## Course Catalog

2020－2021

## Pulaski County High School

## Home of the Cougars

＊＊The Course Catalog may be subject to change at any time．For the most up to date version，please visit Pulaski County High School＇s webpage：http：／／www．pcva．us／schools／PCHS／handbooks／CourseCatalog2021．pdf

All course offerings are contingent upon available resources including instructional personnel，student interest， funding and Virginia Department of Education directives and／or mandates．

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## Instructions For Registration

Students should follow instructions for completion of the registration form:

- Students should select the courses they wish to take including appropriate required courses.
- All students must be scheduled for a minimum of eight (8) credits.
- Students are urged to read the course description carefully and to note prerequisites before making selections.
- Students should consult with school counselors and teachers for assistance in course selections for careers, college entrance and graduation requirements.
- Students should go over their course selections with their parents and discuss their educational and career plans.
- Students should also carefully choose alternate courses, as these courses are often utilized when conflicts occur.

Policies

## Alternating Course Offerings

Course descriptions notated with a box and shading will be on a two year rotation. Course descriptions surrounded with a box/border will be offered in the upcoming school year, but not the following year. Courses with a box or border and shading within the description will not be offered in the upcoming school year, but will be offered in two years. This means students will need to pay particular attention to the availability of courses when registering. As always, the determination of whether a course makes it into the master schedule is determined by enrollment numbers.

## Audit Policy

At PCHS, a student may audit a previously taken class with teacher recommendation and administrative approval in order to improve basic knowledge levels. The class credit and GPA value will remain the same as that awarded when the class was originally taken. Students auditing a course must have a parent/guardian signed contract on file.

## Course Adjustment Policy

Due to scheduling conflicts and staffing considerations, it is sometimes necessary to place students in courses that they did not request. We simply cannot meet every request made by students without unlimited resources. However, our block schedule usually allows the rescheduling of any unfulfilled request at a later date. When developing student schedules, we always consider courses needed for graduation before we consider placement of students in elective courses. Students may request a course adjustment with mandatory written permission from their parent/guardian within the first 7 days of the semester.

Changes from one course to another will be made under the following circumstances:

- failure of a course that is a prerequisite for a selected course,
- failure of a course that is a graduation requirement,
- completion of a selected course in summer school,
- change in a program of studies with an administrative approval,
- grouping adjustments and/or eligibility committee recommendations,
- human or computer error,
- class size


## Credit For Summer Activities

Summer activities, such as band camp, cheerleading camp, football camp, SOL remediation, etc., do not carry academic credit. Only summer school course, which include Camp Cougar, qualify students to earn summer academic credit. Off campus summer school must be approved by guidance and administration prior to taking the course(s).

## Early Release Policy

Early release is not a part of the PCHS curriculum. Students will be released before the end of the school day only if they are involved in a bon-a-fide cooperative program, applied internship, a special education program with an IEP requirement of a modified school day, an Alternative Diploma Program that may include a modified school day, a Section 504 Plan of Rehabilitative Act program that may require a modified schedule due to medical reasons, or by special approval from the Superintendent of Schools.

## Grade Classification

Promotion for grade classification purposes is based upon a combination of high school semesters and credits earned.

- Freshman: A student entering high school for the first time
- Sophomore: Completion of two high school semesters with a minimum of six credits
- Junior: Completion of four high school semesters with a minimum of twelve credits
- Senior: Completion of six high school semesters with a minimum of nineteen credits

Beginning with the summer of 2015 courses, repeat courses for credit (i.e. course previously failed requiring 70 hours of instruction) will be added to the previous spring semester grades recorded on the transcript. New courses taken for credit (i.e. Camp Cougar 9, Camp Cougar 10 and Algebra I which requires 140 hours of instruction) will be added to the upcoming fall semester grades recorded on the transcript.

## Prerequisites

Please note that certain classes have a prerequisite listed for registration. When the prerequisite states "successful completion of," we define that as the student has performed the previous course work required and received a grade of "C" or better.

## Rank and Average

Rank in class is based on all subjects including withdrawals (WF). A system of ranking establishes the class standing of all $12^{\text {th }}$ grade students. A point value is assigned to the final grade of all subjects that are not weighted as follows: $A=4, B=3, C=2, D=1$ and $F=0$. Weighted classes (AP, dual enrollment) have the following values: $A=5, B=4, C=3, D=2$ and $F=0$. The final GPA will include both semesters of the senior year. The rank and average is recorded on the scholastic record and become a part of the student's personal file.

## Title IX and 504

Equal educational opportunities shall be available by Pulaski County Public Schools for all students, without regard to sex, race, color, national origin, gender, ethnicity, religion, disability, ancestry, or martial or parental status. Educational programs shall be designed to meet the varying needs of all students. No student, on the basis of sex or gender, shall be denied equal access to programs, activities, services or benefits or be limited in the exercise of any right, privilege, or advantage or be denied equal access to educational and extracurricular programs and activities.

The School Board shall provide facilities, programs and activities that are accessible, usable and available to qualified disabled persons; provide free, appropriate education, including non-academic and extracurricular services to qualified disabled persons; not exclude qualified disabled persons, solely on the basis of their disabilities, from any preschool, daycare, adult education or career and
technical education programs; and not discriminate against qualified disabled persons in the provision of health, welfare or social services.

Any student who believes he or she has been the victim of prohibited discrimination should report the alleged discrimination as soon as possible to one of the Compliance Officers designated in this policy or to any other school personnel. The alleged discrimination should be reported as soon as possible, and the report generally should be made within fifteen (15) school days of the occurrence. Further, any student who has knowledge of conduct which may constitute prohibited discrimination should report such conduct to one of the Compliance Officers designated in this policy or to any school personnel. Any employee who has knowledge of conduct which may constitute prohibited discrimination shall immediately report such conduct to one of the Compliance Officers designated in this policy.

The reporting party should use the form, Report of Discrimination, JB-F, to make complaints of discrimination. However, oral reports and other written reports shall also be accepted. The complaint should be filed with either the building principal or one of the Compliance Officers designated in this policy. The principal shall immediately forward any report of alleged prohibited discrimination to the Compliance Officer. Any complaint that involves the Compliance Officer shall be reported to the Superintendent.

The complaint, and identity of the complainant and of the person or persons allegedly responsible for the discrimination, will not be disclosed except as required by law or policy, as necessary to fully investigate the complaint or as authorized by the complainant. A complainant who wishes to remain anonymous will be advised that such confidentiality may limit the school division's ability to fully respond to the complaint.

## Tuition

Courses that require a tuition fee are indicated. Tuition for a course is the responsibility of the student unless otherwise noted.

## VHSL Athletic Eligibility

The Virginia High School League has determined that students in $4 x 4$ block schedule schools must pass at least three of four classes the previous semester to be eligible to participate in VHSL sanctioned activities.

## Waiver Policy

Students who do not meet a course prerequisite must have a waiver form signed by a parent and returned to the appropriate counselor before registering. Parents signing the waiver form should understand that the school does not recommend that students register for this course and the request will be subject to administrative approval.

## Withdrawal From Course Policy

Students will have a maximum of 7 school days to request withdrawal from any class without penalty if an alternative course is available. Written parent consent is mandatory prior to a course change being considered. After 7 school days, if administrative approval is granted for a student to withdraw from a class, a grade of WF (withdrawal with an "F") will be recorded on the scholastic record and thereafter will be used in rank and average calculations.

## Achievement Philosophy

Students that have evidenced high achievement in previous classes are encouraged to select more challenging course work in career and technical, fine arts, and academic offerings.

## Advanced Placement Program

The Advanced Placement Program of the College Board involves college-level courses and exams for high school students. The following AP courses are offered (contingent upon sufficient enrollment):

- AP English - Literature and Composition
- AP English - Language and Composition
- AP Psychology
- AP U.S. Government and Politics
- AP U.S. History
- AP European History

These special college-level courses are challenging and take more time, require more work, and give greater depth than other high school courses. Each college decides what AP examination grades it will accept for credit and/or advanced placement. The following link will assist in determining credits awarded by colleges for AP tests:
http://apstudent.collegeboard.org/creditandplacement/search-credit-policies. The benefits of advanced placement and credit are numerous and include taking advanced courses in the AP subject, exploring other subjects of interest, joining honors and other special programs, and saving tuition fees.

Students whose academic achievement in a subject area, overall grade point average, scores on state standardized tests, as well as teacher recommendations indicate that they can be successful in an advanced course may register for an AP course.

PCHS students who register for the AP exam are responsible for the full cost of the exam. However, students scoring a 3 or better on the exam will be reimbursed the cost of the exam less a small administrative fee.

There is a seven-day trial period for AP students; those who perform at a "C" Level or below may be counseled to drop the class and enroll in a less challenging course. AP courses were designed to be challenging and to provide an opportunity for acceleration for high school students. These classes will be taught at the level required for making PCHS students competitive with others around the nation who seek advanced placement at college.

## Virtual Virginia

PCHS will offer students the opportunity to enroll in Virtual Virginia. Virtual Virginia, which includes the Virginia Virtual Advanced Placement School, provides a variety of Advanced Placement (AP) courses, enabling students to earn college credit.

The Virginia Virtual Advanced Placement School (VVAPS) offers online AP and foreign language courses to students across the commonwealth and nation. The courses utilize the Desire2Learn course management software to maximize the interactivity of each class. Each course contains video segments, audio clips, whiteboard and online discussions as well as text. E-Teachers are available for telephone conversations with students throughout the school day. VVAPS classes offer a rich multimedia learning environment that appeals to a variety of learning styles. VVAPS courses can be scheduled flexibly throughout the day, as courses do not have to be taken in 'real' time.

Students in high schools who meet the prerequisites may enroll through their schools. The deadline for registering students is August 1 prior to the start of the school year. There is no late registration through Virtual Virginia.

Virtual learning is the new frontier in today's educational institutions. The technology of the $21^{\text {st }}$ century provides a unique opportunity for educators to reach students who want the experience of Advanced Placement coursework.

Students will be required to sign an Early College Scholars Agreement. The Early College Scholars program allows eligible high school students to earn at least 15 hours of transferable college credit while completing the requirements for an Advanced Studies Diploma or an Advanced Technical Diploma. By signing the agreement, students are indicating their commitment to completing the required 15 hours of college credit in high school and earning an advanced diploma. To qualify for the Early College Scholars program, a student must: have a "B" average or better, be pursuing an Advanced Studies Diploma, and take and complete college-level course work (i.e. Advanced Placement, International Baccalaureate, Cambridge, or dual enrollment) that will earn at least 15 transferable college credits. Students wanting additional information regarding Virtual Virginia should see Guidance or visit the website www.virtualvirginia.org/.

## Dual Enrollment Program

Whenever possible, students shall be encouraged and provided opportunities to take college courses simultaneously for high school graduation and degree credit.

The course(s) must be given by the college for degree credits; hence, no remedial courses will be accepted. New River Community College and Pulaski County High School offer a dual enrollment program taught at the high school. These courses follow the same syllabi and use the same texts as New River Community College. Admission procedures follow requirements of the high school and the community college. Several NRCC courses (first 9 weeks) serve as prerequisites to the second 9 weeks of a dual enrolled course. Students wishing to enroll in some dual enrollment courses must maintain a passing grade during the first 9 week grading period to remain enrolled in the course for the full semester. Failure to maintain a passing grade in the first 9 week grading period can result in removal from the course and placement into an academic equivalent of the course. For example, in the English 12 dual enrollment course students must earn a D or better in the first nine weeks of the course to remain enrolled in the dual English 12 course during the second 9 weeks. The first 9 weeks of the course students are working to complete English 111. The English 111 course is the prerequisite to the second 9 weeks curriculum of English 112. Upon successful completion of the course, one weighted high school credit will be awarded and corresponding number of semester hours of college credit will be awarded by New River Community College. Currently, students are not responsible for paying their own tuition and book fees; however, due to regulations set by Virginia Community College System this will be changing beginning with the 2020-2021 school year. At the time of publication the exact details are not available. Information will be released on dual enrollment costs for students as soon as it is made available. This Placement testing is required of students before beginning dual enrollment classes through New River Community College. Students must submit their applications for admission to New River before taking the placement tests. Applications can be submitted on the NRCC website under admissions. Placement testing must be completed prior to beginning the dual enrollment course. Students can retake the placement test one time within 12 months of the initial attempt of the Virginia Placement Test (VPT).

## Exemptions For Placement Testing

Students may be exempt from taking the Virginia Placement Tests (VPT) if they have taken the SAT, ACT, or PSAT test and received the qualifying minimum scores. Please refer to New River Community College's website for specific scores and information.

## About the Virginia Placement Test

The VPT is a computerized test composed of two separate assessments, English and math. Each test will take between 2 and 3 hours to complete. Students needing to complete both tests should consider taking them on separate days to avoid fatigue. Individual testing times depend on how long it takes the test taker to answer the questions and how consistently he or she answers the questions. Placement tests are not graded per se; they are simply used to place students into appropriate courses. Students should put their best effort into these tests to demonstrate a readiness to take college-level courses.

## VPT English

The English test has two parts; a written essay component and a multiple choice component. The written essay is more heavily weighted in the total English score. Students should take their time and write a complete essay to the best of their ability. During the essay component, students will be asked to write a well-developed essay response to one of two prompts provided on the test. Computerized help tools such as spell check and autocorrect will not be available. Once students start the essay portion, they will need to complete it without leaving, except in case of extreme need. Multiple choice components - students will answer 40 multiple-choice questions on reading and writing fundamentals. NRCC's VPT English MOOC (massive open online course) will help you prepare for the English portion of the placement test. You'll find modules with drills on writing, analyzing, reading comprehension, vocabulary and grammar, and using sources. More information about the FREE VPT English MOOC can be found at http://www.nr.edu/students/vpteng.php.

## VPT Math

Students must take a math placement test before enrolling in any math course. (Students who have passed the Algebra I SOL and are not enrolling in a math dual enrollment course can opt out of the VPT Math.) Some other courses such as science and computer science courses also require a qualifying score on the math placement test. Some programs such as nursing require a qualifying score on the math placement test.

Students can use the electronic calculator that is provided as a pop-up window that is part of the mathematics test. The calculator is a basic four function model with a square root button. It appears on all questions except for the section on basic arithmetic. (Most students will not see this part of the test.) We strongly recommend that students who wish to test into Calculus practice with a four function calculator instead of a graphing calculator. Personal calculators of any kind cannot be used. NRCC offers a free online prep course for the Math VPT to help students prepare to do as well as they can on this test. The better you do on it, the fewer math courses you will have to take. More information about it and how to sign up and use the course can be found at http://vpt-math.vccs.edu/.

## Preparing to Take the Virginia Placement Test

When students prepare to take the placement test, the importance of reviewing material that has previously been studied cannot be over emphasized. The placement test is not an admissions test or an aptitude test. The test measures how well students demonstrate skills and proficiencies which will indicate the courses they are prepared to take. Not reviewing before taking the placement test could prevent students from qualifying for dual enrollment courses. Students are highly encouraged to start the review process early to provide enough time to practice and to build confidence in taking the placement test. This will ensure the most accurate course placement for each student.

## Practice Test

Students can take a diagnostic practice test in VPT English, math, or both. Following the practice test, students are able to view their scores and receive feedback on which areas they can benefit from further review. You can also download a printable set of practice questions. Please see the New River Community College website for details.

PCHS Dual Enrollment Opportunities
(Minimum numbers required by NRCC for enrollment

| PCHS Course | NRCC Equivalent |
| :---: | :---: |
| Biology I (4315) | BIO 101 General Biology I \& lab (4 credits) |
| Biology II (4316) | BIO 102 General Biology II \& lab (4 credits) |
| Calculus w/Analytic Geometry I (3176) | MTH 263 Calculus I (4 credits) |
| Carpentry II (8602) | *BLD 110 Introduction to Construction (3 credits) <br> *BLD 125 Introduction to Carpentry Trades (3 credits) |
| Carpentry III (8603) | *BLD 126 Basic Carpentry Principles (3 credits) <br> *BLD 135 Building Construction Carpentry (3 credits) |
| Electricity II (8534) | *ELE 111 Home Electric Power I (3 credits) <br> *ELE 112 Home Electric Power II (3 credits) |
| Electricity III (8535) | *ELE 113 Electricity I (3 credits) <br> *ELE 114 Electricity II (3 credits) |
| English 11 (1115) <br> ( $11^{\text {th }}$ graders) | ENG 111 College Composition I (3 credits) <br> ENG 112 College Composition II (3 credits) |
| English 12 (1120) <br> ( $12^{\text {th }}$ graders) | ENG 111 College Composition I (3 credits) <br> ENG 112 College Composition II (3 credits) |
| English 12 II (1121) | ENG 243 Survey of English Literature I (3 credits) ENG 244 Survey of English Literature II (3 credits) |
| Health Assisting Careers (8331) | NUR 27 Nurse Aide I (5 credits) |
| History of Western Civilization (2952) | HIS 101 History of Western Civilization I (3 credits) HIS 102 History of Western Civilization II (3 credits) |
| Medical Terminology (8383) | HIM 101 Health Information Technology I (4 credits) HIM 103 Health Information Technology II (2 credits) |
| Pre-Calculus (3170) | MTH 167 Pre-Calculus w/Trigonometry (5 credits) |
| Statistics (3191) | MTH 245 Statistics I (3 credits) |
| US History (2363) | HIS 121 US History I (3 credits) HIS 122 US History II (3 credits) |
| Virginia Teachers for Tomorrow (9062) | EDU 200 Introduction to Teaching as a Profession (3 credits) |
| Welding II (8673) | WEL 100 Fundamentals of Welding (3 credits) |
| Welding III (8674) | WEL 123 Shielded Metal Arc Welding (Basics) (4 credits) |

* Dual enrollment course only - only offered through the high school


## Honors Program

The level and pace of honors courses will be accelerated. Students may enroll in honors classes with a minimum of a " $B$ " average in that subject area and teacher recommendation. Honors classes are designed to challenge students who are highly motivated. These courses provide students with opportunities to explore subjects at an advanced level of inquiry, using sophisticated equipment and texts when appropriate. Students are expected to take the initiative in pursuing independent reading and class preparation.

## Southwest Virginia Governor’s School for Science, Mathematics and Technology

The Southwest Virginia Governor's School opened in Pulaski County in the fall of 1989. Students report to the Governor's School in the morning for science, math, and research courses and return to their home high schools for afternoon classes. Students have the opportunity to take dual enrollment classes in math and science to earn college credit through New River Community College. The Governor's School offers a research-based program, field trips to area businesses and industries to observe science and technology in action, interaction with scientists through the lecture series, and an internship program that allows students to become a part of local business or industry. In addition, students also have the opportunity to work in research-grade technology labs, pursue independent research, and participate in on-going research projects. Students apply to the program during the spring of their sophomore year.

Selection is based on standardized (PSAT and SOL End of Course scores in math and science), GPA, advanced courses taken, teacher recommendations and a writing sample. To be considered for admission to SWVGS, PCHS students must have completed Earth Science, Biology, Algebra I, Geometry, and Algebra II. Interested students should take the PSAT test in October of their sophomore year. Other tools for selection are SOL scores on math and science tests. To review Pulaski County Schools' selection criteria for the Governor's School, please visit http://www.pcva.us/swvgs.html.

## Pulaski County Governor’s Science, Technology, Engineering and Mathematics Academy

The Pulaski County Governor's Science, Technology, Engineering and Mathematics (STEM) Academy will provide rigorous academic content concentrating on three career pathways: Engineering and Technology, Production, and Construction. Student learning and achievement will be enhanced through the integration of core academics, a STEM-focused curriculum, applied technology, and increased participation in career and technical student organization leadership events.

The overall goals of the Pulaski County Governor's STEM Academy are to provide students with $21^{\text {st }}$ center, STEM-enriched technological skills and the knowledge necessary to succeed in postsecondary education and in the world of work. This will be accomplished through authentic, rigorous, project-based work while building partnerships with parents and community and business leaders to meet these goals.

The Pulaski County Governor's STEM Academy is designed to give students in grades nine through twelve the opportunity to explore several career paths while incorporating Virginia's Workplace Readiness Skills for the Commonwealth. Career pathways prepare students for programs leading to bachelor's degrees, two-year associate degrees, apprenticeships, and employment.

Students may complete a study of the following courses in Pulaski County's STEM Academy: Welding I, Welding II-Dual Enrollment, Welding III-Dual Enrollment, Electricity I, Electricity II-Dual Enrollment, Carpentry I, Carpentry II-Dual Enrollment, Carpentry III-Dual Enrollment, Materials and Processes Technology, Manufacturing Systems I, Manufacturing Systems II, Advanced, Criminal Justice I, Criminal Justice II, Engineering Explorations, and Engineering Analysis and Applications II.

Students must meet the following criteria to be selected for the Pulaski County Governor's STEM Academy:

- Recommendation from a teacher, school counselor, school administrator, or the Academy director
- Complete Pulaski County Governor's STEM Academy application
- Minimum 2.5 GPA
- Passing scores on the highest level attained on the English and mathematics Standards of Learning tests
- Complete the New River Community College online application ( $11^{\text {th }}$ and $12^{\text {th }}$ grade students)

Students who are selected for the Academy will be required to meet the following criteria to complete the program successfully:

- Maintain a minimum 2.5 overall grade-point average
- Recommendation from the Academy program area teacher
- Successfully complete the necessary dual enrollment placement test
- Complete dual enrollment credit courses and earn a "C" or better in the course
- Passing scores on the highest level attained on the English and mathematics Standards of Learning tests
- Complete courses within a specific pathway in the STEM Engineering and Technology, Architecture \& Construction, and Production Career Clusters
- Achieve one or more of the following: an industry certification, at least nine transferable college credits, or an Associate Degree
- Complete school/community service and complete a Senior Project
- Adhere to the student code of conduct and attendance policies


## Special Education Services

Pulaski County High School, in accordance with state and federal laws, offers a wide range of services for students with special needs. Services for students with speech and language delays, hearing impairments, behavior disabilities, visual impairments, learning and developmental disabilities and physical disabilities are among those available to satisfy Individualized Education Programs (IEPs). Services in technical assessment and transition planning are an integral part of programs for special needs students. Students qualify
for these services using criteria established in Public Law 94-142. Referral, testing, and placement services are facilitated by the Exceptional Student Services of Pulaski County Schools.

## Career Pathways

Pulaski County Schools is a member of New River Valley Career Pathways Consortium and partners with secondary and post-secondary educators, businesses, and employers. The goal of this program is to provide students information on careers in Virginia and the New River Valley. A "career pathway" is coherent sequence of rigorous academic and career/technical courses that begin in the $9^{\text {th }}$ grade and can lead to an associate, baccalaureate or further degree, an industry-recognized certificate, and/or licensure.

To help students investigate careers and design their courses of study to advance their career goals, the Virginia Department of Education's Office of Career and Technical Education has adopted the nationally accepted structure of 16 career clusters, their accompanying career pathways, and their sample career specialties or occupations. Detailed information about Virginia's Career Clusters Initiative appears at www.doe.virginia.gov/instruction/career technical/career_clusters.

## The 16 Career Clusters

- Agriculture, Food, and Natural Resources
- Architecture and Construction
- Arts, Audio/Visual Technology, and Communications
- Business, Management, and Administration
- Education and Training
- Finance
- Government and Public Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections, and Security
- Manufacturing
- Marketing, Sales, and Service
- Science, Technology, Engineering, and Mathematics
- Transportation, Distribution, and Logistics


## Common Core of Knowledge and Skills

The 16 career clusters and their accompanying 81 career pathways are built on common core of knowledge and skills required for career success in all the occupations included in the cluster. This shared core of knowledge and skills consists of the following elements, which may require different applications in different clusters. (For example, the academic foundations and technical skills needed in architecture and construction differ from those needed in health science.)

- Academic foundations
- Communication
- Problem solving and critical thinking
- Information technology applications
- Systems
- Safety, health, and environment
- Leadership and teamwork
- Ethics and legal responsibilities
- Employable and career development
- Technical skills

The following program/courses are offered in Career and Technical Education:

| Programs | Clusters | Pathways |
| ---: | ---: | ---: |
| Automotive Body Technology, <br> Automotive Technology | Transportation, Distribution and Logistics | Facility and Mobile Equipment Maintenance |
| Carpentry | Architecture and Construction | Construction |
| Computer Information Systems | Business Management and Administration | Human Services |
| Cosmetology | Criminal Justice | Law, Public Safety, Corrections and Security |

## Graduation Requirements

Graduation Class of 2020 and 2021


* A student must earn a career and technical education credential that has been approved by the Board of Education to graduate with a Standard Diploma. The credential could include, but not be limited to, the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness skills assessment.
* A student must successfully complete one virtual course, which may be non credit-bearing, to graduate with a Standard or Advanced Studies Diploma. This requirement is met through PCHS's English 9 courses.
* Computer Mathematics may be used in conjunction with Algebra I and Geometry to satisfy mathematics graduation requirements if the student also completes a career and technical concentration.
* Required verified credits mean that the student must pass the class and must also pass the SOL test required for that class. They are as follows: 2 SOL tests in English, 1 SOL test in Math, 1 SOL test in Science, 1 SOL test in History/Social Studies, and 1 SOL test selected by the student. For the student selected test, a student may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics, or other areas as prescribed by the board in 8 VAC 20-131-110.
* For students entering the ninth-grade class for the first time in 2016-2017 and beyond: Students shall be trained in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an Individualized Education Program (IEP) or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in 8VAC20-131-420 B.


## Advanced Studies Diploma (9 verified credits)

| Courses Credits | ${ }^{1}$ Must be at or above the Level of Algebra I. Shall include at least two course selections |
| :---: | :---: |
| English.................... 4 | from among Algebra I, Geometry, Algebra Functions and Data Analysis, Algebra II or |
| Math ${ }^{1} 4$ | courses above the Level of Algebra and Geometry |
| Science ${ }^{2} \quad 4$ | ${ }^{2}$ Shall include course selections from at least two different disciplines: Earth Science, |
| Social Studies ${ }^{3} \quad 4$ | Biology, Chemistry, or Physics |
| Foreign Language ${ }^{4}$...... 3 | ${ }^{3}$ Shall include U.S. and Virginia History, U.S. and Virginia Government, and two World |
| Health \& PE. 2 | History/Geography courses |
| Fine Arts or Career \& Technical Education | ${ }^{4}$ Courses completed to satisfy this requirement shall include three years of one language or two years of two languages |
| Economics \& Personal Finance.................... 1 | ${ }^{5} \mathrm{~A}$ 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 |
| Electives................. 5 | board in 8 VAC 20-131-110. |

Total. .28

* A student must successfully complete one virtual course, which may be non credit-bearing, to graduate with a Standard or Advanced Studies Diploma. This requirement is met through PCHS's English 9 courses.
* Required verified credits mean that the student must pass the class and must also pass the SOL test required for that class. They are as follows: 2 SOL tests in English, 2 SOL tests in Math, 2 SOL tests in Science, 2 SOL tests in History/Social Science, and 1 SOL test selected by the student. For the student selected test, a student may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics, or other areas as prescribed by the board in 8 VAC 20-131-110.
* For students entering the ninth-grade class for the first time in 2016-2017 and beyond: Students shall be trained in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an Individualized Education Program (IEP) or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in 8VAC20-131-420 B.

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Graduation Class of 2022 and Beyond (Beginning with Freshmen Class of 2018-19)
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## PROFILE OF A VIRGINIA GRADUATE

The Profile of a Virginia Graduate describes the knowledge, skills, experiences and attributes that students must attain to be successful in college and/or the work force and to be "life ready."

In developing the profile, the Board of Education determined that a life-ready Virginia graduate must:

- Achieve and apply appropriate academic and technical knowledge (content knowledge);
- Demonstrate productive workplace skills, qualities, and behaviors (workplace skills);
- Build connections and value interactions with others as a responsible and responsive citizen (community engagement and civic responsibility); and
- Align knowledge, skills and personal interests with career opportunities (career exploration).

The Profile of a Virginia Graduate provides the framework for the requirements students must meet to earn a Standard Diploma or Advanced Studies Diploma.

## THE FIVE C's

In preparing students to meet the Profile of a Virginia Graduate, schools are required to ensure that students develop the following competencies known as the "Five C's":

- Critical thinking
- Creative thinking
- Communication
- Collaboration
- Citizenship


## CAREER EXPLORATION AND PLANNING

The career-planning component of the Profile of a Virginia Graduate provides an opportunity for students to learn more about the employment options and career paths they first explored in elementary and middle school. While there is no specific career-related activity that a student must experience (such as an internship or job-shadowing assignment) to earn a diploma, school divisions must provide opportunities for students to learn about workplace expectations and career options in their own communities and elsewhere. By reducing the number of SOL tests students must pass to earn a diploma, the new standards increase flexibility for schools to expand work-based and service-learning programs that promote college, career and civic readiness.

Standard diploma (5 Verified credits)

| Courses | Credits |
| :--- | :---: |
| English | 4 |
| Math $^{1}$ | 3 |
| Science $^{2,6}$ | 3 |
| Social Sciences $^{3,6}$ | 3 |
| Health \& PE | 2 |
| Foreign Language, Fine Arts or Career \& Technical Education |  |
| Economics \& Personal Finance | 3 |
| Electives | 1 |
| Total | $\underline{7}$ |

${ }^{1}$ Courses completed to satisfy this requirement shall include at least two different course selections from among: algebra I, geometry, algebra functions, and data analysis, algebra II, or other mathematics courses approved by the board to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit.
${ }^{2}$ Courses completed to satisfy this requirement shall include course selections from at least two different science disciplines: earth sciences, biology, chemistry, or physics, or completion of the sequence of science courses required for the International Baccalaureate

Diploma and shall include interdisciplinary courses that incorporate Standards of Learning content from multiple academic areas. The board shall approve courses to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a science course credit.
${ }^{3}$ Courses completed to satisfy this requirement shall include Virginia and U.S. history, Virginia and U.S. government, and one course in either world history or geography or both. The board shall approve courses to satisfy this requirement.
${ }^{4}$ Per the Standards of Quality, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education. Per the Standards of Quality, a computer science course credit earned by students may be considered a career and technical course credit.
${ }^{5}$ Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.
${ }^{6}$ Students who complete a career and technical education program sequence and pass an examination or
occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association, or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for either a laboratory science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the board as an additional test to verify student achievement.

## Additional Requirements for Graduation

* SOLs-Students must earn five verified units of credit. Students earn verified credits by successfully completing required courses and passing associated end of course SOL test or other assessments approved by the state Board of Education. The required number of SOL's to graduate are as follows: one each in English reading, English writing, mathematics, science, and history/social science). Students may only locally verify one SOL in any area. In English writing, a student may verify course mastery through a locally developed performance-based assessment. Performance assessments require students to apply what they have learned and provide an opportunity for students to demonstrate that they have acquired critical thinking, creative thinking, communication, collaboration and citizenship skills
* Advanced Placement, Honors, or International Baccalaureate Course or Career and Technical Education Credential - In accordance with the Standards of Quality, students shall either (i) complete an Advanced Placement, honors, or International Baccalaureate course, or (ii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the standard diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.
* Virtual Course - Students shall successfully complete one virtual course, which may be a non-credit-bearing course or a required or elective credit-bearing course that is offered online.
* Training in emergency first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators (AED) - Students shall be trained in emergency first aid, CPR, and the use of AED, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an IEP or a 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in 8VAC20-131-420 B.
* Demonstration of the five Cs-Students shall acquire and demonstrate foundational skills in critical thinking, collaboration, communication, and citizenship in accordance with the Profile of a Virginia Graduate approved by the board.

Advanced Studies Diploma (5 verified credits)

| Courses | Credits |
| :--- | :---: |
| English | 4 |
| Math $^{1}$ | 4 |
| Science $^{2}$ | 4 |
| Social Sciences $^{3}$ | 4 |
| Health \& PE | 2 |
| Foreign Language $^{4}$ | 3 |
| Fine Arts or Career \& Technical Education $^{5}$ | 1 |
| Economics \& Personal Finance $_{\text {Electives }^{6}} \quad 1$ |  |
| Total | $\underline{5}$ |

${ }^{1}$ Courses completed to satisfy this requirement shall include at least three different course selections from among: algebra I, geometry, algebra II, or other mathematics courses above the level of algebra II. The board shall approve courses to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit
${ }^{2}$ Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics or completion of the sequence of science courses required for the International Baccalaureate Diploma and shall include interdisciplinary courses that incorporate Standards of Learning content from multiple academic areas. The board shall approve additional courses to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a science course credit
${ }^{3}$ Courses completed to satisfy this requirement shall include Virginia and U.S. history, Virginia and U.S. government, and two courses in either world history or geography or both. The board shall approve additional courses to satisfy this requirement.
${ }^{4}$ Courses completed to satisfy this requirement shall include three years of one language or two years of two languages
${ }^{5}$ Per the Standards of Quality, a computer science course credit earned by students may be considered a career and technical credit.
${ }^{6}$ Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.

## Additional Requirements for Graduation

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


## Applied Studies Diploma

The Applied Studies Diploma will be available to students with disabilities who complete the requirements of their Individualized Education Program and who do not meet the requirements for other diplomas. Students who earn this diploma are not be eligible for federal or state financial aid when pursuing post-secondary education

## Certificate of Program Completion

Available to students who completes the prescribed programs of studies by Pulaski County School Board, but who do not qualify for a diploma due to lack SOL's or Industry Credentialing tests. Students must pass all required coursework to earn the Certificate of Program Completion.

## Career and Technical Education

The classes that fit into the category of career and technical education are those listed in this curriculum guide under the following headings:

- Agricultural Education
- Business and Information Systems
- Family and Consumer Science
- Culinary Arts
- Education and Training
- Health and Medical Sciences
- Marketing Education
- Technology Education
- Trade and Industrial Education


## Fine Arts

The classes that fit into the category of Fine Arts are those listed in this curriculum guide under the FINE ARTS heading: Art, Band, Choir, and Theatre Arts.

## Diploma Seals

- Governor's Seal
- Board of Education Seal
- Board of Education Career and Technical Education Seal
- Board of Education Diploma Seal for Science, Technology, Engineering, and Mathematics (STEM)
- Advanced Mathematics and Technology Seal (available to students entering high school prior to 2018-2019)
- Excellence in Civics Education
- Governor's STEM Academy Seal
- Board of Education's Seal of Biliteracy
- Board of Education's Seal for Excellence in Science and the Environment (available to students entering high school for the first time in the 2018-2019.)


## To Earn a Governor's Seal

- Complete the requirements for an Advanced Studies Diploma with a grade point average of 2.75 (B) or above, and
- Successfully complete college-level coursework that will earn the student at least nine transferable college credits in Advanced Placement, Dual Enrollment or International Baccalaureate at Pulaski County High School.
- Complete the requirements for a Standard or Advanced Studies Diploma with a grade point average of 3.6 (A) or above.


## To Earn a Science, Technology, Engineering, and Mathematics (STEM) Seal

- Fulfill the requirements for either a standard or advanced diploma, and
- Satisfy all Math and Science requirements for the Advanced Studies Diploma with a "B" average or better in all course work, and
- Successfully complete a 50 hour or more work-based learning opportunity in a STEM area, and
- Satisfy all requirements for a Career and Technical Education concentration. A concentration is a coherent sequence of two or more state-approved courses as identified in the course listing within the CTE Administrative Planning Guide, and
- Pass one of the following: a Board of Education CTE STEM-H credential examination or an examination approved by the Board that confers a college-level credit in a STEM field.


## To Earn a Career and Technical Education Seal

- Fulfill the requirements for either a standard or advanced diploma, and
- Complete a prescribed sequence of courses in a CTE concentration or specialization, and
- Maintain a "B" or better average in CTE courses, or
- Pass an exam that confers certification from a recognized industry, trade or professional association, or
- Acquire a professional license in a CTE field

To EARN AN ADVANCED MATHEMATICS AND TECHNOLOGY SEAL
(Available for students entering high school prior to 2018-2019)

- Fulfill the requirements for either a standard or advanced diploma, and
- Satisfy all math requirements for the Advanced Studies Diploma with a "B" average or better, and
- Pass an exam that confers certification from a recognized industry, trade or professional association, or
- Pass a Board approved exam that confers college-level credit in a technology or computer science area


## To Earn an Excellence in Civics Education Seal

- Satisfy requirements to earn a Modified Standard Diploma, a Standard Diploma or an Advanced Studies Diploma, and
- Complete Virginia and U.S. History and Virginia and U.S. Government courses with a grade of "B" or higher, and
- Complete 50 hours of voluntary participation in community service or extracurricular activities, such as volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate; participating in Boy Scouts, Girl Scouts, or similar youth organizations; participating in Junior Reserve Officer Training Corps (JROTC); participating in political campaigns, government internships, Boys State, Girls State or Model General Assembly; and participating in school-sponsored extracurricular activities that have a civics focus. Any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement.
- Have good attendance and no disciplinary infractions as determined by local school board policies.


## To Earn a Governor’s Stem Academy Seal

- Maintain a minimum 2.5 overall grade-point average, and
- Recommendation from the Academy program area teacher, and
- Successfully complete the necessary dual enrollment placement test,
- Complete dual enrollment credit courses and earn a "C" or better in the course,
- Passing scores on the highest level attained on the English and mathematics Standards of Learning tests,
- Complete courses within a specific pathway in the STEM Engineering and Technology, Architecture \& Construction, and Production Career Clusters,
- Achieve one or more of the following: an industry certification, at least nine transferable college credits, or an Associate Degree,
- Complete school/community service; and complete a Senior Project, and
- 2016-2017 Academy enrollees will complete a research project in their content area
- 2017-2018 finishers will complete a research project for presentation to a select panel
- Adhere to the student code of conduct and attendance policies


## To Earn the Board of Education’s Seal of Biliteracy

- Students must demonstrate proficiency in English and at least one other language and met additional criteria established by the Board. For the purpose of this article, "foreign language" means a language other than English, and includes American Sign Language.
- Earn a Board of Education-approved diploma, and
- Pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level, and
- 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.


## To Earn the Board of Education’s Seal for Excellence in Science and the Environment

(Awarded to students who enter the ninth grade for the first time in the 2018-2019 year and thereafter, and meet the following criteria:)

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


## End of Course Testing

In accordance with the Standards of Accreditation for Virginia public schools, Pulaski County High School administers "End of Course" examinations in those courses so designated by the Standards.

## Social Studies:

- World History to $1500 \mathrm{AD} /$ World Geography
- World History 100 AD to Present/World Geography and AP European History
- United States History


## Mathematics:

- Algebra I Part 2
- Algebra I
- Geometry Part 2
- Algebra II
- Geometry


## Science:

- Earth Science
- Biology
- Chemistry


## English

- Reading SOL for English 11
- Locally developed performance based assessment for Writing SOL in English 11 and AP English Language and Composition


## Student-Selected Verified Credit in Career and Technical Education

A student-selected verified credit is a credit for a course that includes a test approved by the Virginia Board of Education. A student must:

- Complete the requirements for a standard diploma or an advanced diploma, and
- Successfully complete a course sequence that prepares one to earn a Board approved industry certification or state license, and
- Successfully complete the assessment required by the certifying or licensing agent


## Industry Certification and Licensure

Successful completion of these programs may allow students to be eligible for a state license, or state approved industry certifications, such as Workplace Readiness Skills for the Commonwealth Examination, or specific certifications as listed below:

- Automotive Body Technology III - NATEF/ASE (Non-structural, Refinishing)
- Computer Information Systems I (CIS) - Microsoft Office Examination
- Computer Information Systems II (CIS) - Microsoft Office Examination
- Cosmetology III - Virginia Cosmetology State Board (Licensure)
- Culinary Arts and Restaurant Management II ServSafe Manager Certification
- Early Childhood Education and Services II - CDA- Child Development Associate
- Economics and Personal Finance - W!SE Financial Literacy Certification Test
- Electricity III CTE Dual Enrollment/STEM Academy - Skills USA, Electrical Construction Wiring Exam
- Health Assisting Careers - Certified Nursing Assistant (CNA Licensure)
- Manufacturing Systems II, Advanced - Manufacturing Technician 1
- Pharmacy Technology II- Certified Pharmacy Technician (CPhT) Examination
- Welding II - SkillsUSA, Welding Examination
- Welding III - AWS, Certified Welder
- Veterinary Science - Allied Health, Certified Veterinary Technician

Course Descriptions

Agricultural Education

## Applied Agriculture Concepts

## 8073 (1 credit)

Grade Level: 9, 10, 11, and 12
Students who have limited or no agricultural background or experience learn fundamental agricultural competencies needed for rural or urban living. Areas of instruction include meat grading and selection; maintenance of home appliances and equipment; and the study of plumbing, electrical wiring, carpentry fundamentals. Teachers may incorporate additional competencies in the student of soil fertility and in cultural practices for shrubs, lawns, gardens, and fruit trees. The course emphasizes leadership development activities and participation in FFA activities.

## Introduction to Animal Systems

## 8008 (1 credit)

Grade Level: 9, 10, and 11
Prerequisite: None
Students develop competencies in each of the major areas of the Animal Systems career pathway including animal nutrition, reproduction, breeding, care, and management. Students also learn agricultural mechanics skills including woodworking, welding, electrical principles and plumbing. This course emphasizes leadership and personal skills through participation in the student organization, FFA.

## Agricultural Production Technology

## 8011(1 credit)

Grade Level: 10, 11, and 12
Prerequisite: Applied Agricultural Concepts or Introduction to Animal Systems

This course provides instruction in plant and animal science for students interested in career pathways related to agriculture production. Course content also includes safety, mechanics, soil science, precision agriculture, and business.

## Fisheries and Wildlife Management

## 8041(1 credit)

Grade: 9, 10, 11, and 12
Prerequisite: Applied Agricultural Concepts or Introduction to Animal Systems

The Fisheries and Wildlife Management course offers instructions in identification and management of wildlife and aquatics and of their habitats. Content addressing the issues related to endangered species and organizations that protect fisheries and wildlife is also included.

## Equine Science

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8080(1 credit)
Grade Level: 9, 10, 11, and 12
Prerequisite: None
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In this course students will be introduced to the fundamentals of basic horse production, including handling, care, health, nutrition, genetics, and fertility and judging. Students will participate in various off-campus learning activities.

## Small Animal Care I

## 8083(1 credit)

Grade Level: 9,10
Prerequisite: None
Students learn how to care for and manage dogs, cats, and rabbits, focusing on instructional areas in animal health, nutrition, reproduction, evaluation, training, and showmanship. Course content also includes instruction in the tools, equipment, and facilities for small animal care, and provides activities to foster leadership development. FFA activities are included.

## Small Animal Care II

## 8084(1 credit)

Grade Level: 10, 11, and 12
Prerequisite: Small Animal Care I
This course allows students to continue their education in the care and management of small animals. This course focuses on the care of reptiles, rodents, fish, birds, and amphibians, as well as further instruction in grooming dogs and cats. Students will also begin to perform basic health care functions for animals. Potential careers in the small animal care industry are also examined. FFA activities are included.

## Veterinary Science

8088 (1 credit)
Grade Level: 11, 12
Prerequisite: Small Animal Care I
EOC Test: Allied Health, Certified Veterinary Technician
Students will develop job and technical skills needed to succeed in postsecondary education and a career in veterinary medicine or a related occupation. Course content will include both instructional and practical experiences to gain career skills in health and handling of animals with instruction in the use of tools, equipment, and facilities for veterinary medicine. Business management, leadership, and FFA activities are included.

## Horticulture Sciences

## 8034(1 credit)

Grade Level: 9, 10, 11 and 12
Prerequisite: None

In this course, students develop the necessary knowledge, skills, habits, and attitudes for entry-level employment and advancement in areas such as floriculture, landscape design, greenhouse operation, nursery plant production, and turf management. They receive instruction in using soil and other plant-growing media and in identifying, propagating, and growing horticultural plants in the greenhouse and land laboratory. Instruction is provided in safety practices and leadership development.

## Horticulture II (Floriculture)

## 8038(1 credit)

Grade Level: 10, 11, and 12
Prerequisite: Horticulture Sciences
Students learn the basics of horticulture plant production industry. Instruction includes the science of plant production as well as marketing and business management. Plant material identification and floral design taught in this course prepares the student for an entry-level position in the floriculture industry. Participation in FFA activities provides leadership development opportunities.

## Accounting I

## 6320(1 credit)

Grade Level: 10, 11, and 12
Students study the basic principles, concepts and practices of the accounting cycle. Students learn fundamental accounting procedures using a manual and an electronic system.

## Accounting II

## 6321(1 credit)

Grade Level: 11 and 12
Prerequisite: Accounting I
This class is a continuation of Accounting I and introduces accounting principles with respect to cost and managerial accounting. Accounting II covers fundamental accounting concepts and principles governing the accounting cycle, journals, ledgers, working papers, and preparation of financial statements for sole proprietorships. Once students complete this series of classes, they will be prepared to work within the accounting setting of a business.

## Economics and Personal Finance

## 6120(1 credit)

Grade Level: 10, 11, and 12

## Prerequisite: None

## EOC Test: W!SE Financial Literacy Certification Test

Students learn how to navigate the financial decisions they must face and to make informed decisions related to career exploration, budgeting, banking, credit, insurance, spending, taxes, saving, investing, buying/leasing a vehicle, living independently, and inheritance. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success. Upon successful completion of the course, students will take the W!SE Financial Literacy Exam.

## Computer Information Systems I

## 6612(1 credit)

Grade Level: 10, 11, and 12
Prerequisite: Keyboarding
EOC Test: Microsoft Office Examination
In this class, students will apply problem-solving skills to real life situations through word processing, spreadsheets, databases, multimedia presentations, and integrated software activities. Students will work individually and in groups to explore computer concepts, operating systems, networks, telecommunications, and emerging technologies. This class will provide a solid foundation for many computer courses taught at the college level.

## Computer Information Systems II

## 6613(1 credit)

Grade Level: 10, 11, and 12
Prerequisite: Computer Information Systems I
EOC Test: Microsoft Office Examination

This course is a continuation of Computer Information Systems I. Everything learned in Computer Information Systems I, will be put to use as students learn how to develop dynamic web pages and advanced illustrations. This class offers an introduction to web design through the Dreamweaver program. Upon successful completion of Computer Information Systems I and II students will have the opportunity to complete a certification exam.

## Cyber Security Fundamentals

## 6302 (1 credit, 1 block)

Grade Level: 9, 10, 11, and 12
Cyber and network security degree programs will teach students to administer, manage, and troubleshoot hardware, software, or services for single, mixed and multi-user environments. Students will also utilize cyber security measures to protect data and manage personal conduct in relation to safeguarding data. Course content may include the following material: working with virtual machines, exploring cyber careers, establishing passwords, maintaining endpoint security, maintaining network security, implementing threat mitigation, exploring ethical and legal issues, applying legal procedures, identifying media, exploring media forensics and conducting mobile device forensics.

## Cybersecurity Systems Technology

## 8628 (1 credit)

Grade Level: 10, 11, and 12
Prerequisite: Cyber security Fundamentals
Students enter the world of computer technology and gain practical experience in assembling a computer system. Students will install, configure, and secure various operating systems. Students will troubleshoot computers and peripherals and use system tools and diagnostic software. They develop skills in computer networking and resource sharing. In addition, students explore the relationships between internal and external computer components. Upon successful completion of the course, students may qualify to take the CompTIA A+ certification exam.

## Advanced Cybersecurity Systems Technology

## 8629 ( 2 credits, 2 blocks) <br> Grade Level: 11 and 12 <br> Prerequisite: Cyber security Systems Technology

This advanced course provides students with training in procedures for optimizing and troubleshooting concepts for computer systems, subsystems, and networks. Students explore the following: basic network design and connectivity, network documentation, network limitations and weaknesses, and network security, standards and protocols. Students will gain a basic understanding of emerging technologies including unified communications, mobile, cloud, and virtualization technologies. The course prepares students for postsecondary education and training and a successful career in information technology. Upon successful completion of the course, students may qualify to take CompTIA's A+ and Network+ certification exams.

## Computer Science Programming

6641(1 credit, 1 block)
Grade Level: 10, 11, and 12
Prerequisite: None
Students in the Programming course explore programming concepts, use algorithmic procedures, implement programming procedures with one or more standard languages, and master programming fundamentals. Coding is used throughout the course. Graphical user interfaces may be used as students design and develop interactive multimedia applications, including game programs. In addition, students employ HTML or JavaScript to create web pages. Students develop their employability skills through a variety of activities.

## Advanced Computer Science Programming

## 6642 (1 credit)

Grades: 11 and 12
Prerequisite: Computer Science Programming
Building on their foundation of programming skills, Advanced Programming students use object-oriented programming to develop database applications, interactive multimedia applications including game applications, mobile applications, and Web applications. Students continue to develop their employability skills as they research pathways for continuing education and careers in the information technology industry and engage in various career-building activities.

## Entrepreneurship Education

## 9094 (1 credit)

Grade Level: 9, 10, 11, and 12
Prerequisite: None
This course introduces students to the exciting world of creating, owning, and launching their own business. Students will learn concepts and techniques for planning an innovative business and living the entrepreneurial lifestyle.

## Office Specialist

## 6740(1 credit)

## Grade Level: 9, 10, 11, and 12

## Prerequisite: Teacher recommendation

This course is designed to help special populations progress until prepared to transfer into other business courses. Students develop skills in areas including keyboarding, word processing, office procedures, and records management.

## English

ENGLISH COURSE SEQUENCES


## English 9

## 1092(1 credit)

Grade Level: 9
Prerequisite: None
English 9 Academic continues the student's development in reading comprehension, writing skills, and vocabulary. The student of literature includes units in a wide range of literary genres such as short stories, novels, nonfiction, drama and poetry. Students develop their skills in speaking, listening and writing by using literature as a basis for discussion. The study of grammar is applied to the student's writing in a process that involves prewriting and revising. This course prepares the student to demonstrate mastery of
specific state and local standards in English language skills (SOLs). Computer-assisted instruction will be an integral part of the program, including word processing and Internet use.

## Reading Readiness

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1091(1 credit)
Grade Level: 9, 10,11 & 12
Prerequisite: None
```

This course is for students entering the ninth grade who need to strengthen their reading and writing skills.

## English 9 Honors

## 1094(1 credit)

Grade Level: 9

## Prerequisite: Middle school teacher recommendation

English 9 Honors is a course designed to challenge the advanced student through in-depth reading and analysis. The level and pace of honors courses will be accelerated. Students may enroll in honors classes with a minimum of a B average in that course and teacher recommendation. The study of various literary genres is achieved through a humanities approach with an integration of composition and language study. Vocabulary, grammar, mechanics, and usage skills are refined through application in oral and written expression. Emphasis is on writing with clarity and precision in various rhetorical modes. The course prepares the student to demonstrate mastery of advanced performance standards in language arts as well as state and local standards in English language skills. Computer-assisted instruction will be an integral part of the program, including word processing and Internet use.

## English 10

## 1102(1 credit)

Grade Level: 10
Prerequisite: English 9
EOC Test: Standards of Accreditation requires an End of Course Reading Test.
English 10 Academic continues the student's development in reading comprehension and writing skills. Composition includes personal writing in all of the rhetorical modes, and research-based writing as it pertains to problem solving and decision making. Differences in literacy genres are taught through a thematic approach to the study of a broad range of literature. Language study, vocabulary development, and oral communication skills are integrated with composition. Critical reading and thinking skills are an integral part of the course. Computer-assisted instruction will be an integral part of the program, including word processing and Internet use. This course prepares the student to demonstrate mastery of specific state and local standards in English language skills (SOLs).

## English 10 Honors

## 1104(1 credit)

Grade Level: 10
Prerequisite: English 9 Honors or teacher recommendation
EOC Test: Standards of Accreditation requires an End of Course Reading Test
The course in English 10 Honors is designed to meet the needs of the academically talented English student. In keeping with the nature of an honors course, this English class promotes academic excellence and is taught at a rigorous pace. Students may enroll in honors classes with a minimum of a B average in that course and teacher recommendation. An integration of composition, literature, and language study is achieved through a thematic approach with emphasis on the humanities. Al language skills are examined extensively, and skills are practiced with intensity. Skills to enhance abilities in problem solving, decision making, and effective
writing are emphasized. Computer-assisted instruction will be an integral part of the program, including word processing and Internet use. This course prepares the student to demonstrate mastery of specific state and local standards in English Language Skills.

## English 11

## 1112(1 credit)

## Grade Level: 11

Prerequisite: English 10
EOC Test: Standards of Accreditation requires a locally developed performance-based assessment
English 11 Academic builds on the language arts skills and concepts acquired in previous grades. Composition includes personal literary analysis, research-based writing, critical papers using documented sources and personal and creative writing in all rhetorical modes. The skills of critical reading and thinking are applied to the study of American literature and become the basis for proficiency in language, vocabulary and oral communication. Independent reading and collaborative study are vital to this course and provide a base for discussion, analysis and writing. Computer-assisted instruction will be an integral part of the program, including word processing and Internet use.

## English 11 Dual Enrollment

## 1115(1 credit high school credit)(NRCC classes English 111 and English 112, 6 college credits) Grade Level: 11 <br> Prerequisites: English 10 and successfully pass the Virginia Placement Test; successfully complete the NRCC Eng 111(1 ${ }^{\text {st }}$ nine weeks) prior to entering NRCC Eng 112(2 ${ }^{\text {nd }} 9$ weeks)

This course is designed to allow the student who is academically advanced and enroll in a college course during their junior year. The course develops writing skills for study, work, and other areas of writing based on experience, observation, research and reading of selected literature. Students will be guided in learning writing as a process and the following concepts: understanding audience and purpose, exploring ideas and information, composing, revising, and editing. Students will learn to support their writing by integrating, composing, revising, and editing skills and by integrating experiences in thinking, reading, listening, and speaking. English 11 Dual Enrollment addresses Grade 11 Virginia Standards of Learning. It is an EOC course and students are required to demonstrate writing ability by producing original essays to be scored, which meet the English writing SOL Requirements necessary to earn a diploma in the state of Virginia.

## Advanced Placement English - Language and Composition

## 1196(1 credit)

Grade Level: 11
Prerequisites: English 10
EOC Test: Standards of Accreditation requires a locally developed performance-based assessment
Advanced Placement English 11 engages students in becoming skilled readers or prose written in a variety of periods, disciplines, and rhetorical contexts, and enables them to become effective and confident writers in their college courses across the curriculum and in their professional and personal lives. The content of the course will teach students to read primary and secondary source material carefully, to synthesize material in their own compositions, and to cite source material using conventions recommended by professional organizations. Students will draw from their reading, as well as from personal experience and observation, in order to produce effective expository, analytical, and argumentative writing. This course will also incorporate the teaching of all skills necessary to master the Grade 11 Virginia Standards of Learning. For information regarding Advanced Placement courses, see page 2 in this Course Catalog.

## English 12

## 1122(1 credit)

Grade Level: 12
Prerequisite: English 11

English 12 Academic requires application of reading comprehension and writing skills developed in previous grade levels. Composition in this course includes personal writing in all the rhetorical modes, research-based writing, and responses to literature. While the focus of the course is on British literature, Western and Third World literature may be included in either chronological or thematic approaches. Language study, vocabulary development, and oral communication skills are integrated with composition and literature. Critical reading and thinking skills are an integral part of the course. The ultimate goal is to assure proficiency in English language skills and to provide a base of knowledge necessary to be academically competitive. Computer-assisted instructions will be an integral part of the program, including word processing and Internet use.

## English 12 Dual Enrollment

## 1120(1 high school credit)(NRCC classes English 111 and English 112, 6 college credits)

## Grade Level: 12

Prerequisite: English 11 and successfully pass the Virginia Placement test; successfully complete NRCC English 111(1st nine weeks) prior to entering NRCC English 112 ( $2^{\text {nd }}$ nine weeks).

This course is designed to allow the student who is academically advanced to enroll in a college course during his senior year in high school. This course develops writing skills for study, work, and other areas of writing based on experience, observation, research, and reading of selected literature. It guides students in learning as a writing process: understanding audience and purpose, exploring ideas and information, composing, revising, and editing. The course will support writing by integrating, composing, revising, and editing as well as by integrating experiences in thinking, reading, listening, and speaking.

## English 12 II Dual Enrollment

1121(1 high school credit) (NRCC classes English 243 and English 244, 6 college credits)
Grade Level: 11 or 12
Prerequisite: A letter grade of C or better in English 12 Dual Enrollment

This course is designed to allow the student who is academically advanced to enroll in a college course during his senior year in high school. This course studies major English works from the Anglo-Saxon period to the present, emphasizing ideas and characteristics of the British literary tradition. It involves critical reading and writing.

## Advanced Placement English Literature and Composition

## 1127(1 credit)

Grade Level: 12
Prerequisite: English 11
Advanced Placement English 12 is a college level course for students with exceptional ability. The content of the course carefully examines notable works from world literature. Through such a study, the students will sharpen their awareness of language and their understanding of the writer's craft. The approach to the study of various literary forms is interpretive, analytical, comparative and critical. This course prepares the student to demonstrate mastery of specific state and lock standards in English language skills (SOLs). AP English 12 requires a summer reading component. For information regarding advanced placement courses, see page 2 in this Course Catalog.

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Yearbook I, II, and III
```

1028/1029/1030(1 credit)
Grade Level: 10, 11, and 12
Prerequisite: Application required
This course will provide an opportunity for students to produce a yearbook, the Cougar Pinnacle, for the school. Students will participate in activities, discussions, and assignments that are designed to increase their journalistic knowledge while they assemble photographs and reports that tell the story of one year at Pulaski County High School. The course will focus on yearbook financing, photography, composition, productions and publication.

Family and Consumer Sciences

## Early Childhood Education

Early childhood education is a two-year program for students interested in careers and occupations that focus on young children. The program includes the study of child growth and development of preschoolers and the preparation of preschool learning activities. Students are provided work-related experiences in the lab at PCHS Childcare Center. Co-curricular activities are provided through participation in FCCLA (Family, Career, and Community Leaders of America).

Introduction to Early Childhood Education and Services
8234(1 credit, 1 block)
Grade Level: 9 and 10
Prerequisite: TB test verification must be provided. Student application and three written teacher recommendations that are positive and favorable of the student's qualifications to work with young children are required. Since the students will be working with young children, past discipline records and attendance will be checked and used in the consideration of student enrollment.

Students focus on the principles of child growth and development of self-concepts and building self-esteem, appreciation of diversity, learning experiences for children, principles of guiding children in a positive manner, healthy and safe environments, career development, and careers related to early childhood professionals through hands-on exploration, projects, and group learning. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

## Early Childhood Education and Services I

## 8285(2 credits, 2 blocks)

Grade Level: 11 and 12
Prerequisite: TB test verification must be provided. Student application and three written teacher recommendations that are positive and favorable of the student's qualifications to work with young children are required. Since the students will be working with young children, past discipline records and attendance will be checked and used in the consideration of student enrollment.

Students prepare to be primary providers of home, family, or institution-based child care services by focusing on the planning, organizing, and conducting of meaningful play and learning activities, child monitoring and supervision, record keeping and referral procedures. Critical thinking, practical problem solving and entrepreneurship opportunities within the field of early childhood education are emphasized. Supervision of the instructor is required. Students prepare for continuing education leading to careers in early childhood fields such as medical, healthcare and social services. Students combine classroom instruction and supervised on-the-job training in the PCHS on-site lab.

## Early Childhood Education and Services II

```
8286(2 credits, 2 blocks)
Grade Level: }11\mathrm{ and 12
Prerequisite: Early Childhood Education I and TB test verification must be provided.
EOC Test: CDA-Child Development Associate
```

Students will focus on occupational skills needed by personnel employed in early childhood-related fields such as education, medical/health care, social services, counseling, psychology and entrepreneurship. Work-based learning experiences are under the supervision of the instructor. Critical thinking, practical problem solving and entrepreneurship opportunities within the field of childhood education are emphasized. Students combine classroom instruction and supervised on-the -job training in the PCHS on site lab. Upon completion of this course students will be required to take American Association of Family and Consumer Sciences (AAFCS) Assessment.

## Early Chlidhood Education Internship (Individual Development)

## 8210(1 credit) <br> Grade Level: 11 and 12 <br> Prerequisite: Successful completion of Early Childhood Education II

Students are prepared for job entry skills. This course also targets students considering a career in early childhood education.

## Culinary Arts

## Culinary Arts

Culinary Arts is a program which utilizes the National Restaurant Association Education Foundation's ProStart Curriculum. The courses expose students to industry-based training materials backed by the expertise of education professions, which allow students to explore career options and develop academic and workplace skills, prepare for post-secondary education and employment, and receive classroom instruction, hands-on laboratory, and on-the-job training.

## Introduction to Culinary Arts

```
8250(1 credit, 1 block)
Grade Level: 9, 10, and 11 - Priority given to 9 9
Prerequisite: None
```

The competencies focus on identifying and exploring the individual careers within the food service industry. Units of study include food science and technology, dietetics and nutrition services, diverse cuisines and service styles, current trends, food and beverage production and preparation, and food safety and sanitation. Co-curricular activities are provided through participation in FCCLA (Family, Career and Community Leaders of America).

## Culinary Arts and Restaurant Management I

## 8275( 2 credits, 2 blocks)

Grade Level: 10 and 11

Instructional units include: Welcome to the Restaurant and Foodservice Industry, Keeping Food Safe, Workplace Safety, Professionalism, Equipment and Techniques, Stocks, Sauces, and Soups, Communication, Management Essentials, Fruits and Vegetables, Serving Your Guests, Potatoes and Grains, and Building a Successful Career in the Industry. Students apply concepts learned in classroom instruction to the operation of a food establishment: The Cougar Den. Students are required to participate in the co-curriculum chapter of the Family, Career and Community Leaders of America (FCCLA).

8276(2 credits, 2 blocks)
Grade Level: 11 and 12
Prerequisite: Successful completion of Culinary Arts I, Culinary Instructor Recommendation EOC Test: ServSafe Manager Certification

Instructional units include: Breakfast Food and Sandwiches, Nutrition, Controlling Foodservice Costs, Salads and Garnishing, Purchasing and Inventory, Meat, Poultry, and Seafood, Marketing and the Menu, Desserts and Baked Goods, Sustainability in Foodservice, and Global Cuisines. Students apply concepts learned in classroom instruction to the operation of a food establishment: The Cougar Café. Students have the option of applying into the Foodservice Cooperative Education program with work release credit. Students are required to participate in the co-curricular chapter of the Family, Career and Community Leaders of America (FCCLA).

## Culinary Arts Specialization

## 8279(1 credit, 1 block) <br> Grade Level: 11 and 12 <br> Prerequisite: Successful completion of Culinary Arts \& Restaurant Management II, Culinary Instructor Recommendation

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. Depending on the options available in the locality, students specialize in one of the following four areas: Baking and Pastry Food-Preparation Techniques, Catering/Banquet Food-Preparation Techniques, Restaurant Operation Techniques, 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.

## Education and Training

## Teacher Cadet Program Virginia Teachers for Tomorrow I CTE Dual Enrollment

## 9062(1 credit, 1 block)(NRCC college credit in EDU 200 Introduction to Teaching as a Profession, 3 credit) Grade Level: 11 and 12

Prerequisite: TB test verification, successfully pass the Virginia Placement Examination, NRCC Application

A student application and three written teacher recommendations pertaining to the student's qualifications and character as a future educator will be required prior to admission. Because a minimum understanding of Algebra and the ability to communicate in and evaluate writing are a licensor requirement for Virginia teachers, an acceptable applicant will possess a GPA of at least 3.0 or greater. Integrity and work ethic, being central components to the curricula, past discipline records and attendance will be verified and used in the consideration of student enrollment.

Virginia Teachers for Tomorrow (VTfT) fosters student interest, understanding, and appreciation of the teaching profession and allows secondary students to explore careers in education. Students build a foundation for teaching, learn the history, structure and governance of teaching, apply professional teaching techniques in the VTfT classroom, and reflect on their teaching experiences. Additional educational leadership opportunities are offered through the student organization, Future Educators Association.

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|  |  |  |
|  |  | Studio Classes <br> Drawing <br> Prainding |
|  |  | Sculpture |
|  |  |  |

## Foundations Art I

## 9120(1 credit)

## Grade Level: 9, 10, 11 and 12

## Prerequisite: None

In this course, students will be introduced to the elements of art and principles of design. They will acquire the ability to use new techniques and a variety of media used in art. They will learn the basic fundamentals of drawing, painting, ceramics and sculpture. Throughout the semester the elements of drawing are emphasized, and students complete sketchbook assignments in addition to work done in class. Each student maintains a notebook of classroom activities, art history and art vocabulary in addition to the sketchbook. Student participation in the school exhibit is required. There is a $\$ 12.00$ art fee for this class. Students may take this course once for credit.

## Foundations Art II

## 9130(1 credit)

## Grade Level: 9, 10, 11 and 12

## Prerequisite: Foundations Art 1

Students will build on the fundamentals learned in Foundations I and create more complex projects in drawing, painting, ceramics, and sculpture. Students are required to keep a sketchbook of weekly drawing assignments. An overview of art history, vocabulary and techniques is included with each media area. Student participation in school exhibits is required. There is a $\$ 12.00$ art fee for this class. Students may take this course once for credit

## Drawing (Studio Level)

## 9131(1 credit)

## Grade Level: 10, 11, and 12

## Prerequisite: Foundations Art I and Foundations Art II

The students enrolled in the Drawing Class will further develop their skills from the Foundation Levels. Pencil, charcoal, colored pencil, marker and oil pastel are the primary media used. Seeing and recording accurately through exercises in drawing objects, environments and figures are heavily stressed. The drawing study also will emphasize the process of giving form to ideas and the exploration of composition and media as a means of expression. Student participation in school exhibits is required. There is a $\$ 12.00$ art fee for this course. Students may take this class twice for credit.

## Painting (Studio Level)

**2020-2021**
9132(1 credit)
Grade Level: 10, 11, and 12
Prerequisite: Foundations Art I and Foundations Art II
Painting is a studio course that will enable the student to explore in depth the development of painting and its various techniques. Watercolors, tempera and acrylics are the primary media used. Emphasis will be placed on the application of value and tonal studies using a variety of wet and dry media. Student participation in school exhibits is required. There is a $\$ 12.00$ art fee for this course. Students may take this class twice for credit.

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Sculpture (Studio Level)
**2021-2022**
9133(1 credit)
Grade Level: 10, 11, and 12
Prerequisite: Foundations Art I and Foundations Art II
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This course is designed as an in-depth study of only three-dimensional art. Students will begin explorations into materials and process, as well as tools and construction methods. Projects focus on 3-D formal applications of line, plane, form, and space with investigations of positive/negative, interior/exterior, volume/mass, multiple repetition, scale, color/surface, texture, etc. In regards to ceramics, students will learn how to construct pieces by using pinch, coil, slab and wheel thrown methods. Further work will involve assemblage, altered art, jewelry, stained glass, plaster, weaving and paper mache. Student participation in school exhibits is required. There is a $\$ 12.00$ art fee for this class. Students may take this course twice.

## Music

## Advanced Concert Choir

## 9281(1 credit)

Grade Level: 10, 11, and 12
Prerequisite: Audition, previous choral experience
Advanced Concert Choir members will study and perform traditional and contemporary choral literature. This class will also contain instruction in music theory, correct singing techniques and performance skills. Performance will include school and community events, competitions at the district and state level and choral concerts. Out-of-class rehearsals and performances are required.

## Concert Choir

## 9280(1 credit)

## Grade Level: 10, 11, and 12(Fall Semester); 9, 10, 11, and 12(Spring Semester

## Prerequisite: Interest in choral music

This class will contain instruction in the area of general choral music, beginning theory and performance techniques. Both traditional and contemporary choral literature will be taught and performed. Performances will include school and community events and choral concerts. Out- of-class rehearsals and performances are required.

## Freshman Chorus

## 9279(1 credit) <br> Grade Level: 9(Fall Semester) <br> Prerequisite: Interest in choral music

This class is specifically for all freshman choral students and will contain instruction in the area of general choral music, beginning theory and performance techniques. Both traditional and contemporary choral literature will be taught and performed. Performances will include school and community events and choral concerts. Out-of-class rehearsals and performances are required.

## Ladies Ensemble

## 9294(1 credit)

Grade Level: 10, 11, and 12
Prerequisite: Audition and previous choral experience
This female choral group will study and perform a combination of jazz, blues, traditional and contemporary choral literature while, at times, adding choreography. General music theory and performance techniques will also be included. Performances will include school and community events, competitions at district and state levels and choral concerts. Out-of-class rehearsals and performances are required.

## Band

## Beginning Instrumental Band

## 9231(1 credit)

Grade Level: 9, 10, 11, and 12
Prerequisite: None
This course would be available to students wishing to learn to play a musical instrument (wind, percussion, or guitar) or learn a secondary instrument. This course will focus on basic to intermediate skills associated with reading, writing, playing, and analytically listening to music. This course can be repeated for credit.

## Concert Band

## 9230(1 credit)

Grade Level: 9, 10, 11, and 12
Prerequisite: Previous band experience
This course is open to any band instrumental musician (wind and percussion) interested in learning basic to intermediate fundamental skills of playing and making music. Students should have past band experience prior to signing up for this course. This course can be repeated for credit.

## Music Theory

## 9227(1 credit)

Grade: 10, 11, and 12
Prerequisite: Prior band, choir or music experience
This course is open to any student wishing to learn basic to intermediate music theory fundamentals and skills required to read and create music. Students will learn to read, write, listen and analyze music.

## Symphonic Band

## 9229(1 credit)

Grade Level: 9, 10, 11 and 12
Prerequisite: Audition and previous band experience

This course is open to any band instrumental musician (wind and percussion) interested in learning intermediate to advanced fundamental skills of playing and making music. Students should have past band experience prior to signing up for this course. This course can be repeated for credit.

## Theatre Arts

## Advanced Theatre Arts I and II

1440/1441(1 credit)
Grade Level: 10, 11, and 12
Prerequisite: Students are accepted through application and audition only. Theatre Arts Exploration is required.
This course will provide instruction for students who want to continue studies in acting and production techniques. Students will participate in dramatic productions and projects; explore various career opportunities related to drama and practice theatrical skills as a studio performing company. Students will have the opportunity to perform at school and community events. There will be at least one Theatre Arts production from this class per semester. Out-of-class performances and rehearsals may be called.

## Theatre Arts Exploration

## 1410(1 credit)

Grade Level: 9, 10, 11, and 12
Prerequisite: None
This course will introduce students to basic theatre arts with acting focus and the following units of study; evaluation of performance, acting, pantomime and movement, diction and oral interpretation, play analysis, production, dramatic literature, and theatre history. Performances will include school and community events. First semester will focus on movement/dance, singing, basic performance skills, and presentation of monologues. Second semester will culminate with a performance of a play. Out-of-class rehearsals and performances may be called.

## Stagecraft and Set Design I, II

## 1430/1431(1 credit)

Grade Level: 9, 10, 11, and 12
Prerequisite: None, although Theatre Arts Exploration is recommended

This course will introduce students to many of the technical aspects of play production including set design and construction, lights, sound, special effects, costumes and properties, as well as both stage and house management. Students learn by doing. This class prepares production aspects of main stage productions. The student continues aspects of the beginning course with emphasis in advanced design work in the $11^{\text {th }}$ and $12^{\text {th }}$ grade.

## French I

## 5110(1 credit)

Grade Level: 9, 10, 11, and 12
Prerequisite: None
This is a course for students who wish to begin the study of French. It is taught with emphasis on all four major language skills: listening, speaking, reading and writing. The development and practice of good pronunciation, the building of basic vocabulary, and fundamental understanding of grammar/usage are essential. Skills leading to fluent communication are emphasized. The history, culture and geography of France, and the French-speaking world are introduced.

## French II

5120(1 credit)
Grade Level: 9, 10, 11, and 12
Prerequisite: Minimum grade of $\mathbf{C}$ in French $I$
Development of the four basic skills of listening, speaking, reading and writing is continued. Increased emphasis will be placed on writing.

## French III

## 5130(1 credit)

Grade Level: 10, 11, and 12
Prerequisite: Minimum grade of C in French II
Students will maintain their language proficiency by continuing to use the vocabulary and structure that have been previously learned. Grammar and vocabulary are expanded to raise the level of proficiency required for self-expression both in oral and written forms.
There is increased emphasis on reading.

## French IV

## 5140(1 credit)

Grade Level: 10, 11, and 12
Prerequisite: Minimum grade of $\mathbf{C}$ in French III
This course is strongly recommended for students who plan to continue French in college or for those who hope to be exempted from the college language requirement. Students will continue the development of the four major language skills: listening, speaking, reading and writing. There is increased emphasis on composition and reading modern French literature.

## Spanish I

5510(1 credit)
Grade Level: 9, 10, 11, and 12
Prerequisite: None
This course is for students who wish to begin the study of Spanish. It is taught with emphasis on all four major language skills: listening, speaking, reading and writing. The development and practice of good pronunciation, the building of basic vocabulary, and
the fundamental understanding of grammar/usage are essential. Skills leading toward fluent communication are emphasized. The history, culture and geography of Spain and Latin America are introduced.

## Spanish II

## 5520(1 credit)

Grade Level: 9, 10, 11, and 12
Prerequisite: Minimum grade of $\mathbf{C}$ in Spanish I
Development of the four basic skills of listening, speaking, reading and writing is continued. Proficiency with the language will be developed through class work and independent practice.

## Spanish III

## 5530(1 credit)

Grade Level: 10, 11, and 12
Prerequisite: Minimum grade of $\mathbf{C}$ in Spanish II
Students will maintain their language proficiency by continuing to use the vocabulary and structures that have been previously learned. Grammar and vocabulary are expected to raise the level of proficiency required for self-expression both in oral and written forms.

## Spanish IV

## 5540(1 credit)

Grade Level: 10, 11, and 12
Prerequisite: Minimum grade of C in Spanish III
Grammar will be reviewed throughout the course, and vocabulary building will be continued on an advanced level to aid in the increased emphasis on reading, writing, and speaking in Spanish in critical responses to and appraisals of literature, articles, movies, art, history, and culture. The course will be conducted in Spanish.

## Health and Medical Sciences

## Introduction to Health and Medical Sciences

## 8302(1 credit)

Grade Level: 10, 11, and 12
Prerequisite: None
This course introduces the student to a variety of healthcare careers and develops basic skills required in all health and medical sciences. It is designed to help students understand the key elements of the U.S. healthcare system and to learn basic healthcare terminology, anatomy and physiology for each body system, pathologies, diagnostic and clinical procedures, therapeutic interventions, and the fundamentals of traumatic and medical emergency care. Instruction emphasizes safety, cleanliness, asepsis, professionalism, accountability, and efficiency within the healthcare environment. Students also begin gaining job-seeking skills for entry into the health and medical sciences field. Students may learn the basics of medical laboratory procedures, pharmacology fundamentals, biotechnology concepts, and communication skills essential for providing quality patient care. Students will have the opportunity to become certified in First Aid and Basic CPR by the American Red Cross.

This course is available with an additional option (STEM Academy) which can be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM Academy options.

- STEM Academy

Grade Level: 10, 11, and 12
Prerequisite: Complete a Pulaski County Governor's STEM Academy Application; possess a minimum GPA of 2/5, passing scores on the highest level attained on the English and Mathematics SOL tests.

This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Pharmacy Technician I

8305 (1 credit)
Grade Level: 11 and 12
Prerequisite: None
This certificate program is designed to provide students with the basic skills and knowledge to begin work as a pharmacy technician. The coursework will fulfill the requirements of the Board of Pharmacy and prepare students to take either the state examination or the national examination administered by the Pharmacy Technician Certification Board. Trained, experienced pharmacy technicians who can demonstrate the right skills and knowledge should be able to pursue many exciting and respected career options or postsecondary study in the pharmacy field.

## Pharmacy Technician II

8306 ( 2 credits, 2 blocks)
Grade Level: 11 and 12

## Prerequisites: Pharmacy Technician I

EOC Test: Certified Pharmacy Technician (CPhT) Examination

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

## Health Assisting Careers

## 8331( 2 credits, 2 blocks)

Grade Level: 11 and 12
Prerequisite: Successful completion (minimal "C" average) of Introduction to Health and Medical Sciences 8302 EOC Test: Certified Nursing Assistant (CNA Licensure)

Students explore opportunities in the healthcare field by developing basic skills common to several assisting careers. HAC is a two-block course that qualifies students to take the Virginia State Certification Exam for Nursing Assistants (CNA). They study body structure and function, principles of health, microbes, and disease, and an overview of the health and patient care system. Supervised work-based learning for a minimum of 40 hours as part of the course in health care settings is managed by the health and medical sciences education teacher. Students will provide hands-on patient care with instructor supervision.

This course is available with two additional options (dual enrollment \& STEM Academy) which can both be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM academy options.

- CTE Dual Enrollment

NRCC college credit in NUR 27 Nursing Assistant, 5 credits
Grade Level: 11 and 12
Prerequisite: Successful completion (minimal "C" average) of Introduction to Health and Medical Sciences 8302,
NRCC Placement Examination and NRCC Application. Acceptance for this class is by application process.

- STEM Academy

Grade Level: 11 and 12
Prerequisite: Successful completion (minimal "C" average) of Introduction to Health and Medical Sciences 8302, NRCC Placement Examination and NRCC Application. Acceptance for this class is by application process.

This course is dual enrolled with NRCC NUR 27 Nurse Aide $I-5$ credits. This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Medical Terminology

## 8383(1 credit, 1 block)

Grade Level: 11 and 12
Prerequisite: Recommended Introduction to Health and Medical Sciences

Medical Terminology is designed to help students learn common medical terms essential for safe patient care. Topics are presented in logical order, beginning with each body system's anatomy and physiology and progressing through pathology, laboratory tests and clinical procedures, therapeutic interventions, and pharmacology. Students learn concepts, terms, and abbreviations for each topic.

- CTE Dual Enrollment

NRCC college credit in HIM 101 - Health Information Technology I (4 credits) and HIM 103 - Health Information Technology II ( 2 credits)
Grade Level: 11 and 12
Prerequisite: Recommended Introduction to Health and Medical Sciences and NRCC Placement Examination

- STEM Academy

Grade Level: 11 and 12
Prerequisite: Complete a Pulaski County Governor's STEM Academy Application; possess a minimum GPA of 2.5, passing scores on the highest level attained on the English and Mathematics SOL tests.

This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Health and Physical Education

Students will be permitted to take only one physical education class or physical education elective class per semester, as recommended by the Virginia Department of Education.

## Health and Physical Education 9

7300(1 credit)
Grade Level: 9
Prerequisite: None
The course is required for graduation. The physical education program will be centered on fitness and team sports. Activities will include units in flag football, basketball, softball, volleyball, soccer, badminton, tennis, and physical fitness testing. Health units include first aid, prevention and control of disease, fitness, and family life education.

## Health and Physical Education 10

## 7400(1 credit)

Grade Level: 10
Prerequisite: Health \& Physical Education 9

This course is required for graduation. The physical education program will be centered on fitness and individual and team sports. Activities will include units in tennis, football, aerobics, indoor recreational activities, volleyball, softball, basketball, and physical fitness testing. The classroom phase of driver education will be given during the $1^{\text {st }}$ nine weeks of each semester. Students must pass the classroom phase of driver education before taking the behind-the-wheel phase. Health instruction and family life education will be taught during the $2^{\text {nd }}$ nine weeks of the semester.

## Health and Physical Education Electives

These courses will not count as Health and Physical Education credit for graduation requirements.

## Personal Fitness Courses Mission Statement

The goal of the Personal Fitness courses is to engage the student in meaningful sports and life specific skills. The progression is designed to handle the various fitness and ability levels of each student enrolled. The curriculum is set to maximize each student's body and mind for better performance both on the field and optimal lifelong health. The differentiating levels allow the student to develop a portfolio of their charted progress. This data will follow the student into each course level for a snapshot to individual growth. The application of the data will be used in weight training, core strength training, flexibility, balance and overall improved mobility which will provide an opportunity for the student to monitor, measure, and chart personal progress and growth.

## Personal Fitness Level 1

## 7681(1 credit)

Grade Level: 9, 10, 11, and 12
Prerequisite: None
This course is designed to assess and use data from testing measures of individual fitness levels. This level is designed for the beginner in weight room etiquette and technique, running form, core/balance exercises and flexibility training. The student will receive instruction in the development of total body fitness. Components will be implemented in weight room activities and agility exercises, core conditioning and flexibility drills that translate directly to fitness level. This course will begin building a skill-related portfolio that will motivate and encourage a life of optimal health. Each student will maintain a personal profile as a means to measure progress and growth.

## Personal Fitness Level 2

## 7682(1 credit)

Grade Level: 9, 10, 11, and 12
Prerequisite: Successful completion of Level I
This course is a continuation of the previous level with an emphasis on increased intensity in weight training and interval agility training. This course will be designed to continue mastery of weight training technique, dynamic and static stretching, aerobic and anaerobic exercises and core and balance training. This course will begin to offer a diverse group of skills to enhance sports specific skills and life skill activities. This course will also use testing to determine the student's appropriate and individual growth. Each student will maintain a personal profile as a means to measure progress and growth.

## Personal Fitness Level 3

## 7683(1 credit)

Grade Level: 10, 11, and 12
Prerequisite: Successful completion of Level 2
This course is designed to further enhance skills learned and developed in Level 2. This level will begin to increase intensity and load to sports specific training. The course will require the participant/student to engage knowledge from the previous two levels of
instruction. This will allow the individual to begin maximizing both body and mind. The students will develop an understanding of skills learned and how they directly relate to particular sport and life skills. Exercises will be geared toward the individual sport in relation to strength training, flexibility, core strengthening, balance, and mobility. The course will offer testing that will be added to the student skill portfolio. Each student will maintain a personal profile as a means to measure progress and growth.

## Personal Fitness Level 4

## 7684(1 credit)

Grade Level: 10, 11, and 12
Prerequisite: Successful completion of Level 3
This course is designed to enhance individual fitness levels to student athletes with a diverse and dynamic program related to sport and life skills. The course will focus on speed, explosion, flexibility, and balance. The basis of training will be retrieved from student portfolios developed in previous levels of fitness and conditioning courses. This course has an increased workload and performance expectations. Data will be gathered to assess head to toe fitness levels. The student will be responsible for developing his/her individual ideas tailored to their specific sport and life skills. Each student will maintain a personal profile as a means to measure progress and growth.

## Personal Fitness Level 5

## 7685(1 credit)

## Grade Level: 11 and 12

Prerequisite: Successful completion of Level 4
This course is designed to further enhance skills learned and developed in Level 4. Students will learn more about which specific muscle groups are worked with each exercise taught. Students will leave the class knowing the different muscle groups, how to work that muscle group, and proper form for each exercise. Students will see a difference in their muscle tone and weight gain/loss depending on their wanted outcome.

## Personal Fitness Level 6

7686(1 credit)
Grade level: 11 and 12
Prerequisite: Successful completion of Level 5
This course is designed to further enhance skills learned and developed in Level 5. Students review materials taught in Level 5 and continue learning more about staying physically fit throughout one's lifetime by staying involved in weight training and cardiovascular endurance exercises. They will learn more about maxing out and learn to create their own workouts once introduced to the different exercises in previous level classes.

## Personal Fitness Level 7

## 7687(1 credit)

Grade Level: 12
Prerequisite: Successful completion of Level 6
The course focus is to maximize strength, flexibility, agility, core, and cardiovascular endurance. Movement and exercise will include weight training, plyometric exercises, and endurance running. This course places emphasis on perfection of form and technique while increasing load training. Students will also be encouraged and motivated to continue through advanced skill additions to their portfolios. Growth will be assessed with testing in the aforementioned designated areas. Each student will maintain a personal profile as a means to measure progress and growth.

## Personal Fitness Level 8

7688(1 credit)
Grade Level: 12
Prerequisite: Successful completion of Level 7
This course offers the most diverse and intense interval training in all areas of speed acceleration, change of direction, agility, muscular endurance, flexibility, and mobility. The course is designed for an optimal fitness level built in previous levels and displayed in student portfolios. The final grade for this level will include a research paper that will include elements of the sport, total body workout, and nutrition plan. The foundation and design of this course will contain elements specific to his/her sport and lifelong interest. Each student will maintain a personal profile as a means to measure progress and growth.

## Sports, Exercise, and Health Science

7660(2 credits, 2 blocks)
Grade Level: 11 and 12
Prerequisite: Chemistry or concurrently enrolled in Chemistry
This class is designed for students interested in fields such as athletic training, physical therapy, medicine, fitness, exercise physiology, kinesiology, nutrition, and other sports medicine-related fields. The class will include class work and practical hands-on application in the following areas: anatomy and physiology, nutrition, conditioning, injury pathology, prevention, treatment, and rehabilitation of sports injuries, taping and wrapping of injuries, first aid/ CPR , emergency procedures and sports medicine careers. This course can be taken concurrently with Personal Fitness.

Marketing Education

## Marketing

8120( 1 credit, 1 block)
Grade Level: 9, 10, 11 and 12
Prerequisite: None
Marketing students will receive an introductory level of the concepts, ideas, techniques, and methods of the world of advertising/marketing. Students develop skills in the areas of personal selling, advertising, human relations, product/service technology and related instructional areas.

## Advanced Marketing

## 8130(1 credit, 1 block

Grade Level: 10, 11 and 12
Prerequisite: Marketing, grade "C" or higher, Successful Completion of Marketing
Advanced Marketing is a junior/senior level course designed to provide students with skills for advancement to supervisory and management positions in the field of marketing. Students must work the required 396 hours of on-the-job training. Students will be required to take the National Professional Certification in Customer Service Exam at the completion of the class.

## Fashion Marketing

8140(1 credit, 1 block)
Grade Level: 9, 10, 11, and 12
Prerequisite: None

Fashion Marketing will give students an opportunity to gain a basic knowledge of the apparel and accessories industry and skills necessary for successful employment in apparel businesses through running of the School Based Enterprise (Cougar Store). Students develop general marketing skills necessary for successful employment in fashion marketing, general marketing skills applicable to the apparel and accessories industry, and specialized skills unique to fashion marketing. Personal selling, sales promotion, purchasing, physical distribution, marketing planning, and product/service technology as well as the academic skills (mathematics, science, English, and history/social science) related to the content are part of this course. Computer/technology applications supporting this course are studied

## Sports and Entertainment Marketing

## 8175(1 credit, 1 block)

Grade Level: 9, 10, 11, and 12
Prerequisite: None

Sports and Entertainment Marketing will give students an opportunity to explore the world of sports and entertainment from the perspective of planning and running events. From concerts to football bowl games students will gain knowledge of ticket sales to merchandising. Concerts can be local fairs to big stadium events that will help students prepare for future careers in that field. Students will have the ability to plan events from food purchasing, parking, opening acts, customer care, booking talent and more on computer simulated software.

## Internship Workfocus

## Intern (1 credit, 1 block) <br> Grade Level: 11 and 12

Internship is a planned, progressive, structured educational activity or program that enables the student to practice and develop career-related skills in a real workplace environment. It provides hands-on experience in a particular industry or occupation related to the student's career interests, abilities, and goals, and allows him or her to document job-related experiences. Prior to the internship, the student receives the established criteria and guidelines from the worksite supervisor. Throughout the internship, the supervisor evaluates the student and their progress. Internships are scheduled for a specified period of time during the school year and/or during the summer and may be paid or unpaid. Note: Students must adhere to standards and regulations established for internships.

## Mathematics



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## Algebra I Part I

3131(1 elective credit)
Grade Level: 9 and 10
Prerequisite: None

Algebra I Part I is the first semester of a two-semester sequence. Basic operations in arithmetic, directed numbers, polynomials, equations, properties, and graphing are studied. Graphing calculator instruction will be used to reinforce algebra concepts in this course.

## Algebra I Part II

## 3132(1 credit)

Grade Level: 9, 10, and 11
Prerequisite: Algebra I Part I
EOC Test: Standards of Accreditation require an End of Course Test upon completion of this course.
Algebra I Part II will continue the study of topics begin in Algebra I Part I and extend the study to include fundamental operations with algebraic functions, equations, graphing, linear equations, inequalities in two variables, and quadratic equations. A student who successfully completes Algebra I Part II may continue to Geometry Part I or Geometry with teacher recommendation. Graphing calculators will be used in this course to enforce algebraic concepts.

## Algebra I

## 3130(1 credit)

Grade Level: 9, 10, 11 and 12
Prerequisite: Pre-Algebra experience
EOC Test: Standards of Accreditation require an End of Course Test upon completion of this course.

Algebra I is the study of real numbers for solving $1^{\text {st }}$ and $2^{\text {nd }}$ degree equations, inequalities, linear equations, and systems of equations. This course will include the study of polynomials, factoring, and graphing. Graphing calculators will be used in this course to enforce algebraic concepts.

## Algebra, Functions, and Data Analysis

## 3136(1 credit)

Grade Level: 9, 10, 11 and 12
Prerequisite: Algebra I Part II or Algebra I
Algebra, Functions, and Data Analysis will build a deeper understanding of mathematical concepts learned in Algebra I. The connection will be shown between algebra and statistics. Students will learn how to problem solve, communicate and reason mathematically, make mathematical connections, create and interpret mathematical representations and modes, and make efficient and appropriate use of technology to solve problems.

## Algebra II

## 3135(1 credit)

Grade Level: 9, 10, 11, and 12
Prerequisite: Algebra I or Algebra I Part I and II, and Geometry
EOC Test: Standards of Accreditation require an End of Course Test upon completion of this course.

Algebra II will include the studies introduced in Algebra I and extend the study to include linear and quadratic equations, rational and radical expressions, the complex number system, conic sections, functions, and other related topics. The course is necessary for those students who wish to continue in academic high school mathematics and to establish a strong background in mathematics for college. Graphing calculators will be used in this course to enforce algebraic concepts.

## Algebra II Honors

## 3137(1 credit)

## Grade Level: 9, 10, 11 and 12

Prerequisite: Algebra I or Algebra B, Part I and II, and Geometry
EOC Test: Standards of Accreditation require an End of Course Test upon completion of this course.
Algebra II Honors will include the studies introduced in Algebra I and extend the study to include linear and quadratic equations, rational and radical expressions, the complex number system, conic sections, functions, and other related topics. The course is necessary for those students who wish to continue in academic high school mathematics and to establish a strong background in mathematics for college. In addition to these concepts, the honors course will also include studies in exponential and logarithmic functions, n-th degree polynomials, sequences and series, probability, permutations and combinations, matrices and other related topics. Graphing calculators will be used in this course to enforce algebraic concepts.

## Advanced Algebra/Trigonometry

## 3163(1 credit)

Grade Level: 11 and 12
Prerequisite: Geometry A and Algebra II
After a comprehensive review of Advanced Algebra topics, this course will provide a complete study of all the major topics of plane trigonometry. Real life applications of trigonometry are distributed throughout the course. Attention is also given to establishing connections between trigonometry and other areas of mathematics, particularly algebra and geometry.

## Pre-Calculus with Trigonometry Dual Enrollment

3170(1 high school credit)(NRCC college credit in MTH 167, 5 college credits)
Prerequisite: Algebra II and successfully pass the Virginia Placement Test in math and English Grade Level: 11 and 12

Pre-Calculus Dual Enrollment is designed to be a rigorous class. Students move rapidly through trigonometry and advanced algebra concepts. This course will cover college level algebra, matrices, and algebraic, exponential, and logarithmic functions. Students will follow the course guide and will use the texts of New River Community College for Pre-Calculus I or Math 163.

## Calculus

## 3171(1 credit)

## Grade Level: 11 and 12

Prerequisite: Advanced Algebra/Trigonometry or Pre-Calculus
Calculus will include topics equivalent to freshman calculus in college. The student enrolled may work to achieve the maximum that could qualify him/her to apply for advanced placement in college calculus. Topics will include functions, derivative, differentiation, and integration. A student should have excelled in the prerequisite courses before he/she enrolls in calculus. Emphasis will be on applications of real life problems.

## Calculus with Analytic Geometry I

3176(1 high school credit) (NRCC college credit in MTH 263, 4 college credits)
Grade Level: 11 and 12
Prerequisite: A letter grade of C in Pre-Calculus Dual Enrollment
Applied Calculus will cover matrices, limits, continuity, differentiation of algebraic and transcendental functions with applications and an introduction to integration. Students will follow the course guide and will use the texts of New River Community College for Applied Calculus 1 or Math 271.

## Computer Mathematics

## 3184(1 credit)

Grade Level: 10, 11, and 12
Prerequisite: None
This course is intended to provide students with experiences solving mathematical problems using computer programming techniques and the graphing calculator. Students will use these tools to solve problems in the areas of business, personal finance, leisure activities, sports, and probability and statistics. In addition, students will use programming techniques to determine problem-solving strategies and analyze data in the form of charts, graphs and tables.

## Geometry A

## 3143(1 credit)

Grade Level: 9, 10, 11, and 12
Prerequisite: Algebra I or Algebra I Part II. Students should have earned at least a C average in prior Algebra courses. EOC Test: Standards of Accreditation require an End of Course Test upon completion of this course.

Geometry A will include the study of the concepts of plane, space, and coordinate geometry. An extensive study is made of lines, planes, angles, and their relationships. Emphasis is placed on deductive proofs, construction of figures using basic, geometric tools, and applications of geometric concepts to practical situations.

## Probability/Statistics

## 319(1 credit)

## Grade Level: 11 and 12

Prerequisites: Geometry and Algebra II
Students will be collecting, representing, and processing data to enhance their social awareness and career opportunities. Subtopics and activities include simulations and/or sampling to estimate probabilities, fitting curves, testing hypotheses, and drawing inferences. They will solve problems involving uncertainty through experimental probability and create and interpret probability distributions (norm curve and properties). Students will make informal observations about the likelihood of events to interpret and judge the validity of statistical claims.

## Statistics I Dual Enrollment

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3191(1 high school credit) (NRCC college credit in MTH 245, 3 college credits) Grade Level: 11 and 12
Prerequisite: A letter grade of C in Pre-Calculus Dual Enrollment
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This course presents an overview of statistics, including descriptive statistics, elementary probability, probability distributions, estimation, hypothesis testing, and correlation and regression. Students will follow the course guide and will use the texts of New River Community College for Statistics or Math 240.

## Service Learning - Math Peer Tutoring

## 2502(1 credit) (elective credit)

## Grade Level: 11 and 12

Prerequisite: Application and successful completion of the math course to be tutored
Peer tutoring is a course in which students are given an opportunity to help other students with their class work so they too can excel in their education. Tutoring is not only a worthy service students can provide for the PCHS community, but also a means to prove themselves as responsible and caring individuals. As a peer tutor, a student will tutor other students in a course they have previously completed successfully at PCHS. This course can offer valuable experiences for students who are interested in a teaching career. Students who wish to enroll in this course are required to obtain or possess the following:

- Teaching recommendation
- Good interpersonal communication skills and ease in relating to peers from varying educational, cultural, and social backgrounds
- High level of responsibility, reliability, and punctuality
- Good attendance
- A GPA of 3.0 or higher
- Completion and submission of the tutor application form to the Math Department Chairperson

Science

| SCIENCE COURSE SEQUENCES |  |  |  |
| :---: | :---: | :---: | :---: |
| Earth Science* | Biology | $\longrightarrow$ Chemistry |  |

## Environmental Science

## 4271 (1 credit)

Grade Level: 9, 10, 11, and 12
Prerequisite: None
Environmental Science integrates the study of many components of our environment, including the human impact on our planet. These outcomes focus on scientific inquiry, the physical world, the living environment, resource conservation, humans' impact on the environment, and legal and civic responsibility.

## Biology

4300(1 credit)
Grade Level: 9, 10 and 11
Prerequisite: None
EOC Test: Standards of Accreditation require an End of Course Test upon completion of this course.

This course is an integrated approach to life science that will utilize the study of certain chemistry, physics, and environmental science principles necessary for the study of this fundamental science. The Virginia Standards of Learning is the base for this course.

## Biology Honors

## 4301(1 credit)

Grade Level: 9, 10 and 11
Prerequisite: Successful completion of previous science courses
EOC Test: Standards of Accreditation require an End of Course Test upon completion of this course.
Biology Science Honors is an advanced alternative to Biology Academic. The course will differ from the academic version in textbook, scope and depth of topics covered: a mastery of more abstract processes is expected. A comprehensive research paper and course project will be required. The content, concepts, and required technology approximate those found in the description of Biology Academic.

## Biology II/Ecology

4407(1 credit)
Grade Level: 11 and 12
Prerequisite: Biology
This course is designated for those students who do not meet the math requirement for Chemistry. This course will not meet the requirements for an Advanced Studies Diploma. Biology II/Ecology is a study of the science that affects our everyday lives. The emphasis is on basic scientific principles, ecology, biology, chemistry and the development of laboratory techniques.

## Biology I Dual Enrollment

4315 (1 high school credit and 4 college credits BIO 101)
Grade Level: 11 and 12
Prerequisite: A minimum grade of $C$ in Chemistry and successfully pass the Virginia Placement Test in English and math.
This course explores fundamental characteristics of living matter from the molecular level to the ecological community with emphasis on general biological principles. It introduces the diversity of living organisms, their structure, function and evolution. The course is designed to allow the student who is academically advanced to enroll in a college course during his or her senior year. Students will follow the course guide and will use the texts of New River Community College for Biology 101.

## Biology II Dual Enrollment

4316 (1 high school credit and 4 college credits BIO 102)
Grade Level: 11 and 12
Prerequisite: A minimum grade of $\mathbf{C}$ in Dual Enrollment Biology I
The course explores fundamental characteristics of living matter from the molecular level to the ecological community with emphasis on general biological principles. It introduces the diversity of living organisms, their structure, function and evolution. The course is designated to allow the student who is academically advanced to enroll in a college course during his or her senior year. Students will follow the course guide and will use the texts of New River Community College for Biology 102.

## Chemistry

## 4410(1 credit)

Grade Level: 10, 11 and 12
Prerequisite: Algebra II (or be concurrently enrolled in Algebra II)
EOC Test: Standards of Accreditation require an End of Course Test upon completion of this course.

This course is an academic study of the chemical world, emphasizing experimentation to obtain verifiable data, stoichiometry and an understanding of conservation of energy and matter. Concentration is on problem-solving, understanding and recording data, comprehensive analysis of results, and observation of the chemical world. Students will investigate many environmental, biological, and geologic phenomena as part of their study of chemistry. Laboratory experiences are an essential component of the course and shall occupy at least $50 \%$ of the instructional time.

## Earth Science

## 4200(1 credit)

Grade Level: 9, 10, 11 and 12
Prerequisite: None
EOC Test: Standard of Accreditation requires an End of Course Test upon completion of this course.
The main emphasis of this course is earth-space science and will use the Earth Science Standards of Learning. These standards specifically require the study of certain mathematics, chemistry, and physics concepts as well as several biological principles. Earth Science students will use computer technology and sensors and probes as tools to collect data from classroom and field experience. At least fifty percent of instructional time should be devoted to laboratory investigations. Emphasis is on problem-solving techniques and data collection in order to draw conclusions related to the physical environment.

## Meteorology

## 4255(1 credit)

Grade Level: 11 and 12
Prerequisite: Successful completion of previous classes, including Chemistry
This is a survey course that looks in detail at the science dealing with the lower atmosphere. Special emphasis is placed on computer technology in making weather observations, data collection, and forecasting. Students will utilize a computerized weather station as well as resources on the Internet to analyze present weather conditions and formulate forecasts. Course content will include topics strongly tied to forecasting, such as instrumentation, large-scale weather systems, winds, and precipitation. Special emphasis will be placed on severe weather and students will track the events as they unfold both locally and across the U.S.

## PhYsics

## 4510(1 credit)

## Grade Level: 11 and 12

Prerequisite: Trigonometry or Pre-Calculus

Physics is based upon the use of mathematical statements to interpret physical data. Students will be expected to use current technology (computers, sensors, probes, graphs, spreadsheets, and simulations) to fulfill the new Standards of Learning that include the ability to use instruments to collect and report physical data. Physics is the study of the universal laws of nature. Motion, force, heat, light, sound, electricity, magnetism, and modern physics will be studied. Students will develop skills in problem solving, creative thinking, critical analysis, and hypothesis evaluation through mental and physical activities that include hands-on experiences at least $50 \%$ of the instructional time.

Social Studies Electives

## Introduction to Philosophy

## 2850(1 credit)

Grade Level: 11 and 12
Prerequisite: None

Considering a variety of sources, this course is an introduction to the ideas and issues growing out of the history of philosophical inquiry in such areas as metaphysics (the nature of reality), epistemology (the nature of knowledge), ethics (the nature of moral values and principles), philosophy of religion (the nature of religious belief), and aesthetics (the nature of beauty).

## Psychology

## 2900(1 credit)

Grade Level: 11 and 12
Prerequisite: None

Psychology is an introduction to the study of the mind and observed behaviors. It is a course designed to help students understand themselves and others. One of the primary goals of this course is to aid individuals in the quest to understand what constitutes healthy and unhealthy relationships. Topics also include essential concepts in brain function, motivation, learning, personality, human development, and social/abnormal psychology.

This course is similar to many of the introductory classes found in colleges and universities. Instruction will be provided through daily notes, lecture, and group activities. At the conclusion of this course, students will demonstrate an understanding of the field of psychology, along with an understanding of social and cultural determinants of behavior.

## Advanced Placement Psychology

## 29021 credit)

Grade Level: 11 and 12
Prerequisite: None
Advanced Placement Psychology is designed to introduce students to the systematica and scientific study of the behavior and mental processes of human beings and other animals. Students will be exposed to the psychological facts, principles, and phenomena associated with each of the major subfields of psychology. They will also learn about the ethics and methods psychologists use in their science and practices. Topics covered include: statistics, abnormal behavior, cognition, brain studies as well as many others. The information in this course will be presented in a variety of ways. There will be lectures, notes, class participation projects, research, audio-visual aids and guest speakers. The purpose of this course is to provide the student with a learning experience equivalent to that obtained in most college introductory psychology courses. Another goal of this course is to prepare students to take the AP Exam and receive a passing score which would allow for college credit. Due to the subjective nature of this class, students will be exposed to various thinking styles and terminology on a constant basis. It should be understood at the outset that the expectations of this class are consistent with those of any advanced placement course. Students should expect a workload similar to what they would have if they were to complete this course at the college level.

## History of Western Civilization Dual Enrollment

## 2952(1 high school credit) (NRCC college credit in HIS 101, HIS 102, 6 college credits) <br> Grade Level: 11 and 12 <br> Prerequisite: Successfully pass the Virginia Placement Test in English

This course examines the development of western civilization from ancient times to the present. The first half of the class will end with 1715 A.D.; the second half of the class continues through modern times. Students will follow the course guide and will use the texts of New River Community College for History of Western Civilization 101-102. This is a rigorous course with emphasis on higher level thinking skills.

## Service Learning

## 2500(1 credit)

Grade Level: 11 and 12
Prerequisite: None
Service Learning will encourage students to practice community volunteerism after school, on weekends, and during the school day. The objective is to instill a spirit of community activism and involvement that will extend beyond high school into adult life. The Service Learning course is a program open to juniors and seniors interested in helping community agencies or interested in serving as tutors to peers or to younger students in middle schools and elementary schools. Students will describe their intended service program on an application form. All applications will be reviewed for approval by the program coordinator. It is necessary to document a minimum of 100 clock hours to receive a credit.

The purpose of the course is to provide students an opportunity to investigate ways in which people in a community help each other. For example, the bloodmobile, nursing homes and volunteer services provide essential community services. Students will define an area of interest and make a commitment to an agency serving the community. Developing a good match between a student and an agency will be part of the course. Students will develop skills necessary to fill commitments. Volunteer service offers students an opportunity to use a variety of skills such as communication, recordkeeping, problem solving, planning, synthesis of data, and observation and reporting. It also offers an opportunity to assess personal career interests. Requirements include appropriate preparation prior to agency placement under the supervision of the program coordinator. Students must provide their own transportation.

## Social Studies



## U.S. Government Academic

## 2440(1 credit)

## Grade Level: 12

## Prerequisite: U.S. History

The basic survey course in U.S. Government will include the development of government. The course will concentrate on the American political system in its entirety. Emphasis will be placed on students acquiring basic skills and knowledge in order to function as productive citizens.

## Advanced Placement U.S. Government

2445(1 credit)
Grade Level: 12
Prerequisite: U.S. History

Advanced Placement United States Government is offered to seniors who wish to benefit from taking a college-level government course while still in high school. A general focus on the first nine week period is devoted to college-style lecturing and group discussion. The second nine week period will be largely participatory, with much use of critical thinking skills, problem solving, and skills application.

The historical evolution of present-day governmental roles and structures is studied with a concentration on the importance of the Constitution and its interpretations in defining the powers of government. Specifically, the course will be divided into five particular areas. First, the constitution underpinnings of the U.S. government will be reviewed, with an emphasis on democratic theory and philosophy as well as a historical background to the Constitutional Convention. Second, political beliefs and behaviors that have shaped or have been shaped by political parties and political leaders will be discussed. Third, the importance of voting and individual political participation will be studied. Next, the civil freedoms guaranteed to all individuals will be presented. Finally, the largest portion of the AP class will be devoted to the institutions of national government - the Congress, the president, the court systems, and the vitally important, yet largely unfamiliar, fourth "branch" (the bureaucracy) - and how each of those branches help create public policy. For more information regarding Advanced Placement courses, see page 2 in this Course Catalog.

## U.S. History

2360(1 credit)
Grade Level: 11
Prerequisite: World History to 1500/World Geography
EOC Test: Standards of Accreditation require an End of Course Test upon completion of this course.
This basic survey course will trace the American experience from the exploration period to current-day trends and social problems. The chronological study of events in our history will be combined with the study of major concepts such as cause and effect, change continuity, and appreciation of cultural heritage.

## U.S. History Dual Enrollment

2363(1 high school credit) (NRCC college credit in HIS 121, HIS 122, 6 semester college credits)
Grade Level: 11
Prerequisite: Successfully pass the Virginia Placement Test in English
EOC Test: Standards of Accreditation require an End of Course Test upon completion of this course.
This course surveys United States history from its beginning to present. This course will follow the recommended state Standards of Learning (SOLs) for content, but will include more in-depth study and outside assignments. This course will examine the development of western civilization from ancient times to the present. Students will follow the course guide and will use the texts of New River Community College for United States History 121 and 122. Tests will involve covering the SOLs as well as higher level thinking skills.

## World History to 1500/World Geography

## 2341(1 credit)

Grade Level: 9
Prerequisite: None
EOC Test: Standards of Accreditation require an End of Course Test upon completion of this course.
The World History to $1500 \mathrm{AD} /$ World Geography combination course is designed to precede the World History to $1500 \mathrm{AD} / \mathrm{World}$ Geography combination course to be taken in the $10^{\text {th }}$ grade year. The topics covered shall include a study of early physical and cultural development from the Paleolithic Era and a comparison of selected ancient river civilizations. Students will be able to describe, analyze, and evaluate the history of ancient Greek, Roman, and Egyptian civilizations and their developments. The study of the Middle East, Russia, and the Medieval period of Europe will be highlighted. Students will be able to describe, compare and contrast selected civilizations in Asia, Africa, and the Americas from both historical and geographical analysis skills by locating and
describing civilizations from 4000 BC to 1500 AD . Further, students will use maps, globes, and other media tools to analyze physical and human landscapes.

World History to 1500/World Geography Honors
2343(1 credit)
Grade Level: 9
Prerequisite: Middle school teacher recommendation
EOC Test: The Standards of Learning required an End of Course Test upon completion of this course.
This course will follow the recommended state Standards of Learning (SOLs) for content, but will include more in-depth study and outside assignments than standard academic courses. Students will be required to complete research-based projects which may include (but not limited to) journals, portfolios research papers, essays, etc. using a wide variety of sources. Tests will involve covering the SOLs as well as higher level thinking skills.

World History From 1500 to the Present/World Geography

## 2342(1 credit)

Grade Level: 10
Prerequisites: World History to 1500/World Geography
EOC Test: Standards of Accreditation require an End of Course Test upon completion of this course.
The World History 1500 AD to Present/World Geography combination course is designed to follow the World History to 1500 $\mathrm{AD} /$ World Geography combination course taken in the $9^{\text {th }}$ grade year. The topics covered during this course will include locations, cultures, and conflicts of the major world empires about 1500 AD ; the analysis of social, economic, and political patterns of the late medieval period; as well as the historical developments of the Reformation period and the impact of European expansion in the Americas, Africa, and Asia. The Industrial Revolution will be studied in detail. Students will be able to demonstrate skills in historical research and geographical analysis by analyzing physical and human landscapes using maps, globes, and other media tools. Regional development, economic interdependence, and the forces of cooperation and conflict as they influence geography will also be included in the unit of study.

## Advanced Placement European History

## 2399(1 credit)

Grade Level: 10
Prerequisite: World History to 1500/World Geography OR Honors AND Advanced Proficient Pass Rate on SOL EOC Test: The Standards of Learning require an End of Course Test upon completion of this course.

This course will follow the recommended state Standards of Learning (SOLs) for content, but will include more in-depth study and outside assignments than standard academic courses. This course covers the history of Europe from 1450 to the present. The political, military, economic, geographic, cultural, and social factors that underpin the modern political order are examined in depth. Students will develop critical thinking skills through analysis and interpretation of primary and secondary sources. Research and writing skills will be emphasized, as will techniques for mastery of document-based questions. This course is designed to prepare the student for a comprehensive year-end Advanced Placement examination.

## Technology Education

## Materials and Processes Technology

## 8433(1 credit)

Grade Level: 9, 10, 11, and 12
Prerequisite: None

Delving into material properties, manufacturing technology, and mechanical engineering, students in this project-based class will gain experience and understanding in each of the following materials and processes: wood, plastic, ceramics, metal, and additive and subtractive manufacturing and natural resources stewardship. Each student will study in a well-equipped production shop to create group and individual projects based on Virginia Department of Education competencies with emphasis placed on self-sufficiency, craftsmanship and career awareness.
This course is available with an additional option (STEM Academy) which can be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM Academy options.

- STEM ACADEMY

Grade Level: 9, 10, 11, and 12
Prerequisite: Complete a Pulaski County Governor's STEM Academy Application; possess a minimum GPA of 2.5, passing scores on the highest level attained on the English and mathematics SOL tests.

This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Technology of Robotic Design

## 8421(1 credit)

Grade Level: 9, 10, 11, and 12
Prerequisite: None

Students engage in the study of computers and microprocessors and their applications to manufacturing, transportation, and communication systems. Topics include computer equipment and operating systems, robotics, programming, control systems, and social/cultural impact of these technologies. Problem-solving activities challenge students to design, program, and interface devices with computer systems. Learning activities include robotics, computer-aided design, computer-aided manufacturing and design, and control of electromechanical devices.
This course is available with an additional option (STEM Academy) which can be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM Academy options.

## - STEM ACADEMY

Grade Level: 9, 10, 11, and 12
Prerequisite: Complete a Pulaski County Governor's STEM Academy Application; possess a minimum GPA of 2.5, passing scores on the highest level attained on the English and mathematics SOL tests.

This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Manufacturing Systems I

8425 (1 credit) (1 block)
Grade Level: 9, 10, 11, and 12
Prerequisite: Materials and Processes Technology, Technology of Robotic Design
This course provides an orientation to careers in various fields of manufacturing. Emphasis will be placed on manufacturing systems, safety, materials, production, business concepts, and the manufacturing process. Students participate in individual and team activities to create products that demonstrate critical elements of manufacturing.

- STEM ACADEMY

Grade Level: 9, 10, 11, and 12
Prerequisite: Complete a Pulaski County Governor's STEM Academy Application; possess a minimum GPA of 2.5, passing scores on the highest level attained on the English and mathematics SOL tests.

This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Manufacturing Systems II, Advanced

8427 (1 credit)(1 block)
Grade Level: 10, 11, and 12
Prerequisite: Manufacturing Systems I
EOC Test: Industry credential test or licensure test required upon completion of this course.
Students develop an in-depth understanding of automation and its applications in manufacturing. Activities center on flexible manufacturing processes and computer integrated manufacturing (CIM). Students work in teams to solve complex interdisciplinary problems that stem from the major systems in automated manufacturing.

- STEM Academy

Grade Level: 10, 11, and 12
Prerequisite: Manufacturing Systems I STEM Academy.
This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Engineering Explorations I

## 8450 (1 credit) <br> Grade Level: 9, 10, 11, and 12

This is the first course of a two-course, project-based pathway that will enable students to examine technology and engineering fundamentals related to solving real-world problems. Students will be exposed to a variety of engineering specialty fields including mechanical, civil, electrical, industrial systems, and related careers. Students will gain a basic understanding, history and design and using mathematical and scientific concepts. Students will participate in hands-on projects in a well-equipped production shop as they communicate their findings through technical reports, writing, and drawings.
This course is available with an additional option (STEM Academy) which can be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM Academy options.

- STEM Academy

Grade Level: 9, 10, 11, and 12
Prerequisite: Complete a Pulaski County Governor's STEM Academy Application; possess a minimum GPA of 2.5, passing scores on the highest level attained on the English and mathematics SOL tests.

This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Engineering Analysis and Applications II

## 8451 (1 credit)

Grade Level: 10, 11, and 12
Prerequisite: Engineering Explorations I
This is the second of a possible two-course pathway that will allow students to examine systems, the interaction of technology and society, ethics in a technological world, and the fundamentals of modeling while applying the engineering design process to areas of the designed world. Students will participate in hands-on projects, including one public capstone project, in a well-equipped production shop. Students will communicate information through team-based presentations, proposals, and technical reports. This course is available with an additional option (STEM Academy) which can be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM Academy options.

- STEM ACADEMY

Grade Level: 10, 11, and 12
Prerequisite: Engineering Explorations I STEM Academy OR Teehnology Foundations Aeademy ANB Agebra H

This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

Trade and Industrial Education

## Automotive Body Technology I

## 8676 (1 credit) <br> Grade Level: 10, 11 (priority given to 10)

The Collision Repair Program at PCHS has a strong emphasis on painting and refinishing. These students also will be introduced to the use of air brush painting and design. Students will be working with the siphon feed and gravity feed spray gun, hand and power tools, mig welding, metal working, and small dent repair. Students will be introduced to the safety practices accepted by industry while working in the collision repair shop on various training projects. This is an (ASE) nationally certified program.

## Automotive Body Technology II

8678 ( 2 credits, 2 blocks)
Grade Level: 10, 11, and 12
Prerequisite: Automotive Body Technology I
Students in this program will be working on live work (customer vehicle) with damage including both bolt-on and weld-on parts replacement, analyzing frame damage, mechanical repairs related to collision repair, estimating collision damage, general shop operation and maintenance, and writing tickets and ordering parts with a strong focus on painting and refinishing.

## Automotive Body Technology III

8677 ( 2 credits, 2 blocks)
Grade Level: 11 and 12
Prerequisite: Automotive Body Technology II
EOC Test: NATEF/ASE (Non-structural, Refinishing)
Students will be exposed to all phases of the collision repair trade. Emphasis will be placed on use of the spray gun, paint products and their usage, work habits, shop operation and maintenance. Students will continue to focus on the ASE Painting and Refinishing Program. Students will be required to take an ASE Industry Credential exam.

## Automotive Technology I

## 8506 ( 2 credits, 2 blocks)

Grade Level: 10 and 11 (priority given to 10)
In this first course of the three-course program, students learn all aspects of repair, safety, and customer service by concentrating on two or the primary ASE/NATEF areas for certification (i.e., areas V. Brakes and VI. Electrical/Electronics). Students who successfully complete this portion of the program will be prepared to take and pass the respective ASE/NATEF exam and will be prepared for post-secondary education opportunities.

## Automotive Technology II

## 8507 ( 2 credits, 2 blocks)

Grade Level: 11 and 12
Prerequisite: Automotive Technology I

In this second course of the three-course program, students learn all aspects of repair, safety, and customer service by concentrating on two of the primary ASE/NATEF areas of certification (i.e., IV. Suspension and Steering and VIII. Engine Performance). Students who successfully complete this portion of the program will be prepared to take and pass the respective ASE/NATEF exam and will be prepared for postsecondary education opportunities.

## Automotive Technology III

## 8508 (2 credits, 2 blocks)

Grade Level: 12
Prerequisite: Automotive Technology II
In this capstone course of the three-course program, students master all aspects of repair, safety, and customer service by concentrating on the remaining tasks from the four primary ASE/NATEF areas for certification (i.e., IV. Suspension and Steering, V. Brakes, VI., Electrical/Electronics, and VIII. Engine Performance). Students who successfully complete this program will be prepared to take and pass the respective ASE/NATEF exam and will be prepared for postsecondary education opportunities.

## Carpentry I

## 8601 (1 credit)

Grade Level: 9, 10 (priority given to 10 )
Carpentry I introduces students to skills essential to success in the profession. Students use hand and power tools to cut stock; learn to read blueprints, build and install foundations, trusses, doors, windows, stairs, and finishes, and frame walls, floors, ceilings, roofs, decks, and porches. All students will obtain a required OSHA 10 Safety Credential in the class. Students will be required to work outside on projects.
This course is available with an additional option (STEM Academy) which can be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM Academy options.

- STEM ACADEMY

Grade Level: 9, 10 (priority given to 10)
Prerequisite: Complete a Pulaski County Governor's STEM Academy Application, possess a minimum GPA of 2.5, passing scores on the highest level attained on the English and Mathematics SOL tests.

This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Carpentry II

## 8602 (2 credits, 2 blocks)

Grade Level: 11 and 12
Prerequisite: Carpentry I

Carpentry II completes students’ secondary training for the carpentry profession. Students study blueprints; build and install foundations, trusses, doors, windows, stairs, and finishes; and frame walls, floors, ceiling, roofs, decks, and porches. In addition, students are introduced to basic rigging, learn to estimate and select building materials, and install cabinets.

This course is available with two additional options (dual enrollment \& STEM Academy) which can both be utilized. Preference will be given to students who take advantage of dual enrollment and/or STEM academy options.

- CTE Dual Enrollment

8602 ( 2 credits, 2 blocks) (NRCC college credit in BLD 110 and BLD 125, 6 credits)
Grade Level: 11 and 12
Prerequisite: Carpentry I, NRCC Application and Placement Examination

- STEM Academy

Grade Level: 11 and 12

Prerequisite: Carpentry I STEM Academy, NRCC Application and Placement Examination
This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Carpentry III

## 8603 (2 credits, 2 blocks) <br> Grade Level: 12 <br> Prerequisite: Carpentry II

This course prepares students for success in the carpentry profession. Students use hand and power tools to cut stock; build and install foundations, trusses, doors, windows, stairs, and finishes; study blueprints; and frame walls, floors, ceilings, roofs, decks, and porches. In addition, students are introduced to basic rigging, learn to estimate and select building materials, and install cabinets.
This course is available with two additional options (dual enrollment \& STEM Academy) which can both be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM academy options.

- CTE DUAL ENROLLMENT (CARPENTRY III) 8603 ( 2 credits, 2 blocks) (NRCC college credit in BLD 126 and BLD 135, 6 credits) Grade Level: 12
Prerequisite: Carpentry II, NRCC Placement Examination and NRCC Application.
- STEM Academy (Carpentry III)

Grade Level: 12
Prerequisite: Carpentry II STEM Academy, NRCC Placement Examination and NRCC Application.
This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Cosmetology I

8522 (2 credits, 2 blocks)
Grade Level: 11
Prerequisite: None
The Beauty Salon Assistant course prepares students for work as an assistant in a hair salon. Students study and prepare in a clinical lab setting, learning practical and manipulative skills. The program emphasizes safety and sanitation, shampooing and conditioning, retailing, inventory control, and receptionist work. Competency completions allow students a certificate for entry-level employment. A course fee of $\$ 45$ is required.

Cosmetology refers to the study and practice of beauty culture. In this introductory course, students study hair, skin, and nails and their related care. Students are grounded in theory as they prepare to practice procedures in a clinical lab setting or classroom, using manikins for manipulative skill practice. The first-year course emphasizes personal safety, professionalism, sanitation, and disinfection of equipment and facilities. Students develop skills in shampooing and conditioning hair, as well as styling and cutting hair. They are introduced to chemical texture services and develop skills in manicure and pedicure procedures. This class allows students to be members and participate in Skills USA. A course fee of $\$ 45$ is required.

## Cosmetology II

8523 ( 2 credits, 2 blocks)
Grade Level: 12, Fall Semester
Prerequisite: Successful completion of Cosmetology I

Students are required to submit an application including two written teacher recommendations that are positive and favorable of the student's qualifications to work in Cosmetology. In efforts to secure a successful candidate in the program, discipline records and attendance will be checked and used in the consideration of student enrollment.

In this course, students study hair, skin, and nails and their related care. Students are grounded in theory as they prepare to practice procedures in a clinical lab setting or classroom, using manikins for manipulative skill practice. The course emphasizes personal safety, professionalism, sanitation, and disinfection of equipment and facilities. Students develop skills in shampooing and conditioning hair, as well as styling and cutting hair. They are introduced to chemical texture services and develop skills in manicure and pedicure procedures. Students will be introduced to a business management unit with a focus on managing the salon. Students will gradually assume the role of an employee in a lab that is operated as a beauty salon serving outside patrons (students may opt to intern in a salon). This class allows students to be members and participate in SkillsUSA. A course fee of $\$ 45$ is required.

## Cosmetology III

## 8529 (2 credits, 2 blocks)

Grade Level: 12, Spring Semester
Prerequisite: Successful completion of Cosmetology II
EOC Test: Virginia Cosmetology State Board (Licensure)
In this advanced course, students build on their theoretical foundation of general sciences and practices in cosmetology to increase proficiency in hair cutting and styling on live models, with attention to professionalism, client consultation, safety, and infection control. Students are trained in safe chemical processes related to permanent waves, relaxers, soft-curl permanent waves, lightening, and coloring hair. They also develop artistic skills with wigs and hair additions. In addition, students learn to care for skin, hands, and feet, developing experience in providing facials, manicures, pedicures, and nail enhancements. A business management unit focuses on managing the salon. Competency completion prepares the student for the Virginia State Board of Cosmetology Licensing Exam. Students can combine classroom instruction and supervised on-the-job training in an approved position or internship with continuing supervision throughout the school year.
This is a continuation of Cosmetology II. Students will assume the role of an employee in a lab that is operated as a full service salon serving outside patrons (students may also intern in a salon). This class allows students to be members and participate in SkillsUSA. At the completion of Cosmetology III, students sit for state board examination for licensure and completion of program. A course fee of $\$ 45$ is required as well as a state board fee.

## Criminal Justice I

## 8702 (1 credit, 1 block)

Grade Level: 10, 11, and 12
Prerequisite: None
Students are introduced to the legal foundations, processes, principles, techniques, and practices for exploring careers within the criminal justice system. Criminal Justice I is the first of a three-year sequence of classes designed to prepare students for further study and employment in the field of law enforcement, experience using the various law enforcement implements in simulated laboratory situations, and physical training. Guest speakers from the profession ride-along programs and visits to local police academies will be included. Some training sessions may be conducted at off-campus sites. Students planning to work for local police departments, state police, park service, department of forestry, or any other law enforcement agency are encouraged to enroll.
This course is available with an additional option (STEM Academy) which can be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM Academy options.

- STEM ACADEMY

Grade Level: 10, 11, and 12
Prerequisite: Complete a Pulaski County Governor's STEM Academy Application; possess a minimum GPA of 2.5,
This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Criminal Justice II

8703 (2 credits, 2 blocks)
Grade Level: 11 and 12
Prerequisite: Successful completion of Criminal Justice I

Students learn the legal foundations, processes, principals, techniques, and practices for exploring careers within the criminal justice system, and the history of terrorism in the United States. Students combine classroom instruction and supervised, practical experience throughout the school year. Criminal Justice II provides more in-depth study of concepts introduced in Criminal Justice I. Students will have the opportunity to explore aspects of law enforcement procedures and techniques through simulated experiences. Upon completion of this course, students will have the opportunity to take the Criminal Justice Assessment and/or the Crime Scene Investigation and Criminal Justice Examination.
This course is available with an additional option (STEM Academy) which can be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM Academy options.

- STEM ACADEMY


## Grade Level: 11 and 12

Prerequisite: Minimum "C" average in Criminal Justice I. Complete a Pulaski County Governor's STEM Academy Application, possess a minimum GPA of 2.5, passing scores on the highest level attained on the English and Mathematics SOL tests.

This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Education for Employment I

## 9085 (1 credit)

## Grade Level: 9, 10, 11, and 12

Prerequisite: Teacher recommendation
Education for Employment $I$ is designed to give students practical experience and skills needed for employment in building maintenance and groundskeeping. The program will prepare students for employment with nurseries, lawn care services, landscaping firms, parks, and out-of-door employers. Students work on projects within the school system relating to care and maintenance of building grounds, lawns, and campus landscape.

## Education for Employment II

9087 ( 2 credits, 2 blocks)
Grade Level: 11 and 12
Prerequisite: Education for Employment I and teacher recommendation
Students in the Education for Employment II program will learn and apply landscaping skills and maintain and operate professional landscaping equipment.

## Electricity I

## 8533 (1 credit)

## Grade Level: 10 and 11

Students will be introduced to the field of electricity. The course will cover residential, commercial, and industrial wiring methods and materials. Students will be introduced to basic electrical theory, electrical safety, electrical tools, electrical equipment, and electrical test equipment. Students will learn to read basic electrical blueprints and basic electrical schematics. Students will be introduced to both residential and commercial wiring systems, including conduit wiring systems. Workmanship and professionalism will be stressed throughout the course. Students will spend a significant amount of class time engaged in hands-on learning. Electricity I students will be involved in Skills USA. Students will gain leadership skills and have the opportunity to compete against other students at the local, district, state, and national levels.
This course is available with an additional option (STEM Academy) which can be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM Academy options.

## - STEM ACADEMY

Grade Level: 10 and 11
Prerequisite: Complete Pulaski County Governor's STEM Academy Application; possess a minimum GPA of 2.5 , passing scores on the highest level attained on the English and Mathematics SOL tests.

This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Electricity II

## 8534 (2 credit, 2 blocks)

Grade Level: 11 and 12
Prerequisite: Electricity I, NRCC Placement Examination, and NRCC Application

Students will practice commercial and industrial wiring methods. Electric motors, motor controls, and relays will be studied. Students will be expected to troubleshoot and repair a wide range of electrical devices and equipment. Students will be introduced to more complex electrical blueprints and electrical schematics. The National Electrical Code will be heavily emphasized throughout the course. Students will bend conduit, install electrical wire and cables, install electrical devices, wire motor control systems, and troubleshoot circuits. Electrical rework and upgrades will also be covered. Students will be very involved in Skills USA. Students may be required to take the Introductory Craft Skills, National Construction Career Test (NCTT) or another certification exam upon successful completion of this class.
This course is available with two additional options (dual enrollment \& STEM Academy) which can both be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM Academy options.

- CTE DUAL ENROLLMENT

8534 ( 2 credit, 2 blocks) (NRCC college credit in ELE 111 and ELE 112, 6 credits)
Grade Level: 11 and 12
Prerequisite: Electricity II, NRCC Placement Examination, and NRCC Application

- STEM ACADEMY

Grade Level: 11 and 12
Prerequisite: Electricity I STEM Academy, NRCC Placement Examination, and NRCC Application
This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Electricity III

8535 (2 credits, 2 blocks)
Grade Level: 11 and 12
Prerequisite: Electricity II
EOC Test: Skills USA, Electrical Construction Wiring Exam

Student's skills and knowledge in the field of electricity will be further developed in this course. Industrial electrical systems will be covered extensively and will include: three-phase electrical systems, industrial motor controls, distribution systems, industrial electrical motors, and transformers. Students enrolled in this course will spend significant time practicing and learning the National Electrical Code in preparation for future employment in the electrical trades. Students will be very involved in Skills USA. This course is available with two additional options (dual enrollment \& STEM Academy) which can both be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM academy options.

- CTE DUAL ENROLLMENT

8535 ( 2 credit, 2 blocks) (NRCC college credit ELE 113 and ELE 114, 6 credits)
Grade Level: 11 and 12
Prerequisite: Electricity II, NRCC Placement Examination, and NRCC Application

- STEM ACADEMY

Grade Level: 11 and 12

## Prerequisite: Electricity II STEM Academy, NRCC Placement Examination, and NRCC Application

This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## TV/Media Production I

## 8688 (1 credit) <br> Grade Level: 9, 10, 11, and 12

This course will provide students the opportunity to express themselves through television, video, and computer technology. The television studio, camcorders, computers, and VCRs are used to produce individual projects, newscasts, talk shows, and videos that cover major events at PCHS. Students interested in broadcast journalism, professional videography, music video, cinematography, and TV studio management and operations are provided with a managed environment that plays host to learning basic skills needed for these careers.

## TV/Media Production II

## 8689 (2 credits, 2 blocks) <br> Grade Level: 10, 11, and 12 <br> Prerequisite: Successful Completion of TV/Media Production I

This course is a continuation of TV/Media Production I. Emphasis will be placed on editing, producing, computer editing, professional camcorder use, and videography. Students in this class will produce videos as needed for the student body, the school, and the community. Students will be required to take a certification exam upon successful completion of this class.

## TV/Media Production III

## 8690 (2 credits, 2 blocks)

Grade Level: 11 and 12
Prerequisite: Successful Completion of TV/Media Production II

This course is a continuation of TV/Media Production II. Emphasis is placed on editing, producing, computer editing, professional camcorder use, and videography. Students will be expected and required to demonstrate advanced knowledge of videography, editing, graphics creation and audio recording. In this course, students will continue to produce school and community videos. A greater emphasis will be placed on editing and computer editing.

## Welding I

## 8672 (1 credit)

Grade Level: 10, 11, and 12
Prerequisite: None

Students will receive instruction providing career training in the areas of metal fabrication and emerging welding technologies. This course will provide students with a basic knowledge of electricity and how it applies to welding. In addition, students will be introduced to shielded metal arc welding, gas metal arc welding, gas tungsten arc welding, oxy-fuel welding, plasma arc cutting, and oxy-fuel cutting processes. Students will begin the American Welding Society SENSE program to earn a welding industry certification.
This course is available with an additional option (STEM Academy) which can be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM Academy options.

- STEM ACADEMY


## Grade Level: 10, 11 and 12

Prerequisite: Complete a Pulaski County Governor's STEM Academy application, possess a minimum GPA of 2.5, passing scores on the highest level attained on the English and Mathematics SOL test.

This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Welding II

8673 (2 credits, 2 blocks)
Grade Level: 11 and 12
Prerequisite: Welding I
EOC Test: SkillsUSA, Welding Examination
Students learn to use gases and electric arc processes to fabricate and weld metal parts according to diagrams. Students will also learn to read blueprints and interpret weld symbols, as well as demonstrate many construction safety standards as they relate to the welding industry. Each student will be required to perform horizontal, vertical, and overhead welds using each major welding process.
Students will complete the American Welding Society SENSE program to earn a welding industry certification.
This course is available with two additional options (dual enrollment \& STEM Academy) which can both be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM academy options.

- CTE DUAL ENROLLMENT

8673 ( 2 credit, 2 blocks) (NRCC college credit in WEL 100 Intro to Welding, 3 credits)
Grade Level: 11 and 12
Prerequisite: Welding I, NRCC Placement Examination, and NRCC Application

- STEM ACADEMY

Grade Level: 11 and 12
Prerequisite: Welding I STEM Academy, NRCC Placement Examination, and NRCC Application

This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

## Welding III

8674 (2 credits, 2 blocks)
Grade Level: 11 and 12
Prerequisite: Welding II
EOC Test: AWS, Certified Welder
Students will work toward receiving American Welding Society (AWS) welding qualifications to become an entry level welder. Students will learn various types of weld tests and perform destructive and non-destructive tests on their own welds. Each student will learn metallurgy and aluminum welding practices. Students will explore careers in welding as well as demonstrate maintenance procedures for each welding machine.
This course is available with two additional options (dual enrollment \& STEM Academy) which can both be utilized. Preferences will be given to students who take advantage of dual enrollment and/or STEM academy options.

- CTE DUAL ENROLLMENT

8674(1 credit, 1 block)(NRCC college credit in WEL 123 Shielded Metal Arc Welding, 4 credits)
Grade Level: 11, 12
Prerequisite: Welding II, NRCC Placement Examination, and NRCC Application

- STEM Academy

Grade Level: 11, 12
Prerequisite: Welding II STEM Academy, NRCC Placement Examination, and NRCC Application

This course is STEM-based, meaning all curriculums reinforce the benchmarks of science, technology, engineering and mathematics education.

Summer School
Pulaski County High School tries to offer summer school to students who have previously failed a required course. Letters are sent out at the end of the school year informing students of their failures and the opportunity to retake the course in summer school. Summer school is currently a three-week program where students use a computer-based program to repeat the course they have previously failed. Space is limited in summer school and is based on a first come, first serve basis. In the event enrollment exceeds the class limit for Camp Cougar 9, then those applicants who are not able to participate in Camp Cougar 9 (due to enrollment limits) will receive priority for participating in Camp Cougar 10 the following ear. No other students will receive priority. There is a fee for summer school. Questions about summer school should be directed to the Guidance Office.

## Camp Cougar 9

## 7302 Health \& PE 9 (1 credit)

## Grade Level: 9

## Prerequisite: Must pass a swim test

Camp Cougar 9 is a high adventure-based program that provides health and physical education in a non-traditional setting. This program provides ninth grade students with exciting experiences such as white water rafting, canoeing, low and high rope participation, hiking, rock climbing as well as a health component that focuses on wellness, nutrition, and general well-being. One credit for ninth grade P.E. will be awarded for those students who successfully complete this program. Students are responsible for tuition fees and transportation. Class size is limited.

Camp Cougar 9 is a physical education course designed to meet the Commonwealth of Virginia's requirements for $9^{\text {th }}$ grade physical education and health education. This program is designed for Pulaski County High School students entering the $9^{\text {th }}$ grade.

## Camp Cougar 10

## 7402 Health \& PE (1 credit)

Grade Level: 9 or 10
Prerequisite: PE 9 and pass a swim test

Camp Cougar 10 is a high adventure-based program that provides health and physical education in a non-traditional setting. This program provides students with exciting experiences such as whitewater rafting, canoeing, hiking, caving, and a strong emphasis on aquatics to include sailing, kayaking, skiing, and other water sports. One credit for tenth grade PE will be awarded for those students who successfully complete this program. Students will also complete the curriculum for Driver's Education. Students are responsible for tuition fees and transportation. Class size is limited.

Camp Cougar 10 is a physical education course designed to meet the Commonwealth of Virginia's requirement for $10^{\text {th }}$ grade physical education and driver's education. This program is designed for Pulaski County High School students entering the $10^{\text {th }}$ grade.


[^0]:    Math electives, Algebra I Part I and Geometry Part I do not count as a math credit but will count as general elective credits.
    *End-of-course test required

