyze and interpret accounting transactions. Also included is the study of corporate and cost accounting and budgetary controls.

Sequential options: Business Law, Business Management, Computer Applications, Computer Information Systems, Design, Multimedia, & Web Technology, Keyboarding Applications, Principals of Business and Marketing.

# BUSINESS MANAGEMENT (6140A) Grades 11 or 12, 1st Sem., One-half Credit. *Prerequisite: None*

This one-semester course includes an overview of American business and the social and economic environments in which it operates. Main topics of study are economics, business finance, and personnel administration. Members of the class start and operate a corporation through Junior Achievement.

**Sequential options:** Accounting I, Business Law, Computer Applications, Computer Information Systems, Design, Multimedia, & Web Technology, Marketing, Principals of Marketing.

## BUSINESS LAW (6150B) Grades 11 or 12, 2<sup>nd</sup> Sem., One-half Credit. Prerequisite: Business Management

This course is focused on personal law, the law of contracts and the rights and responsibilities of individuals in our society. Laws affecting daily business contracts and employment are emphasized.

**Sequential options**: Accounting I, Business Management, Computer Applications, Computer Information Systems, Design, Multimedia, & Web Technology, Principals of Business & Marketing.

### BUSINESS, MANAGEMENT, ADMINISTRATION & FINANCE (continued)

## COMPUTER APPLICATIONS (3740Y), Grades 9-12, Full Credit Year Course *Prerequisite:*

None. Keyboarding skills recommended.

This course develops skills and provides experience with major computer applications. These applications include word processing (using both text and graphics-based programs), spreadsheet, database, and integration of applications. Students use these applications for problem solving and file and disk management. Keyboarding and general computer understanding are addressed as needed. Also included is work with multi-media research, the Internet, presentations, desktop-publishing, video conferencing and digital cameras, computer graphics, and computer communications.

**Sequential options:** Accounting I, Business Law, Business Management, Computer Information Systems, Design, Multimedia & Web Technology, Keyboarding Applications, Principals of Business & Marketing, Programming.

## COMPUTER INFORMATION SYSTEMS (6340Y) Grades 11 or 12, Heritage High, Full Credit Year Course

This course develops skills and provides experience with the major business applications of the microcomputer. These include Microsoft Windows and word processing using Microsoft Office. Also included are business computer terminology, systems and procedures, spreadsheets, database management, desktop publishing, and presentation graphics using Microsoft Office. Students will attempt the Internet and Computing Core Certification (IC3) exam. The IC3 exam is offered through Certiport.

**Sequential Options:** Accounting I, Business Law, Business Management, Computer Applications, Computer Information Systems, Design, Multimedia, & Web Technology, Keyboarding Applications, Principals of Business and Marketing, Programming.

# DESIGN, MULTIMEDIA, & WEB TECHNOLOGIES (6260A, 6260B), Grades 9-12, 1st or 2nd Sem., One-half credit

Students develop proficiency in creating desktop publications, multimedia presentations/projects, and web sites using industry standard application software. Students incorporate principles of layout and design in completing publications and projects. Students design portfolios that may include business cards, newsletters, mini-pages, web pages, multimedia presentations, and projects, calendars, and graphics. Completion of this course may prepare students for industry certifications.

**Sequential options:** Accounting I, Business Law, Business Management, Computer Applications, Computer Information Systems, Keyboarding Applications, Principals of Business & Marketing, Programming.

### BUSINESS, MANAGEMENT, ADMINISTRATION & FINANCE (continued)

KEYBOARDING APPLICATIONS (6250A, 6250B), Grades 9-12, 1st or 2nd Sem., One-half Credit. *Prerequisite:* 

Keyboarding (6240) or mastery of touch typing

Students apply keyboarding skills to create and edit a variety of personal and business documents including announcements, memos, various business letter styles, tables, forms, reports (including bibliography page, title page, and tale of contents), labels and envelopes. Students will utilize formatting functions, including margins and justification, font sizes and styles, line spacing, word wrap, bullets and outline features, spell check, and thesaurus. Special emphasis is placed on speed, accuracy and production. Proofreading and editing skills are also address as is the ability to compose at the keyboard.

# PRINCIPLES OF BUSINESS AND MARKETING A & B (6370A, 6370B), Heritage High, Grades 9-12, 1<sup>st</sup> or 2<sup>nd</sup> Sem., One-half Credit. *Prerequisite: None*

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. **Sequential options**: Accounting I, Business Law, Business Management, Computer Applications, Computer Information Systems, Design, Multimedia, & Web Technology, Keyboarding Applications, Marketing I,

Students explore the role of business and marketing in the

# **EDUCATION & TRAINING**

Sports, Entertainment, & Recreation Marketing.

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

EARLY CHILDHOOD EDUCATION I (6541Y), Grade 11, Heritage High, Full Credit Year Course Prerequisite: Approved Application

Course will not be offered in 2017-2018 school year. This is a double-period course. Students prepare to be primary providers of home-, family-, or institution-based child care services by focusing their study on the planning, organizing, and conducting of meaningful play and learning activities; child monitoring and supervision; record keeping; and referral procedures. Teachers highlight the basic skills of math, science, and communication when appropriate. Maximum number of students per class 20.

**Sequential options:** Early Childhood Education II, Teachers for Tomorrow I

# EDUCATION & TRAINING (continued)

EARLY CHILDHOOD EDUCATION II (6542Y), Grade 12, Heritage High, Full Credit Year Course Prerequisite: Early Childhood Education I (6541)

Course will not be offered in 2017-2018 school year.

This is a double-period course. Students prepare for positions in child care centers as child care attendants, kindergarten aides, or child care assistants; as foster parents; or as entrepreneurs. Opportunities for mentorship under the supervision of the instructor will be a part of the class curriculum. Teachers highlight the basic skills of math, science, and communication when appropriate in the content. Completion of this sequence may prepare students for the Child Development Associate (CDA) National Credential by the Council for Professional Recognition. *Maximum number of students per class 20.*This course may be taken as a dual-enrollment course for 6 college credits from Central Virginia Community.

for 6 college credits from Central Virginia Community College under numbers 6548AC, 6548BC. CVCC course numbers CHD 120 (3 credits) and CHD 165 (3 credits).

TEACHERS FOR TOMORROW (6550Y), Grades 11 & 12, Full Credit Year Course, E.C. Glass and Heritage High School, Prerequisite: Have & maintain a minimum 2.7 grade point average. Submit three satisfactory teacher recommendations, a brief essay & application to Lynchburg College (a special application form will be used) Virginia's

Teachers for Tomorrow Program is offered to high school juniors and seniors interested in pursuing a career in teaching and education. Students will experience the profession as they are guided through the history of education and the functions of schools and school divisions. Additionally, the students will experience the classroom as they become acquainted on a personal and professional level with teachers and teaching; including a brief internship in a classroom setting. This course may be taken as a dual-enrollment course earning 4 college credits from Lynchburg College under the LCS course numbers 6558AC and 6558BC. The LC course numbers are EDUC 101 (3 credits) and EDUC 202 (1 credit).

# TEACHERS FOR TOMORROW II (9072Y), Grades 11 & 12, Full Credit Year Course, E.C. Glass and Heritage High School.

Prerequisite: Teachers for Tomorrow I

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

#### **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.

## DENTAL CAREERS I (6810Y) Grade 11, E. C. Glass High, Full Credit Year Course Prerequisite: Approved application

This is a double-period course. This is a double period health occupational preparatory course. Students learn dental anatomy, care and sterilization of instruments, and basic oral hygiene skills. Topics include: clinical skills necessary to assist the dentist in the routine function of a dental office, chair-side dental procedures, instrument setup, and basic laboratory procedures including material manipulation. *Maximum number of students per class 20.* 

#### DENTAL CAREERS II (6820Y) Grade 12, E. C. Glass High, Full Credit Year Course Prerequisite: Dental Careers I (6810)

This is a double-period course. Students continue developing their skills and mastering competencies through classroom instruction and simulated clinical experiences. Topics include: taking and processing dental x-rays, laboratory procedures, and identification of instruments and material manipulation. Students receive Dental Radiation Safety and Hygiene certification upon satisfactory completion of the unit test. The final part of the Dental Careers program combines classroom instruction with actual hands-on training with area dentist, assistants, hygienist, and laboratory technicians. The clinical training will take place during the regular school hours and will be graded but not necessarily for pay. Classroom instruction will include entry level clerical skills as well as clinical skills. *Maximum number of students per class 20.* 

# EMERGENCY MEDICAL TELECOMMUNICATIONS (8337Y), Grades 9-12, Full Credit Year Course, EC Glass. *Prerequisite: None*

This course is designed to develop entry-level skills needed in a telecommunications environment for rescue, fire and police. Upon completion, students will be able to summarize issues involving the telecommunication's role and responsibilities as a member of the health and public safety environment, summarize issues involving available resources to a telecommunicator, the importance of maintaining confidentiality, liability and legal issues involving emergency tele communicators and their agencies, and summarize the process of stress management for inside and outside a communications department/center.

Sequential options: Keyboarding Applications

NURSE AIDE I (8360Y), Grades 11 & 12, Heritage High School, Full Credit Year Course Prerequisite: Approved Application

This is a double-period class. Virginia Board of Nursing approved course to qualify for the Certified Nurse Aide Exam. This course features a dual focus on theory and practical skills. The theory component includes basic anatomy and physiology, ethics, health care systems, medical terminology, and professionalism. The skills are taught in the nursing lab and include transfer techniques, assessment of vital signs, assisting with patient hygiene and grooming, and infection control procedures.

Sequential options: Nurse Aide II

### **HEALTH SCIENCES (continued)**

NURSE AIDE II (8362Y), Grade 12, Heritage High School, Full Credit Year Course Prerequisite: Nurse Aide I (8360)

This is a double-period course. Virginia Board of Nursing approved course to qualify for the Certified Nurse Aide Exam. This course integrates the principles and skills introduced in Nurse Aide I. Students practice skills and concepts from the course in a closely supervised clinical setting. The course also includes preparation for the Virginia certification exam.

## ATHLETIC TRAINING I (5260Y), Grades 11-12, E.C. Glass and Heritage High, Full Credit Year Course *Prerequisite:*

Interest in athletic training and permission of the instructor Students interested in athletic training as a career, physical therapy, or medicine should consider these courses. Sports medicine will be covered from three aspects: recognition of injuries; prevention of injuries; and rehabilitation of injuries. Some lab work with athletic teams may be required.

Sequential options: Athletic Training II

# ATHLETIC TRAINING II (5261Y), Grade 12, E.C. Glass and Heritage High, Full Credit Year Course *Prerequisite:*

Athletic Training I (5260) and permission of the instructor Students continue their study of sports medicine topics from three aspects: recognition of injuries; prevention of injuries; and rehabilitation of injuries. Some lab work with athletic teams may be required.

#### **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 HOSPITALITY, TOURISM AND RECREATION (6440Y), Grades 10-12, Full Credit Year Course, E.C. Glass and Heritage High, *Prerequisite: None*

Students enrolled in the Introduction to Hospitality, Tourism and Recreation focus on developing professional skills and using emerging technologies to prepare for employment in this global industry, rich in diverse career opportunities. The program includes instruction in the industries of lodging, food and beverage, travel and tourism, and recreation and fitness. *Maximum number of students per class 20.* 

# CULINARY ARTS I (6441Y), Grades 10-11, E.C. Glass and Heritage High, Full Credit Year Course Prerequisite: Approved Application

This is a double-period course. Students are taught the managerial, production, and service knowledge and skills used in government, commercial, or independently owned institutional food establishments and related food industry occupations. This course includes planning, selecting, storing, purchasing, preparing, and serving food and food products; basic nutrition, sanitation, and food safety; the use and care of commercial equipment; serving techniques; and the operation of institutional food establishments. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of culinary arts are emphasized. *Maximum number of students per class 20.* 

Sequential options: Culinary Arts I

#### **HOSPITALITY & TOURISM**

CULINARY ARTS II (6442Y), Grades 11-12, E. C. Glass and Heritage High, Full Credit Year Course Prerequisite: Culinary Arts I (6441)

This is a double-period course. Students extend and expand skills learned in Culinary Arts I, preparing for occupations such as chef/cook, baker/pastry helper, pastry decorator, hospitality worker, dietetic aide/assistant, food demonstrator, mixologist, and entrepreneur. Opportunities for mentorships under the supervision of the instructor will be a part of the class curriculum. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of culinary arts are emphasized. Teachers highlight the basic skills of math, science, and communication when appropriate in content. Maximum number of students per class 20. This course may be taken as a dual enrollment course for six college credits from CVCC under numbers 6448AC and 6448BC. CVCC course are HRI 106 (3 credits) and HRI 158 (3 credits).

Sequential options: Culinary Arts Specialization

## CULINARY ARTS SPECIALIZATION (6443Y), Grade 12, E. C. Glass and Heritage High, Full Credit Year Course

Prerequisite: Culinary Arts I (6441); Culinary Arts II (6442)

The Culinary Arts Specialization curriculum provides students with continuing opportunities to obtain comprehensive knowledge of the food service industry as well as to expand their technical skills in a food service specialty. Students explore careers and refine their skills in implementing safety and sanitation standards, applying nutritional principles, planning menus, using business and math skills, and selecting and maintaining food service equipment. Students specialize in one of the following four areas: Baking and Pastry Food Preparation Techniques: Preparation Catering/Banquet Food Restaurant Operation Techniques; or Quantity Food Preparation Techniques. The curriculum continues to place a strong emphasis on science and mathematics knowledge and skills as it emphasizes critical thinking, practical problem solving, and entrepreneurial opportunities within the field of culinary arts. Spots are limited.

#### **HUMAN SERVICES**

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

## COSMETOLOGY I (8340Y), Grade 11, Heritage High, Full Credit Year Course Prerequisite: Approved Application

This is a double-period course. The course includes professional ethics, hygiene, good grooming, manicuring, and hair shaping and styling. This course also includes student practice in scalp and hair treatments, the care and styling of wigs, permanent waving and hair removal.

Related topics also include skin, scalp and hair disorders. **Maximum number of students per class is 20.** 

Sequential options: Cosmetology II

## COSMETOLOGY II (8350Y), Grade 12, Heritage High, Full Credit Year Course Prerequisite: Cosmetology 1 (8340)

This is a triple-period course. The course includes beauty salon management and operation, additional work developing competencies in electricity and light therapy, chemistry, anatomy and physiology, chemical hair relaxing and hair coloring. Students will complete final preparation for taking the state license cosmetology examination.

#### INFORMATION TECHNOLOGY

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 (8540Y), Grades 9-11, Heritage High, Full Credit Year Course Prerequisite: Approved Application

This is a double period course. This course focuses on the soft and technical skills needed to obtain entry-level positions as network, computer, or help-desk technicians. It provides a basic overview of networking concepts, such as LANS, WANS, networking design, setup, and software. Students will study the impact of MMO and LAN gaming on networks, including designing, building, and securing a LAN gaming network. All students will complete the (IC3®) exam by *Certiport*. Students will service microcomputer hardware and support peripherals; build a computer from parts; diagnose, troubleshoot, and resolve personal computer basic hardware and software issues.

#### Sequential options: CST II

This course may be taken as a dual enrollment course earning 3 college credits from Central Virginia Community College under the course numbers 8548AC, 8548BC. The CVCC course number is ETR 149.

# COMPUTER SYSTEMS TECHNOLOGY SYSTEMS II (8550Y), Grades 10-12, Heritage High, Full Credit Year Course Prerequisite: Computer Systems I (8540) Prerequisite

**Course** Prerequisite: Computer Systems I (8540) Prerequisite may be waived by instructor if sufficient technical knowledge is proven.

This is a double period course. This course equips students with the advanced knowledge, skills, and understanding that will enable them to install, troubleshoot and maintain computers and their associated networks. Students diagnose, troubleshoot, and resolve advanced hardware and basic networking issues. Numerous hands on exercises, including configuring, installing, and troubleshooting operating systems, third party software, and hardware will reinforce student learning and understanding. Creating email accounts, configuring wireless technologies, appropriate use of social media are part of the course work. All students will complete the CompTIA A+ Essentials and A+ Specialization exams. Students may be eligible to participate in a number of certification exams offered through CISCO and CompTIA. This course may be taken as a dual enrollment course earning 4 college credits from Central Virginia Community College under the course numbers 8558AC, 8558BC. The CVCC course number is ITE 221.

# CYBER SECURITY (8553Y), Grades 9-12, Heritage High School, Full Credit Year Course Prerequisite: Approved Application

This is a double period course. This course prepares students for entrance into the career of cyber security, data loss prevention, and network security. The cyber security field is the fastest growing field in the IT industry, and by 2016 will be the most needed profession in the United States. Students will be prepared to take and pass the CompTIA Network+ and Security+ examinations and be able to enter the IT security field directly from high school, if they choose. Topics of study include: Linux Operating Systems; OSI model; TCP model; Local and WAN security; ethical hacking (white hat); security careers and penetration testing.

# INFORMATION TECHNOLOGY (continued)

# INFORMATION TECHNOLOGY ASSISTANT I (7140Y), Grades 10-12, Full Credit Year Course

This course is designed to develop students' understanding of technical support as an assistant to the Instructor, a trained Help Desk professional. Students will learn how to diagnose, troubleshoot, and resolve computer and tablet hardware and software problems. Students will develop an understanding of the logistics of properly documenting problems and solution. Students will develop technical problem solving skills through hands-on, supervised experience.

## INFORMATION TECHNOLOGY ASSISTANT II (7150Y), Grades 10-12, Full Credit Year Course *Prerequisite:*

Information Technology Assistant I

This course is designed to further develop students' technical support skills while providing an opportunity for students to step into a leadership role. Students who have completed the first semester course will be challenged with increasingly difficult hardware and software problems. Students will also assist the instructor with prioritizing, planning, and scheduling tasks to IT Assistant I students and ensure work is completed correctly and in a timely manner.

# 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 (8702Y), Grades 11-12, E.C. Glass High School, Full Credit Year Course Prerequisite: None

This course presents an overview of the criminal justice system and introduces the major components in law enforcement, judiciary, and corrections. Students learn theory, principles, and techniques of developing/managing services for the safety and protection of people and property. Students will participate in lessons on and off campus and in activities that take place after-school hours. Students enrolled in this course are expected to join and participate in SkillsUSA.

Sequential options: Criminal Justice II

#### CRIMINAL JUSTICE II (8703Y), Grades 11-12, E.C. Glass High School, Full Credit Year Course Prerequisite: Criminal Justice I (8702Y)

This course covers the complex responsibilities of criminal investigation. Students will learn the principles and techniques of conducting specific investigations such as homicide, assault, and robbery. Students will also learn the principles of crime scene investigation including photography, sketching, and the securing of evidence. Students enrolled in this course are expected to join and participate in SkillsUSA.

### **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 (8450Y), Grade 11, E.C. Glass High, Full Credit Year Course Prerequisite: Approved Application

This is a double-period course. Content includes safety, hand tools, bench work, layout work, blueprint reading, drilling and tapping, machine shop math, and introduction to welding. The course also includes precision measuring tools, use of charts and tables, an introduction to the CNC mill and lathe, tool grinding, and surface grinding. Maximum number of students per class 20.

# PRECISION MACHINE TECHNOLOGY II - INTRODUCTION TO MACHINE TOOLS (8460Y), Grade 12, E.C. Glass High, Full Credit Year Course Prerequisite: Precision Machine Technology I (8450)

This is a double-period course. 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. Qualified seniors are eligible to participate in a work experience program with local machining companies. *Maximum number of students per class 20.* This course may be taken as a dual-enrollment course earning 6 college credits from Central Virginia Community College under the course numbers 8468AC, 8468BC. The CVCC course numbers are MAC 161 (3 credits) and 162 (3 credits).

### MARKETING, SALES & SERVICE

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

# SPORTS AND ENTERTAINMENT MANAGEMENT (6942Y) Grades 10-12, Heritage High, Full

Credit Year Course Prerequisite: Approved Application Sports, Entertainment and Recreation Marketing (SER) is an entry level course offered in the two-year marketing program. This course is designed to develop an understanding of sports, entertainment and recreation marketing and its importance. Students develop fundamental skills for SER event planning, implementing, and evaluating. Students will learn market research, advertising, public relations, professional communications, effective selling, licensing merchandising, branding, and event safety and security. Students learn career options available in the SER industries as well as develop skills necessary for successful initial employment experiences.

**Sequential options:** Marketing I, II, and Principles of Business and Marketing

#### MARKETING, SALES & SERVICE

MARKETING I (6951Y), Grades 10-12, Heritage High, Full Credit Year Course Prerequisite: Approved Application. Continuous part-time employment and/or project plan and DECA membership are required.

Content includes risk management, product planning, communicating effectively and selling techniques. In special situations, a project plan may be substituted for the work experience requirement. This option must be teacher approved in advance. Content also includes relationships with employers, co-workers, and customers, advertising, inventory, safety, ad layout, display, free enterprise system, pricing, and economics.

**Sequential options:** Marketing II, Business Management, Principles of Business and Marketing

MARKETING II (6960Y), Grade 10-12, Heritage High, Full Credit Year Course Prerequisite: Marketing I (6950) or Sports, Entertainment and Recreation Marketing (6942). Continuous part-time employment and/or project plan and DECA membership are required.

Students earn one-half credit per semester for the classroom component of this course and another onehalf credit per semester for the required 360 hours of on-the-job training each semester. Content includes human resource, marketing research, creative selling, payroll, merchandising, determining profit, and purchasing. In special situations, a project plan may be substituted for the work experience requirement. This option must be teacher approved in advance. Content also includes supervisory communications, personnel management, leadership styles, supervision of sales promotion, supervision of product transportation, and responsibilities of supervisory and mid-management personnel. If, in an exceptional case, a student is only able to participate in the classroom component, one-half credit per semester can be earned under the course numbers 6370A or 6370B.

# SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

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, engineering) including laboratory and testing services, and research and development services.

#### DRAFTING I (6740Y), (formerly Basic Technical Drawing) Grades 9-12, E.C Glass. Full Credit Year Course

Prerequisite: It is preferable that students have completed Algebra I.

This entry-level course is designed with an emphasis on the basic principles of drafting and sketching techniques, object visualization, the application of math concepts, and basic through intermediate computer assisted drawing (CAD) applications. Although 2D CAD techniques are emphasized, students also learn 3D modeling techniques at the end of the course. Students may be given the opportunity to compete in regional and state CAD competitions. **Sequential options:** Drafting II, II

### SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS (continued)

#### DRAFTING II (6750Y), (formerly Engineering Drawing) Grades 10 -12, E.C Glass. Full Credit Year Course

Prerequisite: Drafting I (6740) & it is preferable that students have completed Algebra I

This advanced-level course begins with sharpening skills learned in Basic Technical Drawing on the Computer Assisted Drafting (CAD) software. Students will be able to construct three-dimensional and solids drawings, as well as assembly drawings. As students' skills progress, CAD will be used as a tool to assist in completing design projects of increasing difficulty. Engineering principles are introduced and explored through the design projects. Emphasis will be on the development and honing of problem-solving skills and assembling professional design portfolios. The students will also be given the opportunity to compete in regional and state competitions in CAD and engineering design.

Sequential options: Drafting III

#### DRAFTING III (6760Y), (formerly Architectural Drawing) Grades 10-12, E.C Glass. Full Credit Year Course

Prerequisite: Drafting I (6740) & it is preferable that students have completed Algebra I

This upper-level course begins with the basics of residential design and progresses through an entire set of house plans. The students will learn architectural CAD software, as a tool for creating professional, three-dimensional architectural designs and drawings. The students will design and build model displays as projects. The students will also be given the opportunity to compete in regional and state competitions in architectural design and modeling.

Sequential options: Drafting I, Drafting II

# INTRODUCTION TO ENGINEERING DESIGN-PLTW (8439Y), Grades 9-10, Full Credit Year Course, Heritage High.

Prerequisites: None

In this course, students are introduced to the engineering design process, and apply math, science, and engineering standards to identify and design solutions to a variety of real problems. Students solve design problems for which they develop, analyze and create product models using engineering notebooks and 3D modeling software. This course covers ten units: Design Process, Technical Sketching and Drawing, Measurements and Statistics, Modeling Skills, Geometry of Design, Reverse Engineering, Documentation, Advanced Computer Modeling, Design Team, and Design Challenges.

Sequential options: Future PLTW course offering TBD

### SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS (continued)

## TECHNOLOGY OF ROBOTIC DESIGN (8429Y), Grades 11 & 12, Full Credit Year Course, EC Glass.

Prerequisites: It is preferable that students have completed Algebra I

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 LEG0 and the FIRST Tech 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. This course may be taken as a dual enrollment course for 3 college credits from Central Virginia Community College under the course numbers 6778AC and 6778BC. The CVCC course number is IND 195.

## TECHNOLOGY FOUNDATIONS (6640Y), Grades 9-12, Full Credit Year Course, Heritage High.

Prerequisite: None

Technology Foundations is a modular approach to an academic and technology integrated curriculum. The topics include alternative energy, astronomy, computer- aided drafting, computer graphic design, computer problem solving, construction technology, desktop publishing, residential modeling, satellite communications, video communications, and weather and meteorology. Presentations, field trips, and guest speakers will complement the modular concept.

Sequential options: Technology Transfer

## TECHNOLOGY TRANSFER (6650Y), Grades 10-12, Full Credit Year Course, Heritage High.

Prerequisite: Technology Foundations (6640)

Technology Transfer is a course developed around a modular approach. The topics are animation, biotechnology, fiber optics, forensic technology, the Internet, and virtual reality. When the students complete these modules, they will be introduced to advanced levels of the modules they completed in Technology Foundations. This course will assist students in developing problem solving techniques, using resources and developing critical thinking skills.

Sequential options: Technology Foundations

# 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 SERVICE TECHNOLOGY I (8141Y), Grades 9 & 10, E. C. Glass High, Full Credit Year Course

Prerequisite: None

Students learn fundamental skills associated with engine tune-up, electrical diagnosis and repair, lubrication and cooling system diagnosis and repair, brake system diagnosis and repair, basic fuel system diagnosis and repair, basic suspension system diagnosis and repair, and basic routine maintenance of automobiles. *Maximum number of students per class 20.* 

# **AUTOMOTIVE SERVICE TECHNOLOGY II (8140Y), Grades** 10 & 11, E.C. Glass High, Full Credit Year Course

Prerequisite: Approved Application

This is a double-period course. Content includes instruction in the safe operation of laboratory power equipment, hand tools, and testing devices. Students learn to access technical data through electronic media and paper manuals. Instruction in proper wheel and brake operation is included. Also included is instruction in diagnostic procedures regarding automotive steering systems and components. Students will learn to assess and repair problems relating to wheels, alignment, suspension, shocks, struts, and axles. *Maximum number of students per class 20.* 

# AUTOMOTIVE SERVICE TECHNOLOGY III (8150Y), Grades 11-12, E.C. Glass High, Full Credit Year Course

Prerequisite: Automotive Service Technology II (8140)

This is a double-period course. Content includes instruction in diagnostic procedures regarding automotive electrical systems and components and engine performance. Students will learn to assess and repair problems relating to circuits, battery systems, gauges, accessories, and lights. Students will learn to assess and repair problems relating to ignition, fuel, exhaust, and emission control systems. Instructional topics include pumps, carburetors, and associated electronics. Students learn to use testing and scanning equipment to analyze computer and mechanically controlled systems. Instruction will also include reading and interpreting electrical schematics. The second semester of this course provides an opportunity for students to enroll in a work-study program. Students are eligible to take the state A.S.E. Certification test upon completion of this program.

### MARINE CORPS JUNIOR R.O.T.C. LEADERSHIP PROGRAM Heritage High School Only

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 very few individuals who are subjectively selected by the leadership department chair as "exceptional" candidates to fill student leadership positions within the organization of the classes. (It is possible to be qualified but not selected due to limited availability This program of instruction is designed to of positions.) emphasize development of positive character traits, selfdiscipline, responsibility for self and others, and leadership skills. This program is not intended to recruit students for military service; rather, it is intended to develop productive responsible citizens using the military as a role model for teaching these positive lessons. Instructional goals are reached through training in subjects such as close order drill, marksmanship, physical fitness, leadership traits/principles, and first aid/CPR. Course Prerequisites:

- 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.
- 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 in this class simply because they are provided free of charge to the students.
- 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.)

# MCJROTC LEADERSHIP EDUCATION I A & B (5710A, 5710B), All Grades, Heritage High only, 1<sup>st</sup> & 2<sup>nd</sup> Sem., One-half Credit Per Sem., 1<sup>st</sup> Sem. Prerequisite: listed above; 2<sup>nd</sup> Sem. Prerequisite: Completion of 5710 with a course average of 70% or higher.

This is an introductory course designed to provide basic knowledge in leadership training and self-discipline through close order drill, physical fitness, marksmanship, professional personal appearance through care and wearing of uniforms, and professional courtesy. Emphasis on this level is placed on personal goal setting, self-discipline and following direction.

MCJROTC LEADERSHIP EDUCATION II A & B (5720A, 5720B), All Grades, Heritage High only, 1<sup>st</sup> & 2<sup>nd</sup> Sem., one half Credit Per Sem., 1<sup>st</sup> Sem. Prerequisite: Completion of 5710B with a course average of 70% or higher & attainment of the rank of Cadet Lance Corporal. (Promotion requirement worksheets detailing promotion requirements available upon request). 2<sup>nd</sup> Sem. Prerequisite: Completion of 5720 with a course average of 70% or higher.

The level of this course is more advanced than 1A&B and provides general study within each major area listed in 1A. Emphasis is placed on setting group goals, teamwork, individual responsibility, and accountability.

# MARINE CORPS JUNIOR R.O.T.C. LEADERSHIP PROGRAM (continued) Heritage High School Only

MCJROTC LEADERSHIP EDUCATION III A & B (5730A, 5730B), All Grades, Heritage High only, 1st & 2nd Sem., One half Credit Per Sem., 1st Sem. Prerequisite: Completion of 5720 with a course average of 70% or higher & attainment of the rank of Cadet Sergeant. (Promotion requirement worksheets detailing promotion requirements available upon request). 2nd Sem. Prerequisite: Completion of 5730 with a course average of 70% or higher.

The level of this course is more advanced than 2A&B with emphasis on attainment of group goals, personal initiative, responsibility for others, and accountability. Student leaders are normally selected from the second semester of this class.

MCJROTC LEADERSHIP EDUCATION IV A & B (5740A, 5740B), Selected Students, Heritage High only, 1<sup>st</sup> & 2<sup>nd</sup> Sem., One-half Credit Per Sem., 1<sup>st</sup> Sem. Prerequisite: Selection by the leadership department chair as well as completion of 5730B with a course average of 70% or higher & attainment of the rank of Cadet Gunnery Sergeant. 2<sup>nd</sup> Sem Prerequisite: Selection by the SMI and MI as well as completion of 5740 with a course average of 70% or higher

This course, the final year of the four-year MCJROTC LEADERSHIP EDUCATION program, focuses on demonstrating mastery of leadership skills through practical application as a student leader. Students must be prepared to complete independent reading, writing, and research assignments/special projects.

### AIR FORCE JUNIOR R.O.T.C. LEADERSHIP PROGRAM E.C. Glass High School only

**AFJROTC** is available at two levels, basic and advanced. The program teaches respect for both constituted authority and parents, and self-respect. It teaches orderliness, patriotism, personal honor, and self-reliance. It provides information on aerospace and develops a background that many find valuable In aviation and space careers, such as the social and physical sciences, navigation, propulsion systems, and the history and theory of flight. No obligation to the military services or college ROTC programs is incurred; however, advanced standing can be earned. A uniform is provided by the Air Force to be worn one day per week and at special functions.

# AFJROTC I A & B (5750A, 5750B), Grades 9-12, E.C. Glass High only, 1<sup>st</sup> & 2<sup>nd</sup> Sem., One-half Credit Per Sem., *Prerequisite: None*

This course includes study of the history of aviation and space exploration, customs and courtesies of military service, and introduction to basic drill procedures. This course also includes study of aviation weather in the aerospace environment, aerospace careers, and drill and ceremonial procedures of the squad and flight.

### AIR FORCE JUNIOR R.O.T.C. LEADERSHIP PROGRAM (continued) E.C. Glass High School only

AFJROTC II A & B (5760A, 5760B), Grades 9-12, E.C. Glass High only, 1<sup>st</sup> & 2<sup>nd</sup> Sem., One-half Credit Per Sem.,

Prerequisite: 5750

Content includes theory of flight, aircraft propulsion systems, air navigation, introduction to military justice, and a review of drill and ceremonies at the flight level. Also included is study of aerospace vehicles; aircraft, rockets and missiles, techniques of managing squadron size drill formation, and methods of military instruction.

AFJROTC III A & B (5770A, 5770B), Grades 10-12, E.C. Glass High only, 1<sup>st</sup> & 2<sup>nd</sup> Sem., One-half Credit Per Sem., *Prerequisite: 5760* 

The course includes study of rocketing and spacecraft fundamentals, review of drill and ceremonies at squadron level; introduction to leadership principles and methods. Also included is the aerospace community, leadership qualities and techniques needed in the space age, vocational and educational opportunities available in aerospace enterprises, and an introduction to military management.

AFJROTC IV A & B (5780A, 5780B), Grades 11 & 12, E.C. Glass High only, 1<sup>st</sup> & 2<sup>nd</sup> Sem., One-half Credit Per Sem., *Prerequisite: 5770* 

Content includes study of geopolitics, psychological foundation of leadership, military management, review of drill and ceremonies. Also included is the influence of human behavior in leadership, responsibilities and techniques of leadership, student planning and execution of instructional and co-curricular activity, introduction of survival training, and a study of Career Officer and Enlisted programs in the military services.

#### 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.

### **MUSIC** (continued)

Orchestra instruction at the high school level is performance oriented and some afternoons and evenings are required for rehearsals and performances.

**CONCERT BAND I (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 (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 (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 (5370Y), Grades 9-12, Full Credit Year Course Prerequisite: Director's Approval & audition Content includes a continuing development of skills with a focus on performance at the highest possible level.

#### PERCUSSION ENSEMBLE (5380Y), Grades 9-12, Full Credit Year Course Prerequisite: Director's Approval & audition

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

# CHORUS I (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 (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 (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.

### **MUSIC** (continued)

### ORCHESTRA I (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 (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 & COMPUTER APPLICATIONS IN MUSIC (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 (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 (5510Y), Grades 9-12, Full Credit Year Course Prerequisite: None

The first semester of this course is an exploration of a variety of media 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 principles of design.

### **ART (continued)**

#### DRAWING (5520A, 5520B), Grades 10-12, 1st or 2nd Sem.,

One-half Credit. Prerequisite: Art I or Staff Recommendation
This course is an exploration of drawing media. 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 will include still life, figure drawing,
perspective studies, and nature.

## PAINTING I (5530A), Grades 9-12, 1st Sem., One-half Credit. Prerequisite: Art I

This course is an introduction to the basic techniques in opaque and transparent media, such as acrylics, oils, and watercolor. Brush and media control in both hard edge and blended edge technique will be explored. Students will need to purchase items or pay a fee for consumable materials.

## PAINTING II (5540B), Grades 9-12, 2<sup>nd</sup> Sem., One-half Credit. *Prerequisite: Painting I*

This course focuses on the study of composition in painting and the exploration of various painting styles. The further advancement of specific painting skills and the use of color will be a large part of the course of study. The development of an individualized direction will be a major focus. Students will need to purchase items or pay a fee for consumable materials.

# SCULPTURE I (5550A, 5550B), Grades 10-12, 1st or 2nd Sem., One-half Credit. Prerequisite: Art I or Staff

Recommendation

Sculpture is an exploration of a variety of threedimensional media. Techniques will include both traditional and contemporary expression. The concepts of relief and inthe-round, in functional and non-functional directions will be explored.

# SCULPTURE II (5551B), Grades 10-12, 2<sup>nd</sup> Sem. Only. One half Credit. *Prerequisite: Sculpture 1.*

This course allows a student to focus on finding a concentration in sculpture in order to develop additional skill with a specific media or subject matter. This course builds on sculpture 1 as students develop pieces to be used in a 3-dimensional portfolio.

#### DIGITAL PHOTOGRAPHY AND PRINTMAKING (5570Y), Grades 10-12, Full Credit Year Course Prerequisite: Art I or Recommendation.

Course content includes study of traditional printing processes such as relief, monoprinting, lithography, intaglio, and serigraphy with an emphasis on design and composition. Digital photography and computer enhancement techniques will be explored. Comfort with computer technology is recommended.

### **ART (continued)**

## PHOTOGRAPHY (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.

# COMMERCIAL ART (5580A, 5580B), Grades 10-12, 1st or 2nd Sem., One-half Credit. Prerequisite: Art 1 or Recommendation.

This course covers art as it issued 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.

# ADVANCED STUDIO ART (5517Y), Grades 11 & 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 course and allows students to explore areas of interest in greater depth.

# ADVANCED PLACEMENT (AP) PORTFOLIO ART (5519Y) Grades 11 & 12, Full Credit Year Course Prerequisite: Two Credits in Art and Staff Recommendation

This college-level course is structured around the portfolio requirements set by the College Board evaluation 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 submit a portfolio.** 

## ADVANCED PLACEMENT (AP) ART HISTORY (5529Y), Grades 11 & 12, Full Credit Year Course Prerequisite:

Previous experience in advanced placement.

This course is geared to students with a strong desire to explore, read about, and write about the history of art. All course activities are in preparation for the AP exam. All students are required to take the advanced placement examination in May.

#### DRAMA

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 (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 Games, Improvisation, Stagecraft, Theatre Vocabulary and Terminology, and Theatre History.

# MUSICAL THEATRE DANCE (5611Y) Grades 9-12, Full Credit Year Course Prerequisite: Introduction to Theatre or Staff Recommendation.

This course focuses on the various styles of dance prevalent in the musical theatre. Students will 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 (5620Y), Grades 9-12, Full Credit Year Course

Prerequisite: Introduction to Theatre or Staff Recommendation.

This course includes the study of specific acting techniques and the practical application of those techniques in graded scene performances in class. The course is intended for students with a serious interest in acting as a career or hobby. This course may be taken repeatedly for elective credit.

## ACTING II (5630Y), Grades 11 & 12, Full Credit Year Course Prerequisite: Acting I and Staff Recommendation.

This course is performance-oriented and includes public performances involving all class members during the year. This course may be taken repeatedly for elective credit.

# HISTORY OF MUSICAL THEATRE (5621A) Grades 11 & 12, 1st Sem. Only. One-half Credit. Prerequisite: Acting 1 or Staff Recommendation.

This course introduces the student to the musical theatre genre including a history of musical theatre, the development of the genre with focus on each major advancement, reading and viewing major musical theatre works, and studying the contributions of important people in the development of the musical theatre.

# PLAYWRITING (5622A) Grades 11 & 12, 1st Sem. Only. One half Credit. Prerequisite: Acting 1 or Staff Recommendation.

This course will focus on the analysis of dramatic form and style; examination of plot, character, and thought; and expression through dialogue. It will include the practical application of theory by writing one-page plays and will culminate in the creation of a ten-minute play.

### **DRAMA** (continued)

DIRECTING (5623B) Grades 11 & 12, 2<sup>nd</sup> Sem. Only. One half Credit. Prerequisite: Acting 1 or Staff Recommendation.

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.

#### APPLIED TECHNICAL THEATRE I (5640Y), Grades 9 - 12, Full Credit Year Course Prerequisite: Introduction to Theatre or Staff Recommendation.

The course is designed to give students a working knowledge of the many aspects of backstage work. The course includes an overview of theatre history, safety, set construction, scene painting, electrics, sound stage rigging, backstage management and some design. The course includes classroom instruction, supplemental reading assignments, and practical hands-on work.

#### TECHNICAL THEATRE I DESIGN (5641A, 5641B) Grades 9-12, 1st or 2nd Sem. One-half Credit. *Prerequisite:*

Introduction to Theatre or Staff Recommendation.

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.

#### TECHNICAL THEATRE I PRODUCTION (5642B) Grades 9-12, 2<sup>nd</sup> Sem. Only. One-half Credit. *Prerequisite:*

Introduction to Theatre 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.

#### APPLIED TECHNICAL THEATRE II (5650Y), Grades 9 - 12, Full Credit Year Course Prerequisite: Applied Technical Theatre Land Staff Recommendation

This is an advanced course that will focus on the design elements of the theatre. Students receive instruction in set, lighting and sound design and are required to complete design projects in class and out. The course includes a study of different design techniques, methods of presenting design effectively, and an emphasis on using design as a tool to further express the drama. This course may be taken repeatedly for elective credit.

# **TECHNICAL THEATRE II (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.

### **DRAMA** (continued)

COSTUMING (5652B) Grades 11 & 12, 2<sup>nd</sup> Sem. Only. One half Credit. Prerequisite: Technical Theatre 1 Design, Technical Theatre 1 Production, or Staff Recommendation.

This course introduces the art of design with specific emphasis on its relation to costuming for the theatre. Students will explore the use of various media and techniques used for the creation of costume design. A variety of rendering techniques may be explored including collage, watercolor, and transfer drawing. This course may be taken repeatedly for elective credit.

#### STUDENT INTERN PROGRAMS

# ELEMENTARY OR MIDDLE SCHOOL STUDENT INTERN (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 (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. Examples of cooperating businesses include Areva. Architectural Partners. Virginia's Region 2000 Local Government Council, Delegate Scott Garrett, Blue Ridge Therapy Associates, Orthopedic Center of Central Virginia, Lynchburg City Schools, and various dental offices. During the first five weeks of the course, students will complete the Workplace Readiness Skills curriculum. Topics include initiative, work confidentiality, ethic, teamwork, 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 (7110A, 7110B) Grades 10-12, 1st or 2nd Sem., One-fourth Credit. Prerequisite: Staff Recommended

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

#### **NEWSPAPER & YEARBOOK**

NEWSPAPER (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 (7420Y), Grades 10-12, Full Credit Year
Course Prerequisite: Staff Recommendation Content
includes preparation, editing and publication of scho

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 (7770A, 7770B), Grades 9-12, 1<sup>st</sup> or 2<sup>nd</sup> Sem., One-half Credit. 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.

#### POSITIVE PARENTING PROGRAM

Pregnant high school students may enroll in the Positive Parenting Program (P3) or they may continue to attend their base school. If they elect to participate in the Positive Parenting Program, they will be enrolled in semester elective courses in child development and care, family health and development, or nutrition and food preparation in addition to their regular classes. Transportation is provided for Heritage High School students who participate in this program. Homebound instruction will be provided for pregnant middle school students and for both middle and high school students immediately following childbirth.

FAMILY HEALTH & SOCIAL DEVELOPMENT (5241A, 5241B), Grades 9 or 10, 1st or 2nd Sem., One-half Credit. *Prerequisite: None* 

This course fulfills the health and family life education requirement for students in grade ten. The course includes lessons related to prenatal personal health, substance abuse, dietary choices, self-control, goal setting, family health habits, violence prevention, and community health services. An extended study of caring for infants and toddlers is provided and early childhood nutrition, safety, and preventive health topics are presented.

# POSITIVE PARENTING PROGRAM (continued)

#### CHILD DEVELOPMENT AND CARE (7480Y), Grades 9-12,

Full Credit Year Course Prerequisite: None

Students learn the basics of the development of children from birth through toddler age. Expectations for postnatal parental responsibility are presented with an emphasis on building a nurturing relationship between parents and children. The course also focuses on the importance of early childhood education.

#### NUTRITION AND FOOD PREPARATION (7481Y), Grades 9-

12, Full Credit Year Course Prerequisite: None

Students learn the skills necessary to prepare nutritious foods in a safe manner. Students study units on nutrition, cost effective food preparation, safety and sanitation, and other food preparation skills.

#### **ACADEMIC SUPPORT**

(These courses can be taken repeatedly for elective credit)

## SOL REVIEW FOR ENGLISH: R/L/R 11 (7211A, 7211B), Grade 12, 1st or 2nd Sem., One-half Credit. *Prerequisite*:

Passed English 11 but failed English: 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 11<sup>th</sup> 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 (7212A), Grade 12, 1st Sem., One-half Credit. Prerequisite: Passed English 11 but failed English: Writing SOL test

A one semester elective credit course including a review of the standards covered on the English: Writing SOL test for 11<sup>th</sup> 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 (7221A, 7221B), Grades 10-12, 1<sup>st</sup> or 2<sup>nd</sup> Sem., One-half Credit. 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.

### **ACADEMIC SUPPORT (continued)**

(These courses can be taken repeatedly for elective credit)

SOL REVIEW FOR SCIENCE (7231A, 7231B), Grades 10-12, 1st or 2nd Sem., One-half Credit. 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 (7241A, 7241B), Grades 10-12, 1<sup>st</sup> or 2<sup>nd</sup> Sem., One-half Credit. 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.

## SAT PREPARATION (7610A, 7610B), Grades 11 or 12, 1<sup>st</sup> or 2<sup>nd</sup> Sem., One-half Credit. *Prerequisite: None*

This is a one semester elective credit course that provides a review of the content of the critical reading, mathematics, and writing components of the Scholastic Aptitude Test (SAT) I.

## ENGLISH AS A SECOND LANGUAGE (ESL) SUPPORT (1930A, 1930B), Grades 9-12, 1st or 2nd Sem., One-half

Credit. 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 (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 (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.

# STUDY SKILLS FOR SUCCESS IN ADVANCED COURSES (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.

### **ACADEMIC SUPPORT (continued)**

(These courses can be taken repeatedly for elective credit)

### MATH LAB (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.

# COURSES FOR THE APPLIED STUDIES DIPLOMA

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

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

# COURSES FOR THE APPLIED STUDIES DIPLOMA (Continued)

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

ADAPTIVE PHYSICAL EDUCATION (5071 A & B), Grades 9-12, 1st or 2nd Sem., One-half Credit Per Sem.,

Prerequisite: None

CAREER BASED JOB TRAINING (5072 A & B), Grade 9-12, 1st or 2nd Sem., One-half Credit Per Sem., Prerequisite:

None

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

SUPPORT RESOURCE I (5041 A & B), Grades 9-12, 1st or

2nd Sem., One-half Credit Per Sem., Prerequisite: None SUPPORT RESOURCE II (5042 A & B), Grades 9-12, 1st or 2nd Sem., One-half Credit Per Sem., Prerequisite: None SUPPORT RESOURCE III (5043 A & B), Grades 9-12, 1st or 2nd Sem., One-half Credit Per Sem., Prerequisite: None

For additional information about these courses or the applied studies diploma options, 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 gifted in the area of specific academic aptitude. 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.

#### 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 child study committee. Upon receipt of a referral, the child study committee meets within 10 working days. If the child study committee 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. In addition, students entering the ninth grade between 2000-2012 may earn the Modified Standard Diploma. Beginning with the 2013-14 Freshman class, the Modified Standard Diploma will be folded into the Standard Diploma, and the Board of Education will establish, through guidelines, credit accommodations for students with disabilities. The Applied Studies Diploma is also an option for students with disabilities. Requirements for these diplomas are described in a later section of this program of studies.

#### 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 (proposed to open in 2016-17), 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 only be eligible to participate in the Fort Hill Community School graduation.

#### **AP CAPSTONE**

AP Capstone<sup>™</sup> 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

#### **DUAL ENROLLMENT COURSES**

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

The dual enrollment program with Central Virginia Community College allows students who are enrolled in certain courses in the high schools to receive both high school and college credit. All dual enrollment core content courses and electives are weighted at 5.0 quality points. Dual enrollment courses in career and technical fields are weighted at 4.5 quality points. The College Success Skills course is weighted at 4.0 quality points. Student interest defines which courses will be taught on a yearly basis. Students enrolled in these courses may earn college credit from CVCC by fulfilling course requirements and complete the course with a grade of C or better. Students must achieve a C or better 1st semester to be placed in the 2nd semester course. Students must qualify for enrollment for these courses by taking the CVCC placement test or by ACT/SAT qualifying scores a semester prior to enrollment within dual enrollment course for admission approval. The costs for required textbooks for dual enrollment courses will remain the responsibility of the school division. There is no tuition charged for dual enrollment classes taught in high schools. However, there is a \$75 fee if there is a withdrawal. For more information, please contact the appropriate counselor at your student's school.

#### **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 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 7<sup>th</sup> period and after-school activities. 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.

#### **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 271	2338BS	Applied Calculus I		3	5.0
Biology 101-102	3328BS	General Biology I-II	4	4	5.0
Comm. Studies 100	5858AS	Principles of Public Speaking	3		4.5
Health 110	5248BS	Concepts of Personal and Comm. Health		3	4.5
Student Dev. 100	7770AS	College Success Skills	1		4.0

#### **Senior Year**

CVCC Course Number	LCS Course Number	Course Title	Credits First Sem.	Credits Second Sem.	Course Weight
English 241-242	1228AS/BS	Survey of American Literature I-II	3	3	5.0
Political Science 211-212	4328AS	U. S. Government I-II	3	3	5.0
Inform. Technology 115	8538AS/BS	Intro. to Computer Apps and Concepts	3		4.5
Math 164	2348AS	Pre-Calculus II	3		5.0
Math 240	2428BS	Statistics		3	5.0
Psychology 230	3438AS/BS	Developmental Psychology		3	4.5
Spanish 101-102	1828AS/BS	Beginning Spanish I-II	4	4	4.5

#### LYNCHBURG REGIONAL GOVERNOR'S STEM ACADEMY

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

The Lynchburg Regional Governor's STEM Academy, located at Central Virginia Community College in the AREVA Technology Center, focuses on Science, Technology, Engineering and Math, thus the name STEM. This regional program for accepted high school juniors and seniors is supported by Region 2000 Technology Council; Future Focus Foundation; Central Virginia Community College; the Region 2000 Workforce Investment Board; area business partners including AMTI, AREVA, The Babcock and Wilcox Company, Centra Health and Delta Star; and the school divisions of Amherst, Appomattox, Bedford, Campbell and Lynchburg. The goal of this program is to close the gap between education and industry, thereby furthering the economic vitality of this region. The STEM Academy differs from the Central Virginia Governor's School in that the courses will have a career and technical educational focus. The curriculum will be driven by needs and projected growth of regional industry. Currently, the two identified student pathways offered at the Academy will be Health Care Technologies and Mechatronics—the blending of mechanical and electrical engineering disciplines. Graduates of this program will be workforce-ready to further the economic growth in Region 2000.

#### **Junior Year**

CVCC STEM Course Number	LCS Course Number	Course Title	Credits First Sem.	Credits Second Sem.	Course Weight
EGR 115-123	6788AX/BX	Intro. to Engineering Design	4		4.5
IND160/EGR 120	6798AX/BX	Principles of Engineering		4	4.5
MTH 157-158	2469AX/BX	Applied College Algebra & Statistics	3	3	5.0
CHM 101-126	3368AX/BX	Applied Chemistry I & II	4	4	5.0
SDV 100	7770AX	College Success Skills	1		4.0

#### **Senior Year**

CVCC STEM Course Number	LCS Course Number	Course Title	Credits First Sem.	Credits Second Sem.	Course Weight
IND 250	3777AX	Computer Integrated Manufacturing	3		4.5
MEC 140	3737BX	Introduction to Mechatronics		3	4.5
ETR 113-123	3787BX	Digital Electronics		5	4.5
MTH 163-164	2328AX/2348AX	Pre-Calculus I & II	3	3	5.0
<b>OR</b> MTH 173-174	2479AX/BX	College Calculus I & II (for students w/precalculus)	5	5	5.0
PHY 121-122	3569AX/BX	Principles of Physics I & II	4	4	5.0
ETR 121-123	3787BX	Digital Electronics		5	4.5
EGR 190	7720BX	Senior Internship		1	4.0

Senior Year Biotechnical Engineering

CVCC STEM Course Number	LCS Course Number	Course Title	Credits First Sem.	Credits Second Sem.	Course Weight
BIO 141-142	3579AX/BX	Human Anatomy & Physiology I & II	4	4	5.0
HLT 141	8377AX	Introduction to Medical Terminology	2		4.5
ETR 113-123	3787BX	Digital Electronics		5	4.5
MTH 163-164	2328AX/2348AX	Pre-Calculus I & II	3	3	5.0
<b>OR</b> MTH 173-174	2479AX/BX	College Calculus I & II (for students w/pre-calculus)	5	5	5.0
EGR 190	7720BX	Senior Internship		1	4.0

**Cyber Security Courses - Fundamentals** 

CVCC STEM Course Number	LCS Course Number	Course Title	Credits First Sem	Credits Second Sem	Course Weight
ITE 115		Introduction to Computer Applications & Concepts	3		
ITN 101		Introduction to Network Concepts	3		
ITP 100		Software Design	3		
ITN 260		Network Security Basics		3	
ITN 261		Network Attacks, Computer Crime and hacking		3	
ITN 267		Legal Topics in Network Security		3	

#### **Cyber Security Courses**

This career studies certificate is designed as an enhanced module to provide expertise in security to networking specialists. This curriculum will prepare networking specialists for employment as network security specialists or Internet security specialists. This career studies certificate also helps prepare students for the CompTIA Security+ and the CISSP (Certified Information Systems Security Professional) certification exams.

CVCC STEM Course Number	LCS Course Number	Course Title	Credits First Sem	Credits Second Sem	Course Weight
ITE 260		Network Security Basics	3		
ITN 261		Network Attacks, Computer Crime and Hacking	3		
ITP 262		Network Communication, Security and Authentication	4		
ITN 263		Internet/Intranet Firewalls and E- Commerce Security		4	
ITN 266		Network Security Layers		3	
ITN 267 Lega		Legal Topics in Network Security		3	

#### OTHER CVCC OPPORTUNITIES

CVCC has created an opportunity for rising seniors who are interested in getting a head start on their career in the fields of RN, EMT, HVAC, Welding, or Machinist. Seniors will take required high school courses at their base schools and their college courses at CVCC. The courses taken at CVCC will count for both college and high school credit. Transportation will be provided, but tuition costs will be the responsibility of the students and their families. See your school's career or guidance counselor for more information. Students may require a travel period for off-site courses

#### **Machine Tool**

CVCC Course Number	LCS Course Number	Course Title	Credits First Sem.	Credits Second Sem.	Course Weight
MAC 161-162	8417AC	Machine Shop Practices I & II	6		4.5
MAC 163-164	8347BC	Machine Shop Practices III & IV		6	4.5
MAC 181	8457AC	Machine Blueprint Reading	3		4.5
SAF 126	8617BC	Principles of Industrial Safety		3	4.5
HLT 110	5248BC	Concepts of Personal & Community Health		2	4.5
SDV 100	7770AC	College Success Skills	1		4.0

#### **Pre-Nursing**

CVCC Course Number	LCS Course Number	Course Title	Credits First Sem.	Credits Second Sem.	Course Weight
BIO 141-142	3579AC/BC	Anatomy & Physiology I & II	4	4	5.0
ENG 111-112	1328AC/BC	College Composition I & II	3	3	5.0
HLT 230	5227AC	Nutrition & Human Development	3		4.5
PLS 211-212	4328AC/BC	U.S. Government I & II	3	3	5.0
HLT 141	8377AC	Medical Terminology	2		4.5
PSY 230	3438AC/BC	Developmental Psychology		3	4.5
SDV 100	7770AC	College Success Skills	1		4.0
Ad	ditional math courses	s possibly needed for an Advanced Stud	ies Diploma		•
MTH 163-164	2328AC/2348BC	Pre-Calculus I & II	3	3	5.0

#### **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.

### **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 (<a href="www.cvgs.k12.va.us">www.cvgs.k12.va.us</a>) 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 15 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.

LCS students, who have a 3.0 unweighted GPA in high school science and mathematics courses, are eligible to apply for admission to the program in February of their sophomore year. Students who do not have an unweighted 3.0 GPA in these courses may apply if they have a PSAT score in math greater than 65 or SAT score in math that is greater than 650. 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 average SAT scores for recent Governor's School students are verbal-662, math-658.

The following courses are offered at the Central Virginia Governor's School. 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 Coordinator for Gifted Education at 434-515-5000.

#### MATH ANALYSIS (PRECALCULUS)

(1 high school credit)

CVCC Code: MTH 166 first semester
(4 credits), MTH 168 for second
semester (3 credits)

SCED Code: 02110 Pre-Calculus
Virginia Course Code: N/A

CALCULUS I (1 high school credit)
CVCC Code: MTH 173 (5 credits for
the year)
SCED Code: 02121 Calculus
Virginia Course Code: N/A

#### **CALCULUS I**

(0.5 high school credit) CVCC Code: MTH 173 (4 credits) SCED Code: 02121 Calculus Virginia Course Code: N/A

#### **CALCULUS II**

(0.5 high school credit) CVCC Code: MTH 174 (4 credits) SCED Code: 02121 Calculus Virginia Course Code: N/A

# CALCULUS III (VECTOR CALCULUS)

(0.5 high school credit)
CVCC Code: MTH 277 (4 credits)
SCED Code: 02122 Multivariate
Calculus
Virginia Course Code: 3178
Multivariate Calculus

## COMPUTER SCIENCE/PROGRAMMING

(1 high school credit)
CVCC Code: CS 201 for first
semester, CS 202 for second
semester. (4 credits each)
SCED Code 10152 for Computer
Programming Course (year-long)
Virginia Course Code: 6641-Advanced
Programming

#### **HUMAN ANATOMY AND**

PHYSIOLOGY (1 high school credit)
CVCC Courses: BIO 141 for first
semester, BIO 142 for second
semester. (4 credits each)
SCED Code 03053 (for both courses)
Virginia Course Code: 4330 BIO IIAnatomy/Physiology

## NON-DUALLY ENROLLED COURSES

PHYSICS (1 high school credit)
Not dually enrolled
SCED Code: 03152 Physics—
Advanced Studies
Virginia Course Code: N/A

#### **RESEARCH METHODS**

(1 high school credit)
Not dually enrolled
SCED Code: 03212 Scientific
Research and Design
Virginia Course Code: N/A

#### **CONNECTIONS IN MATHEMATICS**

(1 high school credit)
Not dually enrollment
SCED Code: 02102 Discrete
Mathematics
Virginia Course Code: 3154 Discrete
Mathematics

#### **SENIOR SEMINAR**

(1 high school credit) Not dually enrollment SCED Code: 22999 (year-long)

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

#### NCAA & NAIA COLLEGE FRESHMAN ATHLETIC ELIGIBILITY STANDARDS

All potential college student-athletes must register with the NCAA Initial-Eligibility Clearinghouse and meet NCAA academic requirements. Excerpts from the Eligibility Standards are provided on this page. Please see your counselor for additional information.

#### **Core Courses**

- NCAA Division I requires 16 core courses as of August 1, 2008. This rule applies to any student first entering any
  Division I college or university on or after August 1, 2008. Please see the chart below for a breakdown of this 16 corecourse requirement.
- NCAA Division II requires 16 core courses as of August 1, 2013. See the breakdown of core-course requirements below.

#### **Test Scores**

- Division I has a sliding scale for test score and grade-point average.
- Division II has a minimum SAT score requirement of 820 or an ACT sum score of 68.
- The SAT score used for NCAA purposes includes only the critical reading and math sections. The writing section of the SAT is not used.
- The ACT score used for NCAA purposes is a sum of the four sections on the ACT: English, mathematics, reading and science.
- All SAT and ACT scores must be reported directly to the NCAA Eligibility Center by the testing agency. Test scores that appear on transcripts will not be used. When registering for the SAT or ACT, use the Eligibility Center code of 9999 to make sure the score is reported to the Eligibility Center.

#### **Grade-Point Average**

- Only core courses are used in the calculation of the grade-point average.
- Be sure to look at your high school's list of NCAA-approved core courses on the Eligibility Center's Web site to make certain that courses being taken have been approved as core courses. The Web site is www.ncaaclearinghouse.net.
- Division I grade-point-average requirements are listed on the NCAA web site.
- The Division II grade-point-average requirement is a minimum of 2.0.

#### DIVISION I 16 Core-Course Rule

#### 16 Core Courses:

- 4 years of English.
- **3** years of mathematics (Algebra I or higher). 2 years of natural/physical science (1 year of lab if offered by high school).
- 1 year of additional English, mathematics or natural/physical science.
- 2 years of social science.
- **4** years of additional courses (from any area above, world languages or nondoctrinal religion/philosophy).

#### DIVISION II 16 Core-Course Rule

#### 16 Core Courses:

- 3 years of English.
- 2 years of mathematics (Algebra I or higher).
- 2 years of natural/physical science (1 year of lab if offered by high school).
- 2 years of additional English, mathematics or natural/physical science.
- 2 years of social science.
- **4** years of additional courses (from any area above, world languages or nondoctrinal religion/philosophy).

PLEASE NOTE: Beginning August 1, 2013, students planning to attend an NCAA Division II institution will be required to complete 16 core courses.

#### OTHER IMPORTANT INFORMATION:

Students enrolling at an NCAA Division I or II institution for the first time need to complete the amateurism questionnaire through the Eligibility Center Web site. Students need to request final amateurism certification prior to enrollment.

For more information regarding the rules, please go to <a href="www.ncaa.org">www.ncaa.org</a>. You should click on "Academics and Athletes" then "Eligibility and Recruiting." You can also visit the Eligibility Center Web site at <a href="www.ncaaclearinghouse.net">www.ncaaclearinghouse.net</a>.

You can also call the NCAA Eligibility Center if you have questions. The toll-free number is 877-262-1492.

#### NAIA

Graduate from high school and also meet two out of three of the following requirements:

- Achieve a minimum of 18 on the ACT or 860 on the SAT
  - Achieve a minimum GPA of 2.0
- Graduate in the top half of the senior class

### NCAA Divisions I and II Initial-Eligibility Requirements

#### **Core Courses**

- NCAA Division I requires 16 core courses. NCAA Division II currently requires 14 core courses.

  Division II will require 16 core courses for students enrolling on or after August 1, 2013. See the charts below.
- NCAA Division I will require 10 core courses to be completed prior to the seventh semester (seven of the 10 must be a combination of English, math or natural or physical science that meet the distribution requirements below). These 10 courses become "locked in" at the seventh semester and cannot be retaken for grade improvement.
  - Beginning August 1, 2016, it will be possible for a Division I college-bound student-athlete to still
    receive athletics aid and the ability to practice with the team if he or she fails to meet the 10 course
    requirement, but would not be able to compete.

#### **Test Scores**

- **Division I** uses a sliding scale to match test scores and core grade-point averages (GPA). The sliding scale for those requirements is shown on Page No. 2 of this sheet.
- **Division II** requires a minimum SAT score of 820 or an ACT sum score of 68. (After August 1, 2018 use sliding scale to match test scores and core GPA)
- The SAT score used for NCAA purposes includes <u>only</u> the critical reading and math sections. <u>The writing section of</u> the SAT is not used.
- The ACT score used for NCAA purposes is a <u>sum</u> of the following four sections: English, mathematics, reading and science.
- When you register for the SAT or ACT, use the NCAA Eligibility Center code of 9999 to ensure all SAT and ACT scores are reported directly to the NCAA Eligibility Center from the testing agency. <u>Test scores that appear on</u> transcripts will not be used.

#### **Grade-Point Average**

- **Be sure** to look at your high school's List of NCAA Courses on the NCAA Eligibility Center's website (<a href="www.eligibilitycenter.org">www.eligibilitycenter.org</a>). Only courses that appear on your school's List of NCAA Courses will be used in the calculation of the core GPA. Use the list as a guide.
- **Division I** students enrolling full time **before August 1, 2016**, should use Sliding Scale A to determine eligibility to receive athletics aid, practice and competition during the first year.
- **Division I** GPA required to receive <u>athletics aid and practice</u> **on or after August 1, 2016**, is 2.000 (corresponding test-score requirements are listed on Sliding Scale B on Page No. 2 of this sheet).
- Division I GPA required to be eligible for <u>competition</u> on or after August 1, 2016, is 2.300 (corresponding test-score requirements are listed on Sliding Scale B on Page No. 2 of this sheet).
- The Division II core GPA requirement is a minimum of 2.000. After August 1, 2018, core GPA required minimum 2.2 GPA.
- Remember, the NCAA GPA is calculated using NCAA core courses only.

#### Division I 16 Core Courses

4 years of English.
3 years of mathematics (Algebra I or higher).

2 years of natural/physical science (1 year of lab if offered by high school).

1 year of additional English, mathematics or natural/physical science.

2 years of social science. 4 years of additional courses (from any area above, world languages or comparative religion/philosophy).

#### Division II 16 Core Courses (2013 and After)

3 years of English.

2 years of mathematics (Algebra I or higher).

2 years of natural/physical science (1 year of lab if offered by high school).

3 years of additional English, mathematics or natural/physical science.

2 years of social science.

4 years of additional courses (from any area above, world languages comparative religion/philosophy).

### **SEQUENTIAL ELECTIVES**

The following sequences are approved to meet the sequential electives requirement of the Standard Diploma or Applied Studies Diploma.

#### **Cultural Arts**

Orchestra I	Followed by	Orchestra II
Concert Band I	Followed by	Symphonic Band I
Concert Band I		Jazz Ensemble
Symphonic Band I	Followed by	Wind Ensemble
		Percussion Ensemble
Chorus I	Followed by	Chorus II
Chorus I	Followed by	Chorus III
Chorus II	Followed by	Chorus III
Art I		Drawing
		Painting I
	Followed by	Sculpture I
	Followed by	Digital Photography and Printmaking
		Photography
		Commercial Art
Painting I	Followed by	Painting II
Sculpture I	Followed by	Sculpture II
Introduction To Theater		Musical Theatre Dance
		Acting I
	Followed by	Applied Theatre Tech I
		Technical Theatre I Design
		Technical Theatre I Production
Acting I	Followed by	Acting II
Applied Theatre Tech I	Followed by	Applied Theatre Tech II
Technical Theatre I Design	Followed by	Technical Theatre II
	Followed by	Costuming
Technical Theatre I Production	Followed by	Technical Theatre II
	Fullowed by	Costuming
Creative Writing	Followed by	Playwriting and Directing

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

#### **World Languages**

_	ggg					
	French I	Followed by	French II			
	German I	Followed by	German II			
	Latin I	Followed by	Latin II			
	Spanish I	Followed by	Spanish II			

Note: Newspaper, Yearbook, Leadership Training, and SOL Review courses may  $\underline{not}$  be used to partially fulfill the sequential elective requirement.

#### TRANSFER CREDITS

The following information is taken from the *Regulations for Establishing Standards for Accrediting Public Schools in Virginia:* 

8 VAC 20-131-60. A summary table of the graduation requirements for transfer students is provided on page 22.

- **A.** The provisions of this section pertain generally to students who transfer into Virginia high schools. Students transferring in grades K-8 from Virginia public schools or nonpublic schools accredited by one of the approved accrediting constituent members of the Virginia Council for Private Education shall be given recognition for all grade-level work completed. The academic record of students transferring from all other schools shall be evaluated to determine appropriate grade placement in accordance with policies adopted by the local school board.
- **B.** For the purposes of this section, the term "beginning" means within the first 20 hours of instruction per course. The term "during" means after the first 20 hours of instruction per course.
- **C.** Standard or verified units of credit earned by a student in a Virginia public school shall be transferable without limitation regardless of the accreditation status of the Virginia public school in which the credits were earned. Virginia public schools shall accept standard and verified units of credit from other Virginia public schools and state operated programs. Standard units of credit also shall be accepted for courses satisfactorily completed in accredited colleges and universities when prior written approval of the principal has been granted or the student has been given credit by the previous school attended.
- **D.** A secondary school shall accept credits toward graduation received from Virginia nonpublic schools accredited by one of the approved accrediting constituent members of the Virginia Council for Private Education (VCPE). The Board of Education will maintain contact with the VCPE and may periodically review its accrediting procedures and policies as part of its policies under this section. Nothing in these standards shall prohibit a public school from accepting standard units of credit toward graduation awarded to students who transfer from all other schools when the courses for which the student receives credit generally match the description of or can be substituted for courses for which the receiving school gives standard credit, and the school from which the child transfers certifies that the courses for which credit is given meet the requirements of 8 VAC 20-131-110 A. Students transferring into a Virginia public school shall be required to meet the requirements prescribed in 8 VAC 20-131-50 to receive a Standard, Advanced Studies, or Modified Standard Diploma, except as provided by subsection G of this section. To receive a Special Diploma or Certificate of Program Completion, a student must meet the requirements prescribed by the Standards of Quality.
- **E.** The academic record of a student transferring from other Virginia public schools shall be sent directly to the school receiving the student upon request of the receiving school in accordance with the provisions of the 8 VAC 20-150-10, Management of the Student's Scholastic Records in the Public Schools of Virginia.
- **F.** The academic record of a student transferring into Virginia public schools from other than a Virginia public school shall be evaluated to determine the number of standard units of credit that have been earned, including credit from schools outside the United States, and the number of verified units of credit needed to graduate in accordance with subsection G of this section. Standard units of credit also shall be accepted for courses satisfactorily completed in accredited colleges and universities when the student has been given credit by the previous school attended. Students transferring above the tenth grade from schools or other education programs that do not require or give credit for health and physical education shall not be required to take these courses to meet graduation requirements.
- **G.** Students entering a Virginia public high school for the first time after the tenth grade shall earn as many credits as possible toward the graduation requirements prescribed in 8 VAC 20-131-50. However, schools may substitute courses required in other states in the same content area if the student is unable to meet the specific content requirements of 8 VAC 20-131-50 without taking a heavier than normal course load in any semester, by taking summer school, or by taking courses after the time when he otherwise would have graduated. In any event, no such student shall earn fewer than the following number of verified units, nor shall such students be required to take SOL tests or additional tests as defined in 8 VAC 20-131-110 for verified units of credit in courses previously completed at another school or program of study, unless necessary to meet the requirements listed in subdivisions 1 and 2 of this subsection:

#### 1. For a Standard Diploma:

- a. Students entering a Virginia high school for the first time during the ninth grade or at the beginning of the tenth grade shall earn credit as prescribed in 8 VAC 20- 131-50:
- b. Students entering a Virginia high school for the first time during the tenth grade or at the beginning of the eleventh grade shall earn a minimum of four verified units of credit: one each in English, mathematics, history, and science. Students who complete a career and technical education program sequence may substitute a certificate, occupational competency credential or license for either a science or history and social science verified credit pursuant to 8 VAC 20-131-50; and
- c. Students entering a Virginia high school for the first time during the eleventh grade or at the beginning of the twelfth grade shall earn a minimum of two verified units of credit: one in English and one of the student's own choosing.

### **TRANSFER CREDITS (continued)**

- 2. For an Advanced Studies Diploma:
  - a. Students entering a Virginia high school for the first time during the ninth grade or at the beginning of the tenth grade shall earn credit as prescribed in 8 VAC 20- 131-50:
  - b. Students entering a Virginia high school for the first time during the tenth grade or at the beginning of the eleventh grade shall earn a minimum of six verified units of credit: two in English and one each in mathematics, history, and science and one of the student's own choosing; and
  - c. Students entering a Virginia high school for the first time during the eleventh grade or at the beginning of the twelfth grade shall earn a minimum of four verified units of credit: one in English and three of the student's own choosing.
  - **H.** Students entering a Virginia high school for the first time after the first semester of their eleventh grade year must meet the requirements of subdivision G 1 c or G 2 c of this section. Students transferring after 20 instructional hours per course of their senior or twelfth grade year shall be given every opportunity to earn a Standard, Advanced Studies, or Modified Standard Diploma. If it is not possible for the student to meet the requirements for a diploma, 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 unit of credit requirements may be available to the student. The Department of Education may grant such waivers upon request by the local school board in accordance with guidelines prescribed by the Board of Education.
  - I. Any local school division receiving approval to increase its course credit requirements for a diploma may not deny either the Standard, Advanced Studies, or Modified Standard Diploma to any transfer student who has otherwise met the requirements contained in these standards if the transfer student can only meet the division's additional requirements by taking a heavier than normal course load in any semester, by taking summer school, or by taking courses after the time when he otherwise would have graduated.
  - **J.** The transcript of a student who graduates or transfers from a Virginia secondary school shall conform to the requirements of 8 VAC 20-160-10, Regulations Governing Secondary School Transcripts.
  - **K.** The accreditation status of a high school shall not be included on the student transcript provided to colleges, universities, or employers. The board expressly states that any student who has met the graduation requirements established in 8 VAC 20-131-50 and has received a Virginia diploma holds a diploma that should be recognized as equal to any other Virginia diploma of the same type, regardless of the accreditation status of the student's high school. It is the express policy of the board that no student shall be affected by the accreditation status of the student's school.

The following information is taken from the Lynchburg City Schools School Board Regulation 6-58.1:

- 1. If a particular grade is weighted at the school from which a student transfers and this Division weights the grade for the same course, the transferred grade will be weighted.
- 2. If a particular grade is weighted at the school from which a student transfers and this Division does not weight the grade for the same course, the transferred grade will not be weighted.
- 3. If [particular courses are] noted as honors program courses and are weighted in this Division, the grades will be weighted even if the other division did not weight [them].
- 4. If [particular courses are] not weighted [and are not] noted as honors courses elsewhere, the grades will not be weighted.

## First-time Transfers to a Virginia Public School

NOTE: This information is relevant for students transferring into a Virginia public school <u>for the first time</u>.

Beginning = Within the first 20 hours of instruction and **During** = After the first 20 hours of instruction

		Standard Diploma for 9 <sup>th</sup> Graders in 2003-04 and beyond	Advanced Studies Diploma 9th Graders in 2000-01 and beyond
	English	2	2
During 9th Grade OR	Mathematics	1	2
Beginning of 10th Grade:	Science	1	2
	History & Social Science	1	2
	Student Selected	1	1
	Must Earn	6 Verified Credits	9 Verified Credits:
		Standard Diploma for 9 <sup>th</sup> Graders in 2003-04 and beyond	Advanced Studies Diploma 9th Graders in 2000-01 and beyond
	English	1	2
<b>5</b> 1 424 5 1 5 5	Mathematics	1	1
During 10th Grade OR Beginning of 11th Grade:	Science	1	1
<b>5</b>	History & Social Science	1	1
	Student Selected	0	1
	Must Earn	4 Verified Credits	6 Verified Credits:
		Standard Diploma for 9 <sup>th</sup> Graders in 2003-04 and beyond	Advanced Studies Diploma 9th Graders in 2000-01 and beyond
During 11th Grade OR	English	1	1
Beginning of 12th Grade:	Student Selected	1	3
	Must Earn	2 Verified Credits	4 Verified Credits:
During 12th Grade:	Students should be given every opportunity to earn a diploma; if this is not possible, arrange to have the previous school award the diploma; or seek a waiver of the verified credit requirement from the VDOE.		

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 Personnel, 915 Court Street, P.O. Box 2497, Lynchburg, Virginia 24505-2497; telephone number (434) 515-5050.