



2018 – 2019

**HIGH SCHOOL
PROGRAM OF STUDIES**

A Planning Guide for Students and Parents

Bassett High School

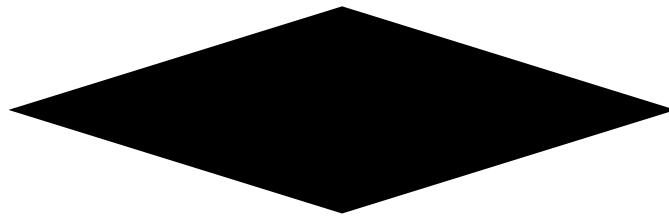


Magna Vista High School



Division Vision Statement

Henry County Public Schools, where critical thinking is expected, creativity is nurtured, technology and innovation are embraced and learning is celebrated.



Division Mission Statement

Henry County Public Schools, a high performing school division, provides all students with an exemplary education in a safe, supportive environment that promotes self-discipline, motivation, and excellence.

Superintendent's Message

Dear Student and Families,

The Program of Studies outlines the academic and elective course content offered to students in grades 9-12. It also outlines the sequence of courses and graduation requirements for the 2018-2019 school year. This has been developed to assist students in planning an appropriate course of study in high school to enable you to make the most effective use of the opportunities available in our schools.

It is extremely important for you to use this as a guide while still maintaining contact with the many resources available to you in our high schools. Your teachers, guidance counselors, assistant principals, and the principal are available to assist students and parents in making the most informed decisions about class schedules, course selections, college, and career choices.

Some of the questions you should consider when selecting courses include:

1. What are your strengths?
2. What are your goals after graduation?
3. What courses do you think you should take to achieve these goals?
4. What are your career interests?
5. What are your long-term plans for your future?

The vision of the Henry County Public Schools System is “critical thinking is expected, creativity is nurtured, technology and innovation are embraced, and learning is celebrated.” As you develop your educational plan with the assistance of your parents and school staff, make sure you take advantage of the comprehensive academic, career, technology, and fine arts course offerings.

Best wishes to you as you prepare for a successful 2018-2019 school year. I look forward to seeing you in the classroom!

Sincerely,



Jared A. Cotton, Ed.D. Superintendent



Bassett High School

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Magna Vista High School

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Introduction

Division Mission and Vision Statement	2
Letter to Parents and Students	3
High School Contact Information	4
Purpose of Program of Studies	6

Diploma Requirements

Standard Diploma	7
Advanced Studies Diploma	8
Explanations and Clarifications	9-10
Profile of a VA Graduate	11

General Information

Promotion Policies	12
Grading Scale	12
Report Cards	12
Test Records	12
Course Changes	12
Driver Education	12
Gifted Education	12

High School Curriculum

Registration	13
Counseling	13
PowerSchool Parent/Student Portal	13
Student Enrollment	13
Access to Courses	13
Standards of Learning Tests	13
End-of-Course Tests	14
Programs for Students with Disabilities	14
English Learners (EL)	14
Remediation Programs	14
Grades Removal Notification	14
Repeating a Course	14
Alternative Education	14
Online Course Offerings	15
Pre-Advanced Placement Courses	16
Advanced Placement Courses	16
Career Academy	16
Dual Enrollment Courses	16

Career & Technical Education

Career Clusters	17
Industry Credentials	17
Cooperative Education	17
CTE Definitions	17
“Oh Henry” Internship	17

Graduation

Graduation Ceremony	18
Fine Arts/CTE Course	18
Definitions	18
Honor Graduate Recognition	18
Graduate of Distinction	18
Community Service Log	19
Extra/Co-Curricular Activity Log	20

Diploma Seal Requirements

Governor’s Seal	21
Board of Education Seal	21
Board of Education Bi-Literacy Seal	21
Advanced Mathematics & Technology Seal	21
Career and Technical Seal	21
Seal for Excellence in Civics Education	21

Academic

Early College Scholars Program	22
Academic and Career Plans	22

Course Descriptions

Selecting Courses	23
English	23-25
Mathematics	25-26
Science	26-28
History/Social Science	28-29
Economics/Personal Finance	30
SAT Preparation	30
Art	30-31
Music	31-32
Drama	32-33
Health & P.E.	33-34
World Languages	35-36
English Learners	36
Agriculture	37-38
Horticulture	38-39
Business & Information Technology	39-40
JROTC	40-41
Family & Consumer Sciences	41-42
Health & Medical Sciences	43
Marketing	43-44
Trade & Industrial	44-45
New Tech Academies	45-46
Patrick Henry Community College	47
IDEA Academy	48
Piedmont Governor’s School	49-51
ACE Academy	51-53

Purpose of the Program of Studies

The purpose of the Program of Studies is to assist you and your child in making educational decisions that will ensure participating in the appropriate program and graduating on time. The information in this guide is designed to help students and parents with the selection of courses for ninth through twelfth grades. Students should study this publication and consult with their parents, school counselors, and teachers in planning their individual program of study. School counselors can help with planning by analyzing test scores and records of past achievements and by discussing current interests and long-term goals. School counselors also have up-to-date information available about various training programs, schools, colleges, universities, and employment possibilities.

STANDARD DIPLOMA REQUIREMENTS

STANDARD DIPLOMA

Subject Area	Standard Credits Students who entered 9 th Grade 2013 – 2014 to 2015 – 2016	Standard Credits Students who entered 9 th Grade 2016 – 2017 or after	SOL Tests for Verified Credit	SOL Tests for Verified Credit Students who entered 9 th grade 2018 - 2019
English	4	4	2 (<i>English 10 Writing; and English 11 Reading</i>)	2 (<i>English 10 Writing; and English 11 Reading</i>)
Mathematics ¹	3	3	1 (<i>Algebra I; or Geometry; or Algebra II</i>)	1 (<i>Algebra I; or Geometry; or Algebra II</i>)
Science ^{2,6}	3	3	1 (<i>Biology; or Chemistry; or Earth Science</i>)	1 (<i>Biology; or Chemistry; or Earth Science</i>)
History and Social Science ^{3,6}	4	4	1 (<i>World Geography; or World History I; or World History II; or US/VA History</i>)	1 (<i>World Geography; or World History I; or World History II; or US/VA History</i>)
Health and Physical Education	2	2		
Economics and Personal Finance	1	1		
Foreign Language, Fine Arts or Career and Technical Education (CTE) ⁴	2	2		
Electives ⁵	6	6		
On-line Course ¹⁰	Required	Required		
Student-Selected Tests ⁷			<i>One additional from Mathematics, Science, or History/Social Science, or Career & Technical Education Course (CTE)</i>	<i>Career & Technical Education Course (CTE)</i>
Industry Certification ⁸	Required	Required		
Emergency First Aid/CPR	N/A	Required		
Total	25	25	6	5

Students may earn a Standard Diploma by earning the required standard and verified units of credits as specified in the chart above.

¹ Courses completed to satisfy this requirement shall include at least three different course selections from among: Algebra I, Geometry, Algebra Functions and Data Analysis, Algebra II, or other mathematics courses above the level of Algebra II.

² Courses completed to satisfy this requirement shall include course selections from at least two different science disciplines from among: earth sciences, biology, ecology, chemistry, or physics. Beginning with the 2018-2019 school year, the addition of (non-AP) Environmental Science will also be available for students to satisfy the science requirement.

³ Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and one course in either World History I, and additional Social Studies course.

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

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 (i) the student selected verified credit and (ii) either a science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the Board of Education as an additional test to verify student achievement.

⁷ A student may utilize additional tests for earning verified credit in computer science, technology, career or technical education, economics, or other areas as prescribed by the board in 8 VAC 230-131-110.

⁸ Passing an Industry Certification test will be required for graduation beginning with the freshmen class of 2013-2014.

⁹ Beginning with first time ninth grader students in the 2016-2017 school year, requirements for the standards and advanced diploma shall include a requirement to be trained in emergency first aid, CPR and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform CPR.

¹⁰ On-line course will be required for graduating beginning with the class of 2013-14.

Industry Certification Test information may be found on the VDOE website. Please click on the following link to view up to date information.

http://www.doe.virginia.gov/instruction/career_technical/path_industry_certification/cte_credentials/industry-certifications-2017.pdf

ADVANCED DIPLOMA REQUIREMENTS

ADVANCED STUDIES DIPLOMA

Subject Area	Advanced Credits Students who entered 9 th Grade 2013 – 2014 to 2015 – 2016	Advanced Credits Students who entered 9 th Grade 2016 – 2017 or after	SOL Tests for Verified Credit	SOL Tests for Verified Credit Students who entered 9 th grade 2018 - 2019
English ¹	5	5	2 (<i>English 10 Writing; and English 11 Reading</i>)	2 (<i>English 10 Writing; and English 11 Reading</i>)
Mathematics ²	4	4	2 (<i>Algebra I; or Geometry; or Algebra II</i>)	1 (<i>Algebra I; or Geometry; or Algebra II</i>)
Science ³	4	4	2 (<i>Earth Science or Biology; or Chemistry</i>)	1 (<i>Biology; or Chemistry; or Earth Science</i>)
History and Social Science ⁴	4	4	2 (<i>World Geography; or World History I; or World History II; or US/VA History</i>)	1 (<i>World Geography; or World History I; or World History II; or US/VA History</i>)
Health and Physical Education	2	2		
Foreign Language ⁵	3	3		
Economics and Personal Finance	1	1		
Fine Arts or Career and Technical Education (CTE)	2	2		
Electives	4	4		
On-line Course ⁶	Required	Required		
Student-Selected Tests ⁷			<i>One additional from Mathematics, Science, or History/Social Science, or Career & Technical Education Course (CTE)</i>	<i>Career & Technical Education Course (CTE)</i>
Emergency First Aid/CPR ⁹	N/A	Required		
Total	29	29	9	5

Students may earn an Advanced Studies Diploma by earning the required standard and verified units of credit as specified in the chart above.

¹The fifth English credit must be Advanced Composition, Research Methodology and Design, AP Language and Composition or (ACE) DE Composition and Language.

²Courses completed to satisfy the math requirement shall include Algebra I, Geometry, Algebra II, and at least one additional math course above the level of Algebra II (Trigonometry, Probability and Statistics, AP Statistics, Math Analysis/Pre-Calculus or Calculus.)

³Courses completed to satisfy the science requirement shall be selected from the following: Chemistry, AP Chemistry, Biology, AP or DE Biology, Earth Science, AP Environmental Science, Ecology, or Physics.

⁴Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and two courses either in world history or geography or both.

⁵Courses completed to satisfy this requirement shall include three years of one language or two years each of two languages.

⁶On-line course will be required for graduating beginning with the freshmen Class of 2013-2014.

⁷A 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 of Education in 8 VAC 20-131-110.

⁸At least one college level Dual Enrollment or Advanced Placement course must be satisfactorily completed.

⁹Beginning with first time ninth grader students in the 2016-2017 school year, requirements for the standards and advanced diploma shall include a requirement to be trained in emergency first aid, CPR and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform CPR.

Industry Certification Test information may be found on the VDOE website. Please click on the following link to view up to date information.

EXPLANATIONS & CLARIFICATIONS

Minimum Graduation Requirements (2018 – 2021)

STANDARD DIPLOMA

English –

4 Required English Credits: English 9, 10, 11, 12

Pass the Writing SOL Test – English 10

Pass the Reading SOL Test – English 11

Mathematics –

3 Math Credits that **MUST** include: Algebra I, Geometry, and AFDA or Algebra II

Pass a Math SOL Test

Science –

3 Science Credits

Pass a Science SOL Test

History and Social Science –

4 History and Social Science Credits that **MUST** include:

World History I, World History II or 20th Century History, VA/US History, and VA/US Government

Pass a History/Social Science SOL Test

Health and Physical Education–

2 Required Health and Physical Education Credits: Health & PE 9, 10

Economics and Personal Finance –

Meets the Online Requirement

Electives –

2 Required Elective Credits in Sequence:

- 2 Fine Arts Courses, or
- 2 Career and Technical Education Courses, or
- 2 Foreign Language Courses

6 Electives Chosen by the Student

Industry Credential –

1 Required Industry Credential

1 Additional SOL Test in ANY AREA

ADVANCED DIPLOMA

English –

5 Required English Credits: English 9, 10, 11, 12 and Advanced Composition or DE/AP

Pass the Writing SOL Test – English 10

Pass the Reading SOL Test – English 11

Mathematics –

4 Math Credits that **MUST** include: Algebra I, Geometry, Algebra II, and one course above Algebra II

Pass 2 Math SOL Tests

Science –

4 Science Credits

Pass 2 Science SOL Tests

History and Social Science –

4 History and Social Science Credits that **MUST** include: World History I, World History II, VA/US History, and VA/US Government

Pass 2 History/Social Science SOL Tests

Health and Physical Education–

2 Required Health and Physical Education Credits: Health & PE 9, 10

Economics and Personal Finance –

Meets the Online Requirement

Foreign Language –

3 Credits of One Language or 2 Credits Earned in EACH of two languages

Electives –

2 Required Elective Credits in:

- 2 Fine Arts Courses, or
- 2 Career and Technical Education Courses

5 Electives Chosen by the Student

1 Additional SOL Test in ANY AREA

EXPLANATIONS & CLARIFICATIONS

Minimum Graduation Requirements (2022 – beyond)

STANDARD DIPLOMA

English –

4 Required English Credits: English 9, 10, 11, 12

Pass the Writing SOL Test – English 10

Pass the Reading SOL Test – English 11

Mathematics –

3 Math Credits that **MUST** include: Algebra I, Geometry, and AFDA or Algebra II

Pass a Math SOL Test

Science –

3 Science Credits

Pass a Science SOL Test

History and Social Science –

4 History and Social Science Credits that **MUST** include:

World History I, World History II or 20th Century History, VA/US History, and VA/US Government

Pass a History/Social Science SOL Test

Health and Physical Education–

2 Required Health and Physical Education Credits: Health & PE 9, 10

Economics and Personal Finance –

Meets the Online Requirement

Electives –

2 Required Elective Credits in Sequence:

- 2 Fine Arts Courses, or
- 2 Career and Technical Education Courses, or
- 2 Foreign Language Courses

6 Electives Chosen by the Student

Industry Credential –

1 Required Industry Credential

ADVANCED DIPLOMA

English –

5 Required English Credits: English 9, 10, 11, 12 and Advanced Composition or DE/AP

Pass the Writing SOL Test – English 10

Pass the Reading SOL Test – English 11

Mathematics –

4 Math Credits that **MUST** include: Algebra I, Geometry, Algebra II, and one course above Algebra II

Pass a Math SOL Test

Science –

4 Science Credits

Pass a Science SOL Test

History and Social Science –

4 History and Social Science Credits that **MUST** include:

World History I, World History II, VA/US History, and VA/US Government

Pass a History/Social Science SOL Test

Health and Physical Education–

2 Required Health and Physical Education Credits: Health & PE 9, 10

Economics and Personal Finance –

Meets the Online Requirement

Foreign Language –

3 Credits of One Language or 2 Credits Earned in EACH of two languages

Electives –

2 Required Elective Credits in:

- 2 Fine Arts Courses, or
- 2 Career and Technical Education Courses

5 Electives Chosen by the Student

Profile of a Virginia Graduate

In Henry County, Virginia, the Life Ready Individual Will:

CONTENT KNOWLEDGE

- Attains and is able to use the knowledge and skills described in the Standards of Learning for core instruction areas (English, Math, Science, and History/Social Science), the arts, personal wellness, languages, and Career and Technical education programs.
- Attains and demonstrates the knowledge and skills necessary to transition to and achieve in a global society and be prepared for life beyond high school graduation.
- Explores multiple subject areas that reflect personal interests and abilities.

WORKPLACE SKILLS

- Attains and demonstrates productive work ethic, professionalism, and personal responsibility.
- Communicates effectively in a variety of ways, and to a variety of audiences, to interact with individuals and within groups.
- Demonstrates workplace skills including collaboration, communication, creativity, critical thinking, problem solving, and responsible citizenship.

COMMUNITY ENGAGEMENT & CIVIC RESPONSIBILITY

- Makes connections and is involved in the community through civic opportunities.
- Demonstrates integrity, maintains personal health and wellness, and shows respect for others.
- Shows respect for diversity of individuals, groups, and cultures in words and actions.
- Understands and demonstrates citizenship by participating in community and government decision-making.

CAREER EXPLORATION

- Understands knowledge, skills, and abilities sought by employers for career opportunities.
- Aligns knowledge, skills, and abilities with personal interests to identify career opportunities.
- Sets goals for career, school, and life and has knowledge of a variety of pathways, course work, and/or requirements to achieve goals.
- Develops skills to align current workplace needs, and that adapt to evolving job opportunities.
- Applies skills and knowledge by participating in workplace experiences.

Henry County 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.

General Information

Promotion Policies

Promotion to the next grade is based on the total cumulative number (units) of credits earned by a student at the end of the school year. They are:

From Grade 9 – 10 : 6 Credits

From Grade 10 – 11 : 12 Credits

From Grade 11 – 12 : 17 Credits

and eligible to graduate at the end of the school year or in summer school.

Report Cards

All interim progress and report cards will be sent to parents by e-mail. Therefore, all parents and guardians must have completed the InfoSnap procedures for student enrollment.

Test Records

Parents have the right to have their child's test score omitted from his/her transcript for the high school credit course. Should parents choose to omit the test record from the transcript, the parents should submit a written request to the principal of the high school where the student attends. Questions concerning this option should be directed to a child's counselor.

Driver Education

The classroom driver education course is offered as part of the tenth grade health education curriculum. When students complete the classroom phase and have secured a learner's permit, they may sign up to take behind-the-wheel driver instruction.

Gifted Education

The gifted education program provides services for students in accordance with the Standards of Quality. The program is designed to address individual learning styles, needs, and interests. Henry County Public Schools requires appropriately differentiated instructional services for students at all grade levels. The Henry County Public Schools Local Plan for Education of the Gifted Program provides detailed information on referral and identification processes as well as the services provided for identified students.

Grading Scale

LETTER GRADE	NUMBER RANGE	HCPS COURSES	DE/AP COURSES
A +	100-97	4.0	5.0
A	96-93	4.0	5.0
A-	92-90	3.7	4.7
B+	89-87	3.3	4.3
B	86-83	3.0	4.0
B-	82-80	2.7	3.7
C+	79-77	2.3	3.3
C	76-73	2.0	3.0
C-	72-70	1.7	2.7
D+	69-68	1.3	2.3
D	67-66	1.0	2.0
D-	65-60	.7	1.7
F	59-0	0	0

Course Changes

The student benefits from a well-planned schedule that addresses individual needs and does not require later adjustments that might disrupt the learning process. Commitments for staff, textbooks, and supplies are made based upon the courses selected; therefore, schedule changes are discouraged. If there are extenuating circumstances and if course enrollment allows, requests for schedule changes are carefully reviewed based on the following:

- Computer or human error (scheduled for a class that was not requested)
- Prerequisite not met
- Passing or failing a course after registration period
- Moving to an AP or Honors-level course

Requests will not be honored for changes related to the following:

- Changing teachers, lunch schedule, or for social reasons

HIGH SCHOOL CURRICULUM

General Information

The information in this guide is designed to help students and parents with the selection of courses for ninth through twelfth grades. Students should study this publication and consult with their parents, school counselors, and teachers in planning their individual program of study. School counselors can help with planning by analyzing test scores and records of past achievements and by discussing current interests and long-term goals. School counselors also have up-to-date information available about various training programs, schools, colleges, universities, and employment possibilities.

Registration

During registration, students will be given information concerning course selection for the coming year. The information in this guide should be used in planning a program of studies. The courses listed will be offered for the school year only if there is sufficient enrollment and available staff. Grade levels listed for courses indicate the grade(s) in which the course is normally taken. All students will be expected to maintain a full-day schedule of classes in order to meet at least the minimum standards necessary for graduation as mandated by Henry County Public Schools and the Virginia State Board of Education.

Counseling

School counselors, together with parents, assist students in developing self-understanding in order to determine the best use of their abilities. Counselors encourage students to examine educational and career opportunities and to make realistic plans and decisions for the future. Educational and career planning are reviewed with each student annually. Both individual and group counseling services are available for those students who are experiencing social, emotional, or academic difficulties. Parents are encouraged to meet with counselors if they have concerns about their child's progress and to attend meetings relating to educational planning and the instructional programs offered in the school.

PowerSchool Parent / Student Portal

PowerSchool is a web-based student information system used by Henry County Public Schools to maintain student data including attendance, grades, and course information. In order to gain access to Parent Portal, a parent or guardian must present a picture ID to an authorized school official. At that time a login and password will be assigned. In order to gain access to the Student Portal, students will receive their passwords in class.

The website to connect to Parent Portal is:

Student Enrollment: InfoSnap

HCPS families may now enroll new students and verify information for returning students online. The website to enroll and update information in InfoSnap is

It is important that parents/guardians remember the email account and password created as this will be the platform for all communication.

Access to Courses

Course descriptions indicate if any prerequisite courses are required in order to enroll in a class. ACE Academy, Governor's School, and IDEA Academy courses require application and admission to the program. PHCC Dual Enrollment courses require a PHCC application and qualifying VPT scores.

Standards of Learning Tests

Students must take all applicable end-of-course Standards of Learning (SOL) tests following course instruction. **Students who successfully complete a course and who achieve a passing score on an end-of-course SOL test or a substitute test for that course shall be awarded a verified credit. (See definitions on pages 18-19)** End-of-course tests that are available are listed in the following chart.

END-OF-COURSE TESTS

ENGLISH	MATH	SCIENCE	SOCIAL STUDIES
English 10 Writing	Algebra I	Earth Science	World History to 1500 A.D.
English 11 Reading	Geometry	Biology	World History from 1500 A.D.
	Algebra II	Chemistry	World Geography
			VA and U.S. History

Programs for Students with Disabilities

Special Education is an essential part of the total program of public education in our community, sharing with elementary, middle, secondary, and technical education the responsibility for providing instruction, training, and necessary supportive services for all children of Henry County. The educational interests of children with various types of exceptionality can be best served when they are accepted as an integral part of the total school program. As the law mandates, the education of disabled students in the “least restrictive environment” is emphasized. Special education, as is true for all education, is based on the fundamental concept of the dignity and worth of the human personality. The school division’s commitment is to provide an appropriate program for all special needs children.

English Learners (EL)

At each grade level, EL students engage in instructional activities to increase listening, speaking, reading and writing skills. While building on their prior knowledge and learning new material, students are provided support services through a cohesive program. Proficiency is determined by the WIDA SCREENER Assessment and/or the WIDA ACCESS 2.0 Test. Students build Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP) through an inclusion and pull-out model.

Remediation Programs

Remedial education in the subject areas of reading, English, science, history/social sciences and mathematics is offered for eligible students experiencing difficulty with Standards of Learning concepts.

Grades Removal Notification

This notice is to inform parents of rising ninth-grade students that, according to Standards of Accreditation 8VAC-20-131-90, they have the right to have their child’s grade omitted from his/her transcript for the high school credit courses in which their child was enrolled during their eighth grade year. These include Algebra I, Spanish I, and French I. Should parents/guardians choose to omit their student’s grade, the student will not receive credit for the course. To have a child’s grade expunged, parents should submit a written request to the principal of the high school where the student will attend prior to the opening day of school.

Repeating a Course

The grade for any failed class shall remain a part of a student’s academic transcript. Students who repeat a failed class shall have both course grades recorded. Students who repeat a class they previously passed in order to improve a grade shall have only the highest grade recorded.

Alternative Education

According to Henry County Schools Policy IGBH, an alternative education program may be offered for students in grades six through twelve who are not succeeding in the traditional school environment. Placement in the alternative school program is at the discretion of the Superintendent or Designee.

A regional alternative school is available for students in grades six through twelve who have experienced trouble with juvenile authorities or have multiple suspensions or an expulsion.

ONLINE COURSE OFFERINGS

All online and off campus courses must be pre-approved by the building principal.

The school division will contract with an online vendor to offer courses that may not be available due to scheduling conflicts that prevent the class(es) from being offered during the regular school setting. The cost of these courses shall be the responsibility of the school division. In other situations, the cost of an on-line course is the responsibility of the student/parent/guardian. Prices vary depending upon courses and availability. Contact your building principal concerning costs. The cost of all courses will be posted on the school division website.

VDOE Virtual Virginia Advanced Placement School (4x4 Block Online Course Offerings)

Students are enrolled in Virtual Virginia when there is a scheduling conflict and must be enrolled by the counselor and approved by the principal. Students enrolling in Virtual Virginia who are participants in the Early College Scholars program will have tuition and Advanced Placement examination fees for any Virtual Virginia Advanced Placement course paid by the Department of Education. Students in Virtual Virginia courses who wish to drop a course must withdraw within 21 calendar days from the first day of the course. Parents are assessed an administrative fee of \$75 for students who withdraw more than 21 calendar days after the start of the course. Students who fail to login over a 30 calendar day period will be administratively dropped from the course and parents will be invoiced for the withdrawal fee. Information about the program and course selection is available at or see your school counselor.

ADVANCED PLACEMENT COURSES & DUAL ENROLLMENT COURSES

Pre-Advanced Placement Courses

Pre-AP courses follow the same course of studies as standard courses but in greater complexity, novelty and pacing. They are distinguished by a difference in the quality of work expected rather than by the quantity of work assigned. Pre AP courses prepare the student for Advanced Placement Courses.

Earth Science	English 9	Algebra II
Biology	English 10	Geometry
Chemistry	English 11	World History I

Advanced Placement Courses

An Advanced Placement Course is a college level course taught in the high school context using a standardized course syllabus aligned with the College Board Advanced Placement test for that course. The advanced placement courses are for those students willing to accept the challenge of a rigorous academic curriculum. The degree of difficulty, workload, and time required are equivalent to an introductory college course. Students and parents should work closely with counselors to ensure that the four-year plans include the prerequisites and subsequent advanced courses.

Teachers who teach Advanced Placement courses received specialized training from College Board to ensure preparation to deliver the curriculum. Course syllabi, including content, instructional materials, and activities are suggested by College Board and are designed to prepare students for the optional AP exams at the end of each course. Earning qualifying scores on such exams *may* result in college credits being granted in those subject areas. However, this decision is made by the individual college.

Henry County Public Schools offers Advanced Placement courses in several curriculum areas. School counselors should be contacted for additional information.

Career Academy

The Career Academy at Figsboro is a small advanced learning community where students receive academic instruction in a work based learning environment. Students at the Career Academy will spend two blocks during their school day at the Figsboro site focusing on a career they have an interest in that will lead to potential job opportunities in the community or surrounding area. *Due to extended instructional time, classes at the Career Academy will have additional credit considerations.*

Dual Enrollment Courses

Dual Enrollment courses are courses that allow high school students to meet the requirements for high school graduation while simultaneously earning college credit. Henry County students are eligible to take Dual Enrollment courses through Patrick Henry Community College. Dual Enrollment provides students access at the high school to the same course content and curriculum that is offered on the community college campus. Therefore, additional assignments will be required by PHCC in order to obtain dual enrollment credit. Henry County Schools will pay for all dual enrollment courses for students as long as students maintain a passing grade. Students who fail a course must pay for the failed course before enrollment is allowed in any additional dual enrollment courses.

Enrollment in these classes is contingent upon a student achieving all of the following by May 1: qualifying scores on a PHCC placement tests and acceptance in the course by the college. Course availability is based on the number of credentialed instructors and student enrollment.

Dual Enrollment	Advanced Placement
Applied Engineering	Biology
Biology	Calculus
Building Trades	Chemistry
Calculus	English Literature & Composition
Early Childhood Education – Intro IA & IB	English Language & Composition
Cyber Security	Environmental Science
English Language & Composition 11	European History
English Literature & Composition 12	French V
Public Safety Academy	Physics
Motorsports	Spanish V
Psychology	Statistics
U.S. History	U.S. Government & Politics
VA U.S. Government	U.S. History

CAREER AND TECHNICAL EDUCATION

To help students investigate careers and design their courses of study to advance their career goals, the Office of Career and Technical Education in Henry County Public Schools has adopted the nationally accepted structure of sixteen career clusters. The career clusters are as follows:

The 16 Career Clusters	
Agriculture, Food and Natural Resources	Architecture & Construction
Arts, A/V Technology & Communications	Business Management & Administration
Education & Training	Finance
Government & Public Administration	Health Science
Hospitality & Tourism	Human Services
Information Technology	Law, Public Safety, Corrections & Security
Manufacturing	Marketing, Sales & Services
Science, Technology, Engineering & Mathematics	Transportation, Distribution & Logistics

DEFINITIONS

A **concentration** is a coherent sequence of courses completed by a student in a specific career area.

A career and technical education **completer** is a student who has met the requirements for a career and technical concentration and all requirements for high school graduation or an approved alternative education program. Students may take additional career and technical education courses that will enhance their career pathway goals.

A **specialization** is a choice by a student to specialize in an occupational field by taking additional courses in a specific career area as appropriate to his/her career pathway.

INTERNSHIP

“Oh Henry” Internship Program – 1 credit
(prerequisite: prior job shadow experience is recommended)
Available to SENIORS

Students registered for “Oh Henry” must have a complete schedule until job placement has been secured.

“Oh Henry” student career experiences offer students in grade twelve a snapshot of career opportunities existing in and around our community. Mentors share knowledge and serve as a source of information as the student observes work in a professional setting.

Students complete a career assessment and participate in “soft skills” training in preparation for placement at a worksite. In addition, interns assemble portfolios and create resumes for use in obtaining employment and/or pursuing further education. Internships are completed in 25 hours for no credit, or 80 hours for one credit.

Students are required to complete applications for internships in May of their junior year. Students can pick up an application located in the guidance office.

Industry Credential, Licenses & Assessment

Certain CTE courses enable students, who complete a CTE sequence of courses, to earn industry credential, a state

license, and/or a national certification. Requirements for the standard diploma shall include a requirement to earn a career and technical education credential that has been approved by

the Board. For a complete list of available certifications, licenses and assessments, please see the comprehensive list

Cooperative Education

Cooperative education is a method of instruction in the marketing program that combines career and technical classroom instruction with paid employment directly related to the classroom instruction. Both student instruction and employment are planned and supervised by the school and the employer so that each contributes to the student’s career objectives and employability. Students interested in cooperative education should see their school counselor.

GRADUATION

Graduation Ceremony

Students who complete graduation requirements during the regular school year are eligible to participate in the graduation ceremony. If requirements **are not met** during the regular school year, students **will not** be allowed to participate in the graduation ceremony. Students completing graduation requirements during the summer term will be eligible to participate in the summer graduation ceremony. The top ten percent of students in the graduating class will be denoted in the graduation program.

Fine Arts or Career and Technical Education Course

The following courses will meet the fine arts graduation requirement: all art courses, all music courses, and all drama courses. All Career and Technical courses will meet the graduation requirement. The course taken to satisfy the Fine Arts or Career and Technical Education course requirement may also serve as one of the two credits required to satisfy the sequential electives requirement.

DEFINITIONS

Standard Unit of Credit

A standard unit of credit is awarded for a course in which the student successfully completes the objectives of the course.

Verified Unit of Credit

A verified unit of credit is awarded for a course in which the student earns a standard unit of credit and achieves a passing score on a corresponding end-of-course SOL test or a substitute assessment approved by the Board of Education. Students who are enrolled in a career and technical program area and pass a certification exam and/or licensure may earn a student-selected verified credit. A student-selected test for verified credit may come from any end-of-course SOL test that is not already satisfying a required verified credit. Local verified credits will be awarded in accordance with Henry County School Board Policy.

Sequential Electives

Sequential electives are defined as two years of study in a focused sequence of elective courses.

Honor Graduate Recognition

- Graduates with a 3.8 GPA or higher will be recognized as Honor Graduates.
- With the exception of class speakers, all students (*including Honor Graduates*) will be seated alphabetically regardless of class rank.
- Special honors, such as Honor Graduate distinction, will be denoted in the graduation program.

Graduate of Distinction

The following criteria will be need to be met by each student:

- **Academic**
 - Cumulative grade point average of 3.8 or higher or,
 - Score 1250 or higher on SAT using any two of the subtests, or at least one of the subtests or,
 - Score 28 or higher on the ACT composite score or,
 - Earn a state or national academic award/office and 3.5 GPA
- **Service-Learning or Volunteering**
 - Student will have to complete at least 40 hours
- **Extracurricular Activities**
 - Students will be expected to participate in a minimum of two activities during their junior or senior year

Students will be recognized with a plaque or similar item, dinner/reception. The school board, administration, and parents will be invited to this event.

See charts on page 19 and 20.



Graduate of Distinction
COMMUNITY SERVICE LOG
Due January 9, 2019

Name of Student: _____

School: _____

Service Agency or Activity	Date(s)	Volunteer Hours	Verification Signature
Total Hours			

HIGH SCHOOL DIPLOMA SEAL REQUIREMENTS

Governor's Seal

The Governor's Seal shall be awarded to students who complete the requirements for an Advanced Studies Diploma with an average grade of "B" or better and successfully complete college-level coursework that will earn the student at least nine transferable college credits in Advanced Placement (AP), or Dual Enrollment (DE).

Board of Education Seal

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

Board of Education Bi-literacy Seal

The Virginia Board of Education has established criteria for awarding a Diploma Seal of Bi-literacy and will be awarding it for any student graduating from a public high school in the Commonwealth in 2016. The Board of Education's Seal of Bi-literacy certifies attainment of a high level of proficiency by a graduating high school student in one or more languages, in addition to English, and certifies that the graduate meets all of the following criteria:

A. The Board of Education's Seal of Bi-literacy will be awarded to students who earn a Board of Education approved diploma and (1) pass all required End-of Course Assessments in English reading and writing at the proficient or higher level; and (2) 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 of approved tests by the Superintendent of Public Instruction and posted on the VDOE website.

B. For purposes of this diploma, "foreign language" means a language other than English and includes American Sign Language.

Board of Education's Seal for Excellence in Civics Education

The Board of Education's Seal for Excellence in Civics Education will be awarded to students who earn either a Standard or Advanced Studies Diploma and:

(i) complete Virginia and United States History and Virginia and United States Government courses with a grade of "B" or higher; and,
(ii) have good attendance and no disciplinary infractions as determined by local school board policies and,
(iii) complete 50 hours of voluntary participation in community service or extracurricular activities. Activities that would satisfy the requirements of clause (iii) of this subdivision include:

- (a) volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate;
- (b) participating in Boy Scouts, Girl Scouts, or similar youth organizations;
- (c) participating in JROTC;
- (d) participating in political campaigns or government internships, or Boys State, Girls State, or Model General Assembly; or
- (e) participating in school-sponsored extracurricular activities that have a civics focus. Any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement.

Advanced Mathematics and Technology Seal

To earn an Advanced Mathematics and Technology Diploma Seal, students must:

1. Fulfill the requirements for either a standard or advanced studies diploma.
2. Satisfy all mathematics requirements for the Advanced Studies Diploma (four units of credit including Algebra II) with two verified units of credit with a "B" average or better.
3. Meet one of the following conditions:
 - Pass an exam that confers certification from a recognized industry, trade, or professional association. Example: Microsoft Office Specialist
 - Pass an exam approved by the Board of Education that confers college-level credit in a technology or computer science area

Career and Technical Education Seal

To earn a Career and Technical Education Diploma Seal, students must:

1. Fulfill the requirements for either a standard or advanced studies diploma.
2. Complete prescribed sequence of courses in a CTE concentration or specialization.
3. Meet one of the following conditions:
 - Maintain a B or better average in CTE courses.
 - Pass an exam that confers certification from a recognized industry, trade, or professional association. Example: Microsoft Office Specialist (MOS)
 - Acquire a professional license in a career and technical field. Example: Licensed Cosmetologist

EARLY COLLEGE SCHOLARS PROGRAM

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, or dual enrollment) that will earn at least 15 transferable college credits

ACADEMIC AND CAREER PLANS

Sample Plan:



Academic and Career Plan

Diploma Type: Advanced Studies Advanced Technical Standard Standard Technical Other

LEVELS	GRADE	English/ Language Arts	Mathematics	Science	Social Studies/ Science	Other Required Courses Recommended Electives	Electives
MIDDLE	7	English 7		Life Science	Social Studies	Health/PE	
	8	English 8		Physical Science	Civics and Economics		
SECONDARY	9	English 9 ___		Earth Science ___	World History I ___	Health/PE 9	
	10	English 10 ___		Biology ___	World History II ___	Health/PE 10	
	11	English 11 ___		Chemistry ___	US/VA History ___		
	12	English 12 ___		Physics ___	US/VA Government ___		
Test Data		Industry Certification(s)		Organization(s) ___DECA ___ FBLA ___ FCCLA ___FFA ___FEA ___HOSA ___SkillsUSA ___TSA	Work-Based Learning ___Career Research ___ Co-op Education ___ Internship ___Mentorship ___Job Shadowing ___Apprenticeship		Career Assessment(s)
Pathway	College Interests		Degree, College Certificate, Apprenticeship/Technical Program or Military		Employment (Career Goal)		

Grade: ___ Date: _____ Grade: ___ Date: _____ Grade: ___ Date: _____
 Student: _____ Student: _____ Student: _____
 School Official: _____ School Official: _____ School Official: _____
 Parent/Guardian: _____ Parent/Guardian: _____ Parent/Guardian: _____

COURSE DESCRIPTIONS

Selecting Courses

The Henry County School Board supports the use of best practices that research and experience have shown to be effective for high school aged students. Such practices include, but are not limited to, teacher-directed instruction, group work, cooperative learning, peer tutoring, and student-directed learning. The high school offers a minimum of six and one-half hours of instruction each day, exclusive of the lunch period. Classes are arranged in a 4x4 block format schedule. All students will maintain a full day schedule of classes.

The following pages describe high school course offerings. Course selection patterns may affect course offerings. Students registered for a class with an enrollment too small or too large are notified by the school counselor and given the opportunity to make another course selection.

ENGLISH

Reading Foundations—1 elective credit (Prerequisite: None)

This course introduces students to literacy skills needed to succeed at the secondary level and beyond. Students learn how to read the text structure of fiction and non-fiction and how to demystify the reading process in order to grasp its content. Students will learn organizational, study and test-taking skills essential to higher education. Teacher directed instruction will focus on comprehension, vocabulary, fluency, and text structure.

English 9 – 1 credit (Prerequisite: Successful completion of Grade 8 English)

The ninth-grade student will present and analyze a dramatic reading and will continue to develop proficiency in making planned oral presentations. Knowledge of literary terms and form will be applied in the student's own writing and in the analysis of literature. Students will be introduced to significant literary works from a variety of cultures and eras. Increased requirements for research and reporting in all subjects are supported by the use of electronic databases and a standard style sheet method to cite reference sources. Writing will encompass narrative, literary, expository, and technical forms, with particular attention to analysis.

English 10 – 1 credit (Prerequisite: Successful completion of Grade 9 English)

The tenth-grade student will become a skilled communicator in small-group learning situations. The student will read and analyze literary works from a variety of eras and cultures, including those cultures studied in world geography. Attention will be given to the analysis of printed consumer information, such as labels, owners' manuals, warranties, and contracts. Reading analysis skills will also be stressed. The student will analyze the writing of peers and professionals to improve his/her writing skills.

English 11 – 1 credit (Prerequisite: Successful completion of Grade 10 English)

The eleventh-grade student will be able to make and analyze persuasive oral presentations, with attention to the accuracy of evidence and the effectiveness of delivery. The student's appreciation for literature will be enhanced by the study of American literature, both classic and contemporary. The student will identify the contributions of other cultures to the development of American Literature. The student will be able to write clear and accurate business and technical correspondence and reports for research and other applications in all subjects. The student will develop expository and persuasive compositions by locating, evaluating, synthesizing, and citing applicable information with careful attention to organization and accuracy.

English 12 – 1 credit (Prerequisite: Successful completion of Grade 11 English)

The twelfth-grade student will use organizational skills, audience awareness, appropriate vocabulary and grammar, and both verbal and non-verbal presentation skills to plan and deliver an effective oral presentation. The student will analyze British Literature with attention to the classic works. To the extent feasible, selections will include those that relate to other subjects, such as the study of American and Virginia Government. Writing will include the production of technical and expository papers, which are organized logically and contain clear and accurate ideas. The student also will produce a well-documented major research paper.

ENGLISH (continued)

Research Methodology and Design—1 credit (Prerequisite: Successful completion of Grade 10 English)

This course is an introduction to the research process, which includes research design, sampling techniques, elementary statistical analysis, library research, scientific writing, presentation skills, and development of multimedia presentations. All students will complete the preliminary report of an original research project. Students will design the study, collect and analyze data, and report the results.

DE/AP English Literature and Composition —1 credit (Prerequisite: Successful completion of Grade 11 English and a qualifying score on the VPT)

DE/AP English Literature and Composition is the equivalent of a college freshman English course. It offers advanced language studies and provides opportunities to practice a variety of rhetorical modes through assignment of frequent essays. Students read certain works of British, American, and world literature, and complete follow-up assignments requiring application of advanced techniques of literary analysis. A documented research paper and an oral presentation are required. A DE/AP English Literature and Composition course engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. Advanced Composition or DE/AP English Language Composition are recommended prerequisites for this course.

DE/AP English Language and Composition – 1 credit (Student must also register for Pre AP English 11 and have a qualifying score on the VPT)

This course engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing.

Advanced Composition – 1 credit (Prerequisite: Successful completion of Grade 10 English)

Advanced Composition is designed especially for college-bound students to develop their composition skills in the areas of expository, descriptive, and narrative writing. The course includes an in-depth study of the four major modes of writing. Emphasis is placed on improving both the content and mechanics of writing. The course of study includes the mechanics of composition, analysis of selections, and development of a critical vocabulary.

Creative Writing – 1 elective credit (Prerequisite: None)

This course offers students the opportunity to learn to write short stories, poetry, and one-act plays. Attention will be given to ideas, structure, and style. Some class time will be devoted to actual writing and criticism of student work. Opportunities will be given for students to submit their best work to various creative writing competitions.

Journalism I – 1 elective credit (Prerequisite: None)

This course introduces students to all types of writing for the media, closely following formats established in the professional press. The class emphasizes writing, design, layout, and web-based publishing.

Journalism II – IV – 1 elective credit each (Prerequisite: Successful Completion of Journalism I and each succeeding course)

These courses cover all facets of a journalist's craft: reporting, writing, design, graphics, photography, broadcast, and multimedia. Contact with professional area journalist accompanies instruction and provides career information. Students produce the school's newspaper using various computer applications and graphic design strategies. Students read and critique metropolitan and high school newspapers and discuss related works.

Photo Journalism I – 1 elective credit (Prerequisite: None)

This course includes a study of the principles of layout, photography, copy and caption writing, and editing. As students work toward publication of the school's yearbook, they will develop skills in yearbook design, use of technology, time management, and public relations.

ENGLISH *(continued)*

***Photo Journalism II – V – 1 elective credit each
(Prerequisite: Successful completion of Photo Journalism I and each succeeding course)***

This course will provide continued study in all phases of yearbook publication while placing increased emphasis on students' leadership skills, staff organization, and advanced yearbook design.

***Public Speaking & Presentation—1 elective credit
(Prerequisite: None)***

This course will provide all levels of students the proper habits and techniques of public speaking. Students will create and organize speeches for a variety of occasions such as formal scholastic presentations, best man/ maid of honor speeches, impromptu, and award acceptances. Students will demonstrate the value of identifying their audience and dealing with the forms of interference one encounters when delivering a speech. This course will support students in developing their public speaking skills to gain confidence and overcome nervousness and stage fright, as well as providing experienced students with the tools to be an exemplary speaker. The skills students develop in this course are transferable across all disciplines.

MATHEMATICS

Algebra Readiness—1 elective credit (Prerequisite: None)

This course is designed for students who wish to enroll in Algebra 1, but require an extension of skills and understanding of concepts in the real number system. Students will solve first-degree equations and inequalities and perform operations with polynomials. Functions, relations, and their graphs are introduced. Manipulatives, graphing calculators, and application software are used for solving problems and verifying solutions.

Algebra I – 1 credit (Prerequisite: None)

In Algebra I, students continue the study of algebraic concepts including operations with real numbers and polynomials. They solve first-degree equations and inequalities, quadratic equations, and systems of equations. Concepts associated with functions and relations, including their graphs, are emphasized. A study of statistics and matrices is also included in this course. Manipulatives, graphing calculators, and application software are used for solving problems and verifying solutions.

Geometry Readiness—1 elective credit (Prerequisite: Algebra I)

This course is designed for students who wish to enroll in Geometry, but require an extension of skills and understanding of concepts needed for the deductive method of proof. Axioms are used to justify theorems and to determine whether conclusions are valid. A gradual development of formal proof is encouraged. A variety of applications and some general problem-solving techniques are used to implement these concepts. Students use graphing utilities and computer software as appropriate.

Geometry – 1 credit (Prerequisite: Algebra I)

This course includes the deductive axiomatic method of proof to justify theorems and to tell whether conclusions are valid. It also includes emphasis on two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. Students use graphing utilities and computer software as appropriate.

Algebra Functions and Data Analysis—1 credit (Does not count as a math credit for an Advanced Studies Diploma) (Prerequisite: Algebra I and Geometry)

This course is designed for students who have successfully completed the standards for Algebra I. Within the context of mathematical modeling and data analysis, students will study functions and their functions and their behaviors, system of inequalities, probability, experimental design and implementation, and analysis of data. Data will be generated by practical applications arising from science, business, and finance. Students will solve problems that require formulation of linear, quadratic, exponential, or logarithmic equations or a system of equations.

Algebra II – 1 credit (Prerequisite: Algebra I and Geometry)

A thorough treatment of advanced algebraic concepts is provided through the study of functions, polynomials, rational expressions, complex numbers, matrices, and sequences and series. Oral and written communication concerning the language of algebra, the logic of procedures, and interpretation of results also permeate the course. A transformational approach to graphing functions is used. Students vary the coefficients and constants of an equation, observe the changes in the graph of the equation, and make generalizations that can be applied to many graphs.

MATHEMATICS (*continued*)

Trigonometry /Math Functions – 1 credit (Prerequisite: Algebra II)

Trigonometric and circular functions are introduced in this course. Evaluation of trigonometric functions, use of basic formulas, and laws of cosines and sines are presented. Emphasis is placed on the applications of trigonometry, solutions of trigonometric equations, applications of triangles and vectors, and polar graphing. Advanced topics in algebra, analytical geometry, polynomial functions, and sequences are also included.

Math Analysis/Pre-Calculus—1 credit (Prerequisite: Trigonometry)

Students enrolled in Mathematical Analysis are assumed to have mastered Algebra II concepts and have some exposure to trigonometry. Mathematical Analysis develops students' understanding of algebraic and transcendental functions, parametric and polar equations, sequences and series, and vectors. The content of this course serves as appropriate preparation for a calculus course.

DE/AP Calculus – 1 credit (Prerequisite: Math Analysis/Pre-Calculus and a qualifying score on the VPT)

This course extends the theory of elementary functions. Topics include: derivatives of algebraic functions, and transcendental functions; derivatives of the sum, difference, product, quotient and power of algebraic/transcendental functions; the definite integral and improper integrals and concepts related to integration; logarithmic differentiation; techniques of integration; differential equations, and applications of the derivative and the definite integral. Both applications and formal proof are emphasized.

Probability and Statistics – 1 credit (Prerequisite: Algebra II)

Probability and Statistics is a semester course designed to introduce the methods used in the field of applied statistics. Emphasis is given to the basic concepts and techniques for collecting and analyzing data, drawing conclusions, and making predictions. The major focus of this course is to provide students with experience in using the computer to solve problems that can be set up as mathematical models.

AP Statistics – 1 credit (Prerequisite: Algebra II)

AP Statistics is equivalent to a one-semester introductory, non-calculus-based, college course in statistics. Students are introduced to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, sampling and experimentation, anticipating patterns and statistical inference.

SCIENCE

Earth Science – 1 credit (Prerequisite: None)

The Earth Science standards connect the study of the Earth's composition, structure, processes, and history; its atmosphere, fresh water, and oceans; and its environment in space. The standards emphasize historical contributions in the development of scientific thought about the Earth and space. The standards stress the interpretation of maps, charts, tables, and profiles; the use of technology to collect, analyzes, and report data; and science skills to perform systematic investigation. Problem solving and decision-making are an integral part of the standards, especially as they relate to the costs and benefits of utilizing the Earth's resources. Major topics of study include plate tectonics, the rock cycle, Earth history, the oceans, the atmosphere, weather and climate, and the solar system and universe.

Biology – 1 credit (Prerequisite: Earth Science unless approved by principal)

The standards of Biology are designed to provide students with a detailed understanding of living systems. Emphasis continues to be placed on the skills necessary to examine alternative scientific explanations, actively conduct controlled experiments, analyze and communicate information, and acquire and use scientific literature. The history of biological thought and the evidence that support it are explored and provide the foundation for investigating biochemical life processes, cellular organization, mechanisms of inheritance, dynamic relationships among organisms, and the changes in organisms through time. The importance of scientific research that validates or challenges ideas is emphasized at this level.

SCIENCE *(continued)*

DE/AP Biology – 1 credit (Prerequisite: Successful completion of Biology and two of the following – Earth Science, Chemistry, Physics, AP Physics or concurrent registration in Pre AP Biology and a qualifying score on the VPT)

This course is an intensive study of modern biology, taught at the college level. Course content provides in-depth coverage of molecular biology, genetics, cellular biology, embryology, plant and animal physiology, and human anatomy and physiology. Experience will be provided in special techniques and laboratory materials and equipment used in modern biological research.

Biology II – Anatomy and Physiology- 1 credit (Prerequisite: Biology and Chemistry)

The purpose of this course is to introduce students to the gross and microscopic study of the anatomy and physiology of the human body by way of cells, tissues, organs and systems. This course will provide students a solid foundation of the various different structural and functional components of the human body, by studying anatomical parts and the physiological processes of each system. Topics will also include anatomical terminology, homeostasis, levels of organization, and integration of systems. Biology SOL test required, if not already taken.

Chemistry – 1 credit (Prerequisite: Successful Completion of Biology and Algebra I)

The Chemistry standards are designed to provide students with a detailed understanding of the interaction of matter and energy. This interaction is investigated through the use of laboratory techniques, manipulation of chemical quantities, and problem-solving applications. Scientific methodology will be employed in experimental and analytical investigations, and concepts will be illustrated with practical applications. Algebra II is a recommended prerequisite for this course.

AP Chemistry – 1 credit (Prerequisite: Successful completion of Biology, Chemistry, Algebra II)

In Advanced Placement Chemistry, concepts introduced in Chemistry are extended and higher levels of subject matter and scientific investigations are explored. Laboratory techniques are refined and expanded with emphasis placed on the study of descriptive chemistry and chemical principles through the use of chemical models. Importance is placed on the student's development of a strong problem-solving orientation to chemistry.

Physics – 1 credit (Prerequisite: Biology and Chemistry)

The Physics standards emphasize a more complex understanding of experimentation, the analysis of data, and the use of reasoning and logic to evaluate evidence. The use of mathematics, including algebra, inferential statistics, and trigonometry, is important, but conceptual understanding of physical systems remains a primary focus. Students build on physical science principles by exploring, in depth, the nature of characteristics of energy and its dynamic interaction with matter. Key areas covered by the standards include force and motion, kinetic molecular theory, energy transformations, wave phenomena and the electromagnetic spectrum, light, electricity fields, and non-Newton physics. The standards stress the practical application of physics in other areas of science and technology and how physics affects our world.

AP Physics – 1 credit (Prerequisite: Successful completion of Biology, Chemistry and Physics)

AP Physics is equivalent to an introductory college physics course. Students focus on reading, understanding, and interpreting physical information as well as describing and explaining the sequence of steps in the analysis of a particular physical phenomenon or problem. In addition, students use mathematical reasoning as they perform experiments and interpret results of observations.

Ecology– 1 credit (Prerequisite: Earth Science and/or Biology)

The goal of this course is to raise students' awareness of the need to preserve Earth's limited resources. Through study of environmental issues associated with biotic and abiotic components of ecosystems, students will develop a deeper understanding of and appreciation for Earth's systems and cycles. In addition, students will further develop scientific investigation skills through laboratory exercises and field studies that target local environmental issues. Biology SOL test required, if not already taken.

Environmental Science – 1 credit (Prerequisite: Earth Science, Biology, and Chemistry)

Environmental Science is a one-semester science course. This course provides students not seeking AP course the opportunity to learn about environmental science and increase their environmental literacy in order to become more informed citizens. Earth Science SOL test required, if not already taken.

SCIENCE *(continued)*

AP Environmental Science – 1 credit (Prerequisite: Earth Science, Biology and Chemistry)

AP Environmental Science is equivalent to a one-semester introductory college environmental science course. This course emphasizes scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. This course includes a strong laboratory and field investigation component that focuses on local organisms and/or systems. Earth Science SOL test required, if not already taken.

Forensic Science – 1 elective credit (Prerequisites: Chemistry, and Algebra I)

This course is designed to introduce students to various aspects of science and how they relate to the law. The main focus of this course will be techniques used during crime scene investigations. Topics will include fingerprinting, collection of evidence, processing evidence, documentation of evidence and crime scenes through sketches and photography, questioned documents, trace evidence, firearms and tool marks, etc. Principles of criminal law and procedure, preparation and presentation of evidence, examination of witnesses, methods of legal research and procedural rules affecting the collection and use of physical evidence will also be discussed. Students will apply their knowledge to laboratory assignments, simulation crime scenes and mock trials.

HISTORY / SOCIAL SCIENCES

World History I: to 1500 A.D. – 1 credit (Prerequisite: None)

This course enables students to explore the historical development of people, places, and patterns of life from ancient times until about 1500 A.D. Students study the origins of much of our heritage using texts, maps, pictures, stories, diagrams, charts, chronological skills, inquiry/research skills, and technology skills.

World History II: 1500 A.D. to the Present – 1 credit (Prerequisite: World History I)

This course covers history and geography from 1500 A.D. to the present with emphasis on Western Europe. Geographic influences on history continue to be explored, but increasing attention is given to political boundaries that developed with the evolution of nation-states. Significant attention will be given to the ways in which scientific and technological revolutions created new economic conditions that in turn produced social and political changes. The people and events of the nineteenth and twentieth centuries will be emphasized for their strong connections to contemporary issues. The course covers broad themes of history with emphasis on specific historic events, ideas, issues, persons, and documents. Using texts, maps, pictures, stories, diagrams, charts, and a variety of chronological, inquiry/research, and technology skills, students develop competence in chronological thinking, historical comprehension, and historical analysis.

AP European History—1 credit (Prerequisite: World History to 1500 A.D.)

AP European History is equivalent to an introductory college course in European history. The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. In addition to providing a basic narrative of events and movements, the goals of the AP program in European History are to develop (a) an understanding of some of the principal themes in modern European History, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing.

United States History – 1 credit (Prerequisite: None)

This course covers the historical development of American ideas and institutions from the Age of Exploration to the present. While focusing on political and economic history, the students will develop a basic knowledge of American culture through a chronological survey of major issues, movements, people, and events in United States and Virginia history.

DE/AP United States History – 1 credit (Prerequisite: A qualifying score on the VPT)

The focus of this course is on the major themes, events, and ideas that shaped the history of the United States. Students probe, in depth, the dynamics of American political and diplomatic decision-making, national and sectional interests, and a variety of personalities and social movements related to the development of the United States. Distinguishing characteristics of cultures are examined through literature, art, architecture, music, religion, philosophy and geography. Students will be required to write thoughtful and factually supported papers on historical topics.

HISTORY / SOCIAL SCIENCES *(continued)*

United States and Virginia Government – 1 credit (Prerequisite: United States History)

The focus of this course is on the major themes, events, and ideas that shaped the history of the United States. Students probe, in depth, the dynamics of American political and diplomatic decision-making, national and sectional interests, and a variety of personalities and social movements related to the development of the United States. Distinguishing characteristics of cultures are examined through literature, art, architecture, music, religion, philosophy and geography. Students will be required to write thoughtful and factually supported papers on historical topics. In addition, students will study a unit in financial literacy.

DE/AP Virginia and United States Government – 1 credit (Prerequisite: United States History and a qualifying score on the VPT)

This course provides students with challenging assignments in reading, analysis, synthesis, writing, and speaking providing an analytical perspective on government. Students examine the principles and practices of government, particularly of American government, at national, state, and local levels. The framework for this course includes units on the development of the theories of government, law and the justice system, and current domestic and foreign policy. This course includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. government and politics. Students will experience how the policies created by government at the national, state, and local levels affect them on a daily basis. Students will be required to differentiate among the operations of each of the levels of the United States government.

Twentieth-Century United States History – 1 credit (Does not count as a history credit for an Advanced Studies Diploma, Prerequisite: None)

This course focuses on the events, times, and individuals that helped shape the United States during the twentieth century. It is designed to provide an in-depth exploration of special topics that may not be covered in a United States history survey course. Students will explore United States history through independent and group research projects. Classroom projects include working collaboratively collecting data. Students use technology to research and communicate information in visual or audio format.

Psychology – 1 elective credit (Prerequisite: None)

Providing a broad, general introduction to psychology, this course emphasizes how the basic subject matter of psychology has been attained by scientific methods. This course examines patterns and variations of human behavior and the process of human development. Students will study how psychological knowledge is applied to improve the quality of life.

DE/AP Psychology – 1 elective credit (Prerequisite: A qualifying score on the VPT)

This course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about ethics and methods psychologists use in their science and practice. Major topics in the DE/AP course include methods, approaches and history; biological bases of behavior; sensation and perception; states of consciousness; learning; cognition; motivation and emotion; developmental psychology; personality; testing and individual differences; psychological disorders; treatment of psychological disorders; social psychology.

Legal Studies– 1 credit (Prerequisite: None)

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

Sociology – 1 elective credit (Prerequisite: None)

This course investigates human society with regards to sociological perspectives, cultural and social structures, social inequality, social institutions, and social change. Specific topics focus on culture and its components, deviance, ethnic and racial diversity and the issues involved, gender and age inequalities, groups and formal organizations, socialization and how it shapes us, sports, education, family, and religion. Students use a variety of learning methods including class discussion, research, project development, experiments, and observation.

ECONOMICS AND PERSONAL FINANCE

Economics and Personal Finance—1 credit (Online Course) (Prerequisite: None)

Successful completion of an Economics and Personal Finance course is **required** for graduation. 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. In addition to developing personal finance skills, students in the 36-week course will also study basic occupational skills and concepts in preparation for entry-level employment in the field of finance.

SAT PREPARATION

SAT Preparation—1 credit (Prerequisite: None)

SAT Prep is a course designed to help prepare students for the SAT test. In addition to reviewing the basic verbal and mathematical skills assessed on the SAT test, students have access to test-taking strategies specific to the exam, real student work samples with explanations, grading rubrics for peer and self-assessment, practice test with complete multiple-choice assessments, essays prompts, and study resources. Instruction, followed by collaborative, guided, and independent practice, provides the foundation for the course. Students spend the eighteen weeks working on the math, verbal and writing components of the SAT. Upon successful completion, students will possess the tools necessary to complete the SAT to the best of their ability.

ART

Art I: Art Foundations – 1 credit (Prerequisite: None)

Art Foundations emphasizes the development of abilities to recognize visual arts content, concepts, and skills to create, discuss, and understand original works of art. The standards represent a thematic approach to visual communication and production, cultural context and art history, judgment and criticism and aesthetics through which students will develop understanding and appreciation for the visual arts. At this level, studio production involves beginning experiences utilizing a variety of media.

Art II: Intermediate – 1 credit (Prerequisite: Art I: Art Foundations)

This course extends and refines abilities to investigate and respond to the visual arts. The standards emphasize the importance of content, concepts, and skills involved in the creation of original works of art. The standards introduce a chronological approach to visual communication and production, cultural context and art history, judgment and criticism, and aesthetics that enhance student understanding of the ways in which art functions within a multicultural society. Areas covered are drawing, painting, sculpture, pottery, printing and various crafts. Students are encouraged to develop self-expression through their individual works.

Art III: Advanced Intermediate – 1 credit (Prerequisite: Art II: Intermediate)

Advanced Intermediate Art continues the emphasis on development of abilities to organize and analyze visual arts content, concepts, and skills in creating works of art. The focus on art history, critical evaluation and aesthetics is increased, and includes cultural and stylistic issues and creative problem solving. At the advanced level, previous understandings and skills are further emphasized and developed while the students are allowed and encouraged to pursue individual projects and to plan and execute creative products by using a variety of techniques and visual concepts.

Art IV: Advanced – 1 credit (Prerequisite: Art III: Advanced Intermediate)

Advanced Art reinforces competence and confidence in skills of analysis evaluation, and creation of works of art. Content and concepts associated with art criticism and aesthetics are central to the refinement of art production skills, and the student-directed approach at this level richly enhances personal expressive abilities. Visual communication and production, cultural context and art history, judgment and criticism, and aesthetics remain the foundation areas of standards. Students pursue independent projects that allow them to expand their unique talents and interests. Students conduct research that is related to their studio production and are given opportunities to exhibit and develop portfolios for college or employment review.

ART *(continued)*

Studio Art – 1 credit (Prerequisite: Art I, Art II, Art III, and Art IV)

Studio art is a course for advanced art students who want to study areas of art in depth. There is a continued emphasis upon aesthetic knowledge, visual problem-solving, creative growth, and the use of media skills for personal expression. Students are allowed more time for pursuing individual projects, for exploration of art media and techniques, and for developing art skills. The students are allowed to choose areas in which they want to work. Along with the teacher, the student chooses media and subject matter. This may include any area of art such as sculpture, painting, graphics, drawing or crafts. This course may be taken more than once for further knowledge and experience.

Graphic Design I – 1 credit (Prerequisite: Art I: Art Foundations)

Graphic Design allows students to study foundation skills and explore the potential of computer image making and video. Students will use the computer's most complex creativity tools and the industry standard in digital imaging. They may include, but are not limited to, Adobe Photoshop and Adobe Illustrator. They will work independently on computer tutorials with the help of the instructor. Students will explore common production requirements faced by graphic designers.

Graphic Design II – 1 credit (Prerequisite: Graphic Design I)

Students will continue to use the computer's most complex creativity tools and the industry standard in digital imaging and web design. This class provides a working knowledge of web page design and construction. Students will learn how to create a web site by focusing on full web development software and HTML, the code that builds web sites. Emphasis is on project planning and management; content organization; visual design, approach, and navigation; and the technology of launching a successful site on the Internet. The course features lectures, systematic class assignments, and opportunity for individual projects. Students will work independently on computer tutorials with the help of the instructor. They will explore common production requirements faced by web designers.

MUSIC

Beginning Chorus – 1 credit (Prerequisite: None)

This course emphasizes fundamental vocal development, traditional notation, and the introduction to ensemble singing. It requires performance, creativity, and investigation at a fundamental level. Opportunities are provided for students to explore ways in which the content of the various disciplines, within and outside the arts, are interrelated with those of music.

Intermediate Chorus – 1 credit (Prerequisite: Beginning Chorus)

This course is designed for students who have achieved competency in beginning vocal/choral skills. Emphasis is placed on the continuing development of vocal production techniques and ensemble participation. Opportunities to explore the relationship between music and the arts and disciplines outside of the arts are continued.

Advanced Chorus – 1 credit (Prerequisite: Beginning and/or Intermediate Chorus)

This course emphasizes proficiency in ensemble singing and will begin to develop competency in individual performance. Singing with refined expressive qualities, the student will perform vocal/choral selections and sight-reading material at increased levels of difficulty. Students will demonstrate an expanded ability in performance, creativity, and analytical investigation and will also gain experiential knowledge of leadership and evaluative skills in group and in individual settings. Opportunity for students to explore the relationship between music and other disciplines continues to be provided.

Select Vocal Ensemble – 1 credit (Prerequisite: Prior choral participation preferred, but not necessary)

This course is open to students through audition only. The choir studies a varied repertoire of music and emphasis is on performance. Students are required to perform at various special school events and functions throughout the community.

Hand Bells – 1 credit (Prerequisite: Middle School Band, Hand Bells or prior music reading skill)

This course provides students the opportunity to extend their skills in hand bell performance and reading music. Participation in school and community concerts and performances are mandatory. This course is offered for one term only.

MUSIC *(continued)*

Music Theory/History Review (Prerequisite: None)

This course provides students with the necessary tools to work with music from creative and performance viewpoints. The basic fundamentals of music reading are stressed with emphasis on scales, intervals, chords, four-part writing and form analysis. Ear training and basic music composition skills will be stressed. Students will also be introduced to the understanding of music in western civilization, correlated with political, religious, and sociological occurrences that shaped music. Study will also include the study of rhythm, melody, harmony, texture, form and color.

Advanced Band - 1 credit (Prerequisite: Performance Ensemble)

This course stresses learning and performing on a band instrument. It is a continued study designed to promote technical proficiency on the techniques of ensemble and full band performances by participating regularly in a band setting. Students at the advanced level should be able to perform at Virginia Band and Orchestra Directors Association Selective List for solo repertoire levels 5-6. The fundamentals of music are continued and extended to broaden knowledge of all major and chromatic scales (the Standard 26 American Drum Rudiments for Percussion), selected minor scales, keys, rhythm patterns, and basic expression symbols. Instrumental techniques are improved with a study of intonation, tone quality, breath control (including vibrato), extensions of range, auxiliary fingering, alternate positions, basic improvisational skills, articulation, phrasing, and execution of trills. Percussion students will become more proficient in the use of mallet instruments, keyboard, and timpani. Emphasis is placed on the proper balance and function of the various instrumental choirs of the band. Students are expected to have the ability to discuss musical concepts, cultures, styles, composers and historical periods. A broad range of musical literature is studied in order to acquaint the students with musical styles. Marching band is a part of this program.

Performance Ensemble – 1 credit (Prerequisite: None)

This performance-oriented band participates in concert appearances. Students continue the in-depth mastery of basic fundamentals of music while preparing pieces for performances. Students in this class expand their knowledge and skills of instrumental techniques, tone production, musical interpretation, and ensemble/solo performance to an advanced level. Students at the advanced level should be able to perform at Virginia Band and Orchestra Directors Association Selective List for solo repertoire levels 2-5. Performances and rehearsals outside school hours are required.

Percussion Ensemble – 1 credit (Prerequisite: None)

This class is designed to develop all percussion skills used for marching band, concert band, indoor drum line and percussion ensemble. It is designed for students interested in learning proper percussion technique. Emphasis will be placed on snare drum, tenor drum, and bass drum techniques used for marching band as well as keyboard and accessory percussion technique. The level, instrumentation, and performance opportunities will be left to the discretion of the instructor. This is a performance-oriented course that includes extracurricular activities. Students must be willing and able to perform with the marching band and other scheduled performances.

Visual Ensemble – 1 credit (Prerequisite: Successful Audition)

These ensembles are designed to meet specific needs and/or interests. Content includes study of appropriate ensemble literature and rehearsal and performance techniques from the various areas of musical composition. After-school performances and rehearsals, both in and out of school, may be required. Students will do routines set to music. Routines will include dance and use of equipment such as flags and rifles. Students in the course will participate in marching band as part of the color guard.

DRAMA

Video and Media Technology - 1 elective credit (Prerequisite: None)

This course is designed to give students the opportunity to participate in a variety of film projects, from creating commercials to creating an episode for a television sitcom. All coursework is created to help students gain an understanding of the film-making process. Topics include, but are not limited to, film creation, film etiquette, roles and jobs in front of and behind the camera.

Introduction to Speech Communication and Theatre – 1 credit (Prerequisite: None)

This challenging course is for ninth through twelfth grade students who have a serious interest in developing their speaking and acting skills. Students will be exposed to the dynamics of speech and the categories of speech (forensics) competition. This course is also designed to provide students with a survey of the theatre arts, allowing opportunities to participate in the creative processes of oral interpretation, performance and production. This course provides the theatrical and speech opportunities that enable students to determine personal areas of interest.

DRAMA (continued)

Drama I – 1 credit (Prerequisite: None)

Drama I explores both theory and practice of theatre arts. The course includes an introductory study of theatre history, acting, and stagecraft.

Drama II – 1 credit (Prerequisite: Drama I)

Drama II is the second level in the study of theatre. The class is designed to develop further the students' skills. Students will continue to study the basics; however, more emphasis will be placed on performance in the classroom, as well as for additional audiences.

Advanced Drama I, II – 1 credit each course

(Prerequisite: Drama I and Drama II, Advanced Drama I)

Because these are advanced classes, students will be expected to have retained skills mastered in Drama I and II and to be ready to put those skills into practice. These classes are performance based, and the students are expected to work toward excellence in that area.

Technical Theatre – 1 credit (Prerequisite: None)

This course offers students the opportunity to gain expertise in all elements of technical theatre. Students study scenic design, theatre management, sound design, stagecraft, makeup, masks, costume design and construction, scenery painting, stage management, lighting design, theatre spaces, scenic painting, props, and special effects.

— HEALTH & PHYSICAL EDUCATION —

Health and Physical Education 9 – 1 credit (Prerequisite: None)

In grade nine, students complete the transition from modified versions of movement forms to more complex applications across all types of physical activities. Activities include games, sports, dances, and recreational pursuits. Students demonstrate the ability to use basic skills, strategies, and tactics as they show more specialized knowledge in identifying and applying key movement concepts and principles. Students develop and assess a personal physical activity program aimed at improving their skill performance. Students demonstrate the ability to plan and improve components of fitness to achieve and maintain a health-enhancing level of personal fitness. Health education includes information concerning alcohol and other drugs, consumer health, disease prevention and control, personal health, growth and wellness, mental health, nutrition, and family life education. Physical fitness testing occurs twice each semester.

NOTE: Students may earn, in any combination, no more than two elective credits from the following courses: Advanced Physical Education I, Advanced Physical Education II, Physical Training I and Physical Training II.

Health and Physical Education 10 – 1 credit

(Prerequisite: Health and Physical Education 9)

In grade 10, students are proficient in all fundamental movement skills. Students self-select physical activities that they are likely to participate in throughout life. Students understand and apply key movement and fitness principles and concepts for activities in which they demonstrate competence. Students develop the ability to understand and anticipate how physical activity interests and abilities change across a lifetime. Students must demonstrate a level of competency in at least three lifetime physical activities and implement, self-assess, and modify a personal fitness plan. Classroom instruction includes driver education, first aid, CPR, and family life education. **All students must participate and successfully complete CPR/First Aid and AED training in order to complete graduation requirements.** Classroom and in-car driver education focus on safe driving attitudes, time, space, and distance perception, skill development, and recognition of appropriate response to hazards in the ever-changing driving environment. Students apply basic driving skills in low-to-moderate traffic situations and progress to demonstration of skill proficiency in more complex traffic situations. Throughout the course, emphasis is placed on extensive supervised practice with a licensed parent or guardian to develop precision in the use of skills, processes, and responsibilities. Physical fitness testing occurs twice each semester.

HEALTH & PHYSICAL EDUCATION *(continued)*

Advanced Physical Education I – 1 credit (Prerequisite: Health & P.E. 9 and Health & P.E. 10 - successful completion) Only Junior/Senior Students)

This course provides students opportunities to expand the scope of their skills in physical education to include officiating, orienteering, coaching, and teaching. An additional goal is to foster lifetime fitness. Emphasis is placed on the five health-related components of fitness including cardiovascular fitness, muscular strength and endurance, flexibility, and body fat control. Individual student fitness levels are assessed. Instruction includes emphasis on health risk factors related to lifestyles and how nutrition affects wellness. Activities include weight training and conditioning, outdoor recreation, fundamentals of officiating, fundamentals of coaching and teaching, flag football, softball, tennis, golf, badminton, soccer, archery, basketball and volleyball. Physical fitness testing occurs twice each semester. Throughout this course, student fitness levels will be monitored with the use of individual records that incorporate charts and graphs.

Advanced Physical Education II– 1 credit (Prerequisite: Advanced Physical Education I)

This course provides students opportunities to expand the scope of their skills in physical education to include officiating, orienteering, coaching, and teaching. An additional goal is to foster lifetime fitness. Emphasis is placed on the five health-related components of fitness including cardiovascular fitness, muscular strength and endurance, flexibility, and body fat control. Individual student fitness levels are assessed. Instruction includes emphasis on health risk factors related to lifestyles and how nutrition affects wellness. Selected movement activities may include archery, soccer, weight training, orienteering, ultimate Frisbee, softball, golf, badminton, tennis, volleyball, basketball, team handball, flag football, and fitness testing. Many of these activities are extensions of those offered in Advanced Physical Education I. Physical fitness testing occurs twice each semester. Throughout this course, student fitness levels will be monitored with the use of individual records that incorporate charts and graphs.

Physical Training I – 1 credit (Prerequisite: Health & P.E. 9 and Health & P.E. 10 - successful completion) Only Junior/Senior Students)

This course provides students opportunities to expand the scope of their skills in strength training. It teaches appropriate use of weight training equipment. The objectives of this course are to introduce the student to methods and techniques for improving muscular strength and endurance through program design. Methods of training include machines, free weights, and training without apparatus. Physical fitness testing occurs twice each semester.

Physical Training II – 1 credit (Prerequisite: Physical Training I)

This course provides students opportunities to expand the scope of their skills in strength training. It teaches appropriate use of weight training equipment. The objectives of this course are to expound on advanced methods and techniques for improving muscular strength and endurance through program design. Methods of training include machines, free weights, and training without apparatus. Students will develop and utilize a personalized sport specific or lifestyle specific training program. Physical fitness testing occurs twice each semester.

Sports Exercise and Health I-A– 1 credit

This course is designed for students interested in the medical profession and athletics. The material presented will combine medical principles with the athletic setting. Specific topics will include human anatomy, injury prevention and identification, medical documentation, record keeping, preventive taping, equipment fitting, first aid, rehabilitation guidelines, and career options. Special topics/current issues in health care will also be discussed. Students will participate in hands-on learning activities and be expected to perform practical skills.

Sports Exercise and Health I-B– 1 credit (Prerequisite – Sports Medicine –I-A)

Students will increase their skills learned in Sports Medicine I. Mastery of the material in this course would provide students with a strong background should they wish to pursue certification in areas such as first aid, CPR, AED, and/or personal trainer.

Sports Exercise and Health II-A – 1 credit (Prerequisite: Sports Medicine I-A and I-B)

This course is designed as an advanced look at the treatment, evaluation, and rehabilitation of athletic related injuries. Topics include medical documentation, record keeping, preventive taping, equipment fitting and professional considerations. Instruction will include advanced first aid and life support techniques.

Sports Exercise and Health II-B– 1 credit (Prerequisite – Sports Medicine –II-A)

Students study basic human anatomy and physiology, medical terminology, legal and ethical issues in sports medicine, and career preparation. Mastery of the material in this course would provide students with a strong background should they wish to pursue certification in areas such as first aid, CPR, AED, and/or personal trainer.

WORLD LANGUAGES

French I – 1 credit (Prerequisite: None)

Level I French focuses on students' communicative competence in French and their understanding of the cultures of French-speaking countries. In level I French classes, students learn to communicate in real-life contexts about topics that are meaningful to them. French I concentrates on the development of the four language skills: listening, speaking, reading, and writing. Emphasis is placed on the use of French in the classroom and on the use of authentic materials to learn about the language and the culture. An important component of French classes is the use of the French language beyond the classroom in order to apply knowledge of the language in the real world. In many cases, this is accomplished through the integration of technology in the classroom.

French II – 1 credit (Prerequisite: French I or its equivalent)

In French II, students continue to develop their proficiency in the three modes of communicative competence: interacting with other speakers of French, understanding oral and written messages in French, and making oral and written presentations. They are exposed to more complex features of the French language. They continue to focus on communicating about their immediate world and daily life. Emphasis continues to be placed on the use of French in the classroom as well as on the use of authentic materials to learn about the culture.

French III – 1 credit (Prerequisite: French II or its equivalent)

In French III, students continue to develop their proficiency in the three modes of communicative competence. They communicate using more complex structures in French on a variety of topics, including some of an abstract nature, such as social rights and responsibilities. They comprehend the main ideas of authentic materials that they read and hear and are able to identify significant details when the topics are familiar. French is used almost exclusively in the class as students develop the ability to discuss topics related to historical and contemporary events and issues.

French IV – 1 credit (Prerequisite: French III or its equivalent)

In French IV, students continue to develop their communicative and cultural competence, understanding oral and written texts, and making oral and written presentations in French. They are able to exchange and support opinions on a variety of topics related to historical and contemporary events. They comprehend spoken and written French texts from a variety of authentic sources as well as produce compositions containing well-developed ideas on various topics. Students compare and contrast everyday situations with those of our own culture. Additional emphasis is placed on appropriate verbal and non-verbal behaviors. Students will focus on global understanding of the language, increase accuracy and appropriateness of oral communication with emphasis on creativity, examine authentic materials and explore various literary genres, and refine their creative expression. Students are strongly encouraged to explore individual interest areas in depth and share these interests with the class.

AP French V – 1 credit (Prerequisite: French IV)

In this course students prepare for the AP French Language Exam and develop a strong command of the French language with proficiency in integrating language skills and synthesizing written and aural materials, centered on the six cultural themes outlined in the AP curricular requirements: Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Families and Communities, and Beauty and Aesthetics. Students master the formal writing process and aural comprehension skills, as well as develop extensive interpersonal and presentational speaking and writing practice.

Spanish I – 1 credit (Prerequisite: None)

Level I Spanish focuses on students' communicative competence in Spanish and their understanding of the cultures of Spain and other Hispanic countries. In level I Spanish classes, students learn to communicate in real-life contexts about topics that are meaningful to them. Spanish I concentrates on the development of the four language skills: listening, speaking, reading, and writing. Emphasis is placed on use of Spanish in the classroom and on use of authentic materials to learn about the language and culture. An important component of Spanish classes is the use of the Spanish language beyond the classroom in order to apply knowledge of the language in the real world. In many cases, this is accomplished through the integration of technology into the classroom.

WORLD LANGUAGES *(continued)*

Spanish II – 1 credit (Prerequisite: Spanish I or its equivalent)

In Spanish II, students continue to develop their proficiency in the three modes of communicative competence; interacting with other speakers of Spanish, understanding oral and written messages in Spanish, and making oral and written presentations. They are exposed to more complex features of the Spanish language. They continue to focus on communicating about their immediate world and daily life. Emphasis continues to be placed on the use of Spanish in the classroom as well as on the use of authentic materials to learn about the culture.

Spanish III – 1 credit (Prerequisite: Spanish II or its equivalent)

In Spanish III, students continue to develop their proficiency in the three modes of communicative competence. They communicate using more complex structures in Spanish on a variety of topics, including some of an abstract nature. They comprehend the main ideas of authentic materials that they read and hear and are able to identify significant details when the topics are familiar. Spanish is used almost exclusively in the class as students develop the ability to discuss topics related to historical and contemporary events and issues.

Spanish IV – 1 credit (Prerequisite: Spanish III or its equivalent)

In Spanish IV, students continue to develop their communicative and cultural competence, understanding oral and written texts, and making oral and written presentations in Spanish. They are able to exchange and support opinions on a variety of topics related to historical and contemporary events. They comprehend spoken and written Spanish texts from a variety of authentic sources as well as produce compositions containing well-developed ideas on various topics. Students compare and contrast everyday situations with those of our own culture. Additional emphasis is placed on appropriate verbal and non-verbal behaviors. Students will focus on global understanding of the language, increase accuracy and appropriateness of oral communication with emphasis on creativity, examine authentic materials and explore various literary genres, and refine their creative expression. Students are strongly encouraged to explore individual interest areas in-depth and share these interests with the class.

AP Spanish V – 1 credit (Prerequisite: Spanish IV or its equivalent)

In this course students prepare for the AP Spanish Language Exam and develop a strong command of the Spanish language with proficiency in integrating language skills and synthesizing written and aural materials, centered on the six cultural themes outlined in the AP curricular requirements: Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Families and Communities, and Beauty and Aesthetics. Students master the formal writing process and aural comprehension skills, as well as develop extensive interpersonal and presentational speaking and writing practice.

ENGLISH LEARNERS

EL Level I – 1 credit Level

Students engage in listening, speaking, reading, and writing English through an integrated language arts curriculum. Building both on their prior knowledge and on newly introduced material, they are provided support through a cohesive program. Placement is made following assessment. The goal is to help students build the Basic Interpersonal Communication Skills (BICS) and vocabulary necessary for Cognitive Academic Language Proficiency (CALP).

EL Level II – 1 credit

Students continue to engage in listening, speaking, reading, and writing English needed for building BICS and CALP. Placement is made following assessment.

CAREER AND TECHNICAL EDUCATION

AGRICULTURE

Foundations of Agriculture, Food and Natural Resources – 1 credit (Prerequisite: None)

This is a yearlong course that is offered as a split block with Horticulture. This course is designed to develop competencies in each of the career pathways as they pertain to agricultural education, including the areas of Virginia’s agriculture industry; the global scope of agriculture; scientific research concepts in plant, animal, and food science; principles of leadership and opportunities within student organization [FFA]; agribusiness and Supervised Agricultural Experience program opportunities; agricultural skills and safety; forestry and wildlife; and natural resources and environmental systems.

Introduction to Animal Systems –1 credit (Prerequisite: Foundations of Agriculture, Food and Natural Resources)

Students develop competencies in each of the major areas of the Animal Systems career pathway including animal nutrition, reproduction, breeding, care, and management. Students learn agricultural mechanics applicable to animal systems. Students will be exposed to principles of leadership and opportunities within student organization [FFA] along with Supervised Agricultural Experience opportunities.

Agricultural Production Technology – 1 credit (Prerequisite: Foundations of Agriculture, Food and Natural Resources)

This course emphasizes one or more areas of plant science, animal science, soil science, agricultural business management, and agricultural mechanization, based upon the student’s employment objective. Supervised occupational experience programs and leadership training are important parts of the course.

Agricultural Production Management – 1 credit (Prerequisite: Foundations of Agriculture, Food and Natural Resources)

This course includes instruction in agricultural mechanics, with emphasis placed on the application of mechanical skills to farm power and machinery, soil and water management, supervised farming programs, and leadership training [FFA].

Agricultural Business Management—1 credit (Prerequisite: Foundations of Agriculture, Food and Natural Resources)

This course teaches students the economics of raising meat animals for food production. Students will obtain animals through special low interest student loans for the government’s Farm Service Agency. They will learn fundamental animal husbandry skills, record keeping, and business management. Activities include resume preparation, portfolio design, study of international agriculture and participation in the FFA.

Veterinary Science—1 credit (Prerequisites: Foundations of Agriculture, Food and Natural Resources)

This course provides students with the employability and technical skills needed to succeed in postsecondary education and a career in veterinary medicine or in a related occupation. Course content will include the integration of academics and career skills and instruction in the use of tools, equipment, and facilities for veterinary medicine. Business management, leadership and FFA activities are included in the course. Students enrolled in the course should have a strong back-ground in math and science and knowledge of small animal care.

Equine Management Production – 1 credit (Prerequisite: Foundations of Agriculture, Food and Natural Resources or Introduction to Animal Systems)

In this course, students learn how to care for and manage horses. Equine health, nutrition, management, reproduction, training, evaluation, and showmanship are the major instructional areas. In addition, course content includes instruction in the tools, equipment, and facilities for equine enterprises. Business management topics include the economics of boarding, training, and merchandising horses. Leadership development activities are included, and participation in FFA activities is encouraged.

AGRICULTURE (continued)

Introduction to Natural Resources and Ecology Systems— 1 credit (Prerequisite: Foundations of Agriculture, Food and Natural Resources)

This course serves as the introductory level course for the Natural Resources Career Pathway. Students will explore the study of natural resources and begin to develop skills and knowledge required for employment in occupations related to forestry, wildlife and natural resources management, and conservation. Special emphasis is placed on opportunities in the FFA.

Forestry Management – 1 credit (Prerequisite: Foundations of Agriculture, Food and Natural Resources and Intro to Natural Resources and Ecology Systems)

This course will offer students instruction in the management of the forest as a resource and as a business. Students will develop knowledge in areas like tree physiology, forest ecology, silviculture, and the management and marketing of forest products. Strong emphasis is placed on developing career skills for the forestry industry as well as are continued opportunities available through FFA.

Small Animal Care I — (Prerequisite: Foundations of Agriculture, Food and Natural Resources)

Students learn how to care for and manage small animals, focusing on instructional areas in animal health, nutrition, management, reproduction, evaluation, training, and, when applicable, 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 — (Prerequisite: Small Animal Care I)

Students advance their skills in the care and management of small animals, focusing on the specific needs of various breeds. Instruction includes grooming and handling animals, as well as technical functions related to animal health, office-management instruction and it affords students the opportunity to practice leadership skills. FFA activities are included.

HORTICULTURE

Applied Horticultural Science – 1 credit (Prerequisite: None)

This is a yearlong course that is offered as a split block with Agriculture. This allows students to view the seasonal production and marketing of greenhouse and floral products. Course content covers basic plant science and an introduction to floral design, greenhouse production and landscape design. Plant identification includes greenhouse and landscape materials.

Floral Design I – 1 credit (Prerequisite: Applied Horticultural Science)

This course offers an expanded study of floral design that began in Applied Horticultural Science. Specific design styles examined include body flowers, bud vases, balloon bouquets and decorations, mass arrangements, line-mass arrangements, silk Christmas design, and wedding design. Plant identification curriculum includes advanced placement work in herbaceous plant materials.

Floral Design II – 1 credit (Prerequisite: Applied Horticultural Science and Floral Design I)

Course content covers a range of specialty floral design including historical and contemporary design, party decorations, floragraphy, dried arrangements and sympathy work. The business aspect of the industry is addressed through the study of pricing, advertising, shop display and design. Plant identification curriculum includes advanced placement work in herbaceous plant materials.

Introduction to Floral Design— (Prerequisite: Applied Horticulture Science plus any other Horticulture Class)

This class incorporates skills required for composition of basic table arrangements. It includes the history of design styles, identification of flowers and greens, identification and use of equipment, and condition of handling flowers.

Landscape Design, Construction and Maintenance I – 1 credit (Prerequisite: Applied Horticultural Science)

Landscape Design principles are studied. Hardscapes and plant materials are examined for their function in the landscape. Basic maintenance procedures on a residential landscape are introduced. Elementary drafting skills are practiced as features of a residential landscape design. Plant identification curriculum includes advanced placement work in woody materials.

HORTICULTURE (continued)

Landscape Design, Construction and Maintenance II – 1 credit (Prerequisite: Applied Horticultural Science and Landscape Design, Construction and Maintenance I)

Complete residential and commercial landscape plans are developed incorporating principles of landscape design, hardscapes and plant materials. Maintenance plans for landscape designs are developed. Special elements of the landscape such as golf courses, water features, and irrigation systems are examined. Computer landscape design graphics are practiced. Plant identification curriculum includes advanced placement work in woody materials.

Landscape Drawing Applications— (Prerequisite: Applied Horticulture Science plus any other Horticulture class)

Students enrolled in this course apply theories of landscape design and drawing to actual design projects and tasks. Emphasizes drawing techniques and use of advanced media in applications. Includes hard line, free-style, and computer assisted landscape drawing in simple landscape drawing applications.

Plant Production and Management – 1 credit (Prerequisite: Applied Horticultural Science and Landscape Design, Construction and Maintenance I)

Greenhouse structures are examined and compared for commercial applications. Environmental systems for greenhouses including irrigation, heating, cooling, fertilization, and photoperiodic control are studied. Greenhouse crop schedules for poinsettias, bedding plants, bulbs, and specialty crops are introduced. Plant identification curriculum includes advanced placement work in herbaceous materials.

Specialty Horticulture Arts – 1 credit (Prerequisite: Applied Horticultural Science and Landscape Design, Construction and Maintenance I)

A wide range of specialty topics are studied including topiary, fruit and vegetable production, interior landscaping, terrariums, dish gardens, and bonsai. Horticulture as an opportunity for entrepreneurship is examined. Plant identification curriculum includes advanced placement work in woody plant materials.

Advanced Plant Horticulture Articulation – 1 credit (Prerequisite: Applied Horticultural Science)

The Henry County Horticulture Program is one of eight in the state of Virginia that has signed an articulation agreement with Virginia Tech. Students have an opportunity to earn up to nine semester credits. These credits will transfer to Virginia Tech's Agriculture Technology program. If a student transfers from the two-year Agriculture program to a four-year Horticulture degree program, these credits would be accepted. Advanced Placement course work includes Herbaceous Perennials and Woody Landscape Plant Materials.

BUSINESS AND INFORMATION TECHNOLOGY

Accounting – 1 credit (Prerequisite: None)

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

Advanced Accounting – 1 credit (Prerequisite: Accounting)

Advanced Accounting students gain knowledge of advanced accounting principles, procedures, and techniques used to solve business problems and make financial decisions. Students work in a technology-integrated environment, using accounting and spreadsheet software to analyze, synthesize, evaluate, and interpret business financial data related to inventory, fixed assets, notes/accounts payable and receivable, implementation of a partnership and a corporation, and other specialized accounting systems. Using authentic workplace scenarios that reflect current industry trends and standards, students analyze financial data and acquire knowledge of business ethics.

BUSINESS AND INFORMATION TECHNOLOGY *(continued)*

Business Management - 1 credit (Prerequisite: None)

Business Management students study basic management concepts and leadership styles as they explore business ownership, planning, operations, marketing, finance, economics, communications, the global marketplace, and human relations. Quality concepts, project management, problem solving, and ethical decision making are an integral part of the course. Student leadership skills may be enhanced by participation in school-based or virtual enterprises, job shadowing, internships, and/or the Future Business Leaders of America (FBLA).

Computer Information Systems – 1 credit

Computer Information Systems students apply problem-solving skills to real-life situations through word processing, spreadsheets, databases, multimedia presentations, and integrated software activities. Students work individually and in groups to explore computer concepts, operating systems, networks, telecommunications, and emerging technologies. Completion of this course may prepare students for the certification exam for Microsoft Office Specialist (MOS).

Advanced Computer Information Systems – 1 credit (Prerequisite: Computer Information Systems)

Advanced Computer Information Systems students apply problem-solving skills to real-life situations through advanced integrated software applications, including printed, electronic, and Web publications. Students work individually and in groups to explore advanced computer maintenance activities, Web site development, programming, networking, emerging technology, and employability skills. Completion of this course may prepare students for the certification exam for Microsoft Office Specialist (MOS).

Design, Multimedia, and Web Technologies – 1 credit

Design, Multimedia, and Web Technologies students develop proficiency in designing and creating desktop-published projects, multimedia presentations/projects, and Web sites. Students apply principles of layout and design in completing projects. Students create portfolios that include a résumé and a variety of desktop-published, multimedia, and Web-site projects produced in the course. Completion of this course may prepare student for the certification exam for Microsoft Office Specialist (MOS).

Information Technology Fundamentals – 1 credit (Prerequisite: None)

Information Technology (IT) Fundamentals introduces the essential technical and professional skills required for students to pursue programs leading to professional careers and IT certifications. Students investigate career opportunities and technologies in four major IT areas: Information Services and Support, Network Systems, Programming and Software Development, and Interactive Media. The focus of the IT Fundamentals course is the introduction of skills related to information technology basics, Internet fundamentals, network systems, computer maintenance/upgrading/troubleshooting, computer applications, programming, graphics, Web page design, and interactive media. Students explore ethical issues related to computers and Internet technology and develop teamwork and communication skills that will enhance their employability.

JUNIOR ROTC (JROTC)

Leadership Education and Training (LET I) – 1 credit (Prerequisite: None)

This course is designed to teach students the value of citizenship, leadership, service to the community, personal responsibility, and a sense of accomplishment, while instilling in them self-esteem, teamwork, and self-discipline. The course prepares students for responsible leadership roles while making them aware of their rights, responsibilities, and privileges as American citizens. Students receive instruction in citizenship skills, leadership theory and application, learning styles, communication skills, conflict resolution and financial planning. Students will be issued a uniform free of charge, and will be required to meet established grooming standards. They will also be required to participate in physical fitness training. Students can participate in JROTC co-curricular activities (Drill team, Air-Rifle Team, or Raider Team) if they maintain a minimum 2.0 GPA.

JUNIOR ROTC (JROTC) *(continued)*

Leadership Education and Training (LET II) – 1 credit ***(Prerequisite: Successful completion of LET I)***

This course builds upon the citizenship and leadership skills learned in LET I. Students are afforded the opportunity to earn advanced rank in the JROTC unit, allowing them to lead others in practical application situations. Students receive instruction in achieving a healthy lifestyle, first aid for emergency and non-emergency situations, and drug awareness. Students also receive instruction in earth science, geography, and environmental awareness. Finally, students learn about the American political system, the U.S. Constitution, the shaping of American institutions and practices, the Bill of Rights, and citizen's roles in American democracy. Students lead physical fitness training and can participate in JROTC co-curricular activities if they maintain a minimum 2.0 GPA.

Leadership Education and Training (LET III) – 1 credit ***(Prerequisite: LET I and LET II)***

This course builds upon the citizenship and leadership skills learned in LET II. Students advance to positions of increased responsibility leading other students in accomplishing a myriad of tasks. They receive instruction in mid-level management positions and leadership planning and strategies. Students learn skills to be successful in life such as becoming a better writer and speaker, managing anger, conflict resolution and mediation, violence prevention, time management and critical thinking strategies. They learn about career exploration strategies, developing portfolios, college preparation, and financial planning. Students lead physical fitness training and can participate in JROTC co-curricular activities if they maintain a minimum 2.0 GPA.

Leadership Education and Training (LET IV) - 1 credit ***(Prerequisite: LET I, II, III)***

Students advance to positions of increased responsibility leading other students in accomplishing a myriad of tasks such as planning for the annual service-learning project. They receive instruction in the function and organizations within the Department of Defense, the Peace Corps, and AmeriCorps. Students are taught advanced leadership principles such as management skills, styles of leadership, communication and motivation. They learn teaching skills and are given the opportunity to teach LET I students. LET IV students are given the opportunity to complete citizenship and history projects. Students lead physical fitness training and can participate in JROTC co-curricular activities if they maintain a minimum 2.0 GPA.

Leadership Education and Training (LET V-VIII) 1 credit ***(Prerequisite: LET I, II, III, and IV)***

Students can advance to the highest positions within the JROTC unit and experience the duties and responsibilities of leaders and staff officers within a large organization. The students conduct all the planning that is required to run the JROTC unit and ensure successful execution of all tasks assigned. They receive advanced instruction in citizenship, leadership, life skills, wellness, fitness, first aid, geography and environmental awareness and American history and government. The LET V-VIII students lead physical fitness training and not only can participate in JROTC co-curricular activities but have the opportunity to be Captains or hold other advanced leadership positions within the various teams if they maintain a 2.0 GPA.

FAMILY AND CONSUMER **SCIENCES**

Introduction to Culinary Arts – 1 credit (Prerequisite: None)

The food occupations 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, contemporary cuisines and service styles, food and beverage production and preparation, and food safety and sanitation. Teachers reinforce math, science, social studies and English Standards of Learning while teaching the required competencies. Teachers also focus on workplace readiness skills.

Culinary Arts I – 2 credits (Prerequisite: None)

Students practice managerial, production, and service skills used in government, commercial, or independently owned institutional food establishments and related food industry occupations. Students plan, select, store, purchase, prepare, and serve food and food products. They study basic nutrition, sanitation, and food safety; the use and care of commercial equipment; and the operation of institutional food establishments. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of culinary arts are emphasized. Teachers highlight the basic skills of mathematics, science, and communication when appropriate in content. Introduction to Culinary Arts is a recommended prerequisite for this course.

FAMILY & CONSUMER SCIENCES *(continued)*

Culinary Arts II – 2 credits (Prerequisite: Culinary Arts I)

Culinary Arts II provides students an opportunity to refine skills in serving, dining room management, and other skills learned in Culinary Arts I. Students prepare for occupations such as chef/cook, baker/pastry helper, pastry decorator, hospitality worker, dietetic aide/assistant, food demonstrator, and entrepreneur. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of culinary arts are emphasized. Teachers highlight the basic skills of mathematics, science, and communication when appropriate in content.

Culinary Arts Specialization III – 2 credits (Prerequisite: Culinary Arts II)

Culinary Arts III provides students with an opportunity to enhance their skills in planning menus, applying nutritional principles, implementing sanitation and safety standards, and exploring careers. Depending on the locality, students have the prospect of specializing in one of the following food-preparation techniques: Baking and Pastry, Catering/Banquet, Restaurant/Business, or Quantity Foods. Critical thinking, practical problem solving, and entrepreneurial opportunities within the field of culinary arts are emphasized.

Nutrition and Wellness – 1 credit (Prerequisite: None)

Students enrolled in Nutrition and Wellness focus on making choices that promote wellness and good health; analyzing relationships between psychological and social needs and food choices; choosing foods that promote wellness; obtaining and storing food for self and family; preparing and serving nutritious meals and snacks; selecting and using equipment for food preparation; and identifying strategies to promote optimal nutrition and wellness of society. Teachers reinforce math, science, social studies and English Standards of Learning while teaching the required competencies. Teachers also focus on workplace readiness skills.

DE Introduction to Early Childhood Education – 1 credit (Prerequisite: PHCC Placement test for dual enrollment credit)

This course focuses on the integration of knowledge, skills, and practices required for careers in early childhood education. Content covers career paths within early childhood, education, and services; developmentally-appropriate practices; integration of the curriculum and instruction to meet children's developmental needs and interests; healthy and safe learning environments; principles of guiding children; teaching methods and strategies; and arranging learning centers that provide exploration, discovery, and development. During a three-week internship, students will gain practical experience in an early childhood facility, and elementary school, or a community childcare facility.

DE Early Childhood Education I-A – 1 credit (Prerequisite: PHCC Placement test for dual enrollment credit and Introduction to Early Childhood Education)

This course delves into program operations in early childhood and care. 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. Students also prepare for continuing education leading to careers in early childhood fields (e.g., medical, social services, and education).

DE Early Childhood Education I-B – 1 credit (Prerequisite: PHCC Placement test for dual enrollment credit and Early Childhood Education I)

Students will explore various jobs within the industry and gain work experience at various child education facilities. Critical thinking, practical problem solving and entrepreneurship opportunities within the field of education are emphasized. This course requires a nine-week internship. Practical experiences (e.g., local daycare centers, elementary schools, other institutions) under the supervision of the instructor are required. Upon completion of the program, students may obtain Child Development Association National Credential through the Council for Professional Recognition, Child Development Association by taking a written exam at the age of 18 or above, meeting the hour requirements for work experience, and being observed at the work site. NOCTI test will be administered.

Teacher Cadet – 1 credit (Prerequisite: Students should have an interest in teaching and education)

The Teacher Cadet course introduces seniors to a career in teaching and education. The course is a study of the history, development, organization, and practices of preschool, elementary, and secondary education. The primary elements of the curriculum components are the learner, the school, and the teacher and teaching. The components are intentionally broad in scope and provide a great deal of flexibility based on the career interest of a student. In addition to the fundamental curriculum components, all students are required to observe and participate in an internship outside the teacher cadet classroom. The internship may be done from the pre-school level through grade 12.

Entrepreneurship – 1 credit (Prerequisite: None)

This course introduces students to the concept that an entrepreneur is an individual who undertakes the creation, organization, ownership, and risk of a business. Students will acquire information to guide business decision making and understand fundamental economic concepts to obtain a foundation for employment in business. Upon completion of this course, students will also demonstrate an understanding of business ownership, financial statements, marketing principles and basic economic principles. Students will develop sales and customer service skills.

HEALTH AND MEDICAL SCIENCES

Introduction to Health and Medical Sciences—1 credit (Prerequisite: None)

This course introduces the student to all health care careers and develops basic skills common to all health occupations. Throughout the course, instruction emphasizes safety, cleanliness, asepsis, professionalism, accountability, and efficiency within the health care environment. In addition, instruction may include the basics of medical laboratory procedures, pharmacology fundamentals, biotechnology concepts and communication skills essential for providing quality patient care.

Medical Terminology – 1 credit (Prerequisite – None– Introduction to Health and Medical Sciences is recommended)

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.

Health Assisting A – 1 credit (Prerequisite – None– Introduction to Health and Medical Sciences is strongly recommended)

Students explore careers in the allied health field by developing basic skills common to several assisting careers. They study body structure and function, principles of health, microbes and disease, and an overview of the national health and patient care system. Supervised work education, job shadowing and/or internships opportunities will be available for students and is managed by the Health and Medical Sciences teacher.

Health Assisting B– 1 credit (Prerequisite – Health Assistant I-A)

Health Assistant B is an occupational preparation course that emphasizes advanced skill training in areas such as catheter care, range of motion, care of the dying, and admission, transfer and discharge procedures. Students learn disease and body systems as related to advanced clinical care of the acute medical-surgical patient, the chronically ill, and the elderly. Job Shadowing and/or Internships opportunities will be available for students.

MARKETING

Principles of Business and Marketing – 1 credit (Prerequisite: None)

Students explore the roles of business and marketing in the free enterprise system and the global economy. They study how the American economy operates and prepare to make decisions as consumers, wage earners, and citizens.

Marketing (Co-op Option) – 1 credit (Prerequisite: None)

Students are introduced to functions and foundations involved in the marketing of goods, services, and ideas and achieve skills necessary for successful marketing employment. Students study risk management, selling, promotion, pricing, purchasing, marketing-information management, product/service planning, distribution, and financing. Foundation skills include economics, human resources, and marketing and business necessary for success in marketing occupations. Academic skills (mathematics, science, English, and history/social science) related to the content area are a part of this course. Students participating in the co-op option may earn one additional credit for a minimum of 396 hours worked.

Advanced Marketing (Co-op Option) – 1 credit (Prerequisite: Marketing [Co-op Option])

Students continue to gain knowledge of marketing functions and foundations as they relate to supervisory and management responsibilities and develop skills needed for advancement. They develop skills for supervisory positions and/or for continuing education in a marketing-related field. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Students participating in the co-op option may earn one additional credit for a minimum of 396 hours worked.

Fashion Marketing (Co-op Option) – 1 credit (Prerequisite: None)

In this specialized course, students gain basic knowledge of the apparel and accessories industry and skills necessary for successful employment in apparel businesses. Students develop general marketing skills necessary for successful employment in fashion marketing, general marketing skills applied to the apparel and accessories industry, and specialized skills unique to fashion marketing. Personal selling, sales distribution, market planning, and product/service technology as well as academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Students participating in the co-op option may earn one additional credit for a minimum of 396 hours worked.

MARKETING (continued)

Sports, Entertainment, & Recreation (Co-op Option) – 1 credit (Prerequisite: None)

Students develop skills in the areas of marketing analysis, event marketing, communication, and human relations, along with a thorough understanding of the sports, entertainment, and recreation industry and career options available. Students participating in the co-op option may earn one additional credit for a minimum of 396 hours worked.

TRADE AND INDUSTRIAL

Building Management I – 1 credit (Prerequisite: None)

This course is designed to provide students with general building and grounds maintenance skills in carpentry, plumbing and pipefitting, and landscaping. Hotels, hospitals, schools, shopping malls, office complexes, manufacturing plants and other establishments use facility maintenance technicians to keep their buildings and grounds safe and in good repair. Students will learn to schedule, perform and document preventive maintenance tasks, conduct routine inspections, safely operate a variety of hand and power tools, read and interpret blueprints, and make use of repair manuals and catalogs to order and manage supplies.

Building Management II A – 1 credit (Prerequisite: Building Management I)

This course is designed to provide students with general building and grounds maintenance skills in carpentry, plumbing and pipefitting, and landscaping. Hotels, hospitals, schools, shopping malls, office complexes, manufacturing plants and other establishments use facility maintenance technicians to keep their buildings and grounds safe and in good repair. Students will learn to schedule, perform and document preventive maintenance tasks, conduct routine inspections, safely operate a variety of hand and power tools, read and interpret blueprints, and make use of repair manuals and catalogs to order and manage supplies.

Building Management II B – 1 credit (Prerequisite: Building Management II)

Students increase their skills in working with students with general building and grounds maintenance skills in carpentry, plumbing and pipefitting, and landscaping. Students will learn advanced skills in performing and documenting preventive maintenance tasks, conducting routine inspections and safely operating a variety of hand and power tools.

Cosmetology I – 2 credits per year (Prerequisite: None)

Cosmetology is the study of hair, skin and nails, and their related care. Students study and prepare in a clinical lab setting, using mannequins and live models for manipulative skill practice. The program emphasizes safety and sanitation, communication, and management skills. Related areas of study include psychology, ethics, and presentation of a professional image. Competency completions prepare the student for the Virginia Board of Cosmetology licensing exam.

Cosmetology II – 2 credits per year (Prerequisite: Cosmetology I)

Cosmetology is the study of hair, skin and nails, and their related care. Students study and prepare in a clinical lab setting, using mannequins and live models for manipulative skill practice. The program emphasizes safety and sanitation, communication, and management skills. Related areas of study include psychology, ethics, and presentation of a professional image. Competency completions prepare the student for the Virginia Board of Cosmetology licensing exam. Students are required to take the Virginia Board of Cosmetology licensing exam.

DE Heating, Ventilation, Air Conditioning and Refrigeration I – 2 credits per year (Prerequisite: PHCC placement test)

This instructional program prepares students to install, repair, and maintain the operating conditions of heating, air conditioning, and refrigeration systems.

TRADE AND INDUSTRIAL (continued)

DE Heating, Ventilation, Air Conditioning and Refrigeration II, – 2 credits per year (Prerequisite: Heating, Ventilation, Air Conditioning, and Refrigeration I and PHCC Placement test)

This instructional program prepares students to install, repair, and maintain the operating conditions of heating, air conditioning, and refrigeration systems.

Industrial Maintenance Technology I – 1 credit (Prerequisite: None)

This course focuses on the adjustment, maintenance, part replacement, and repair of tools, equipment, and machines used in industry, including hydraulic and pneumatic systems.

Industrial Maintenance Technology II A – 1 credit Prerequisite: Industrial Maintenance Technology I)

This course focuses on the adjustment, maintenance, part replacement, and repair of tools, equipment, and machines used in industry, including hydraulic and pneumatic systems.

Industrial Maintenance Technology II B – 1 credit Prerequisite: Industrial Maintenance Technology II A)

Students increase their skills in working with systems maintenance, parts replacement, repair of tools, equipment and machines used in industry, including hydraulic and pneumatic systems.

NEW TECH ACADEMIES

BENGAL TECH ACADEMY (BTA) & WARRIOR TECH ACADEMY (WTA)

Bengal Tech Academy (BTA) and Warrior Tech Academy (WTA) offer traditional courses in a project based or problem based learning environment where learning is student-driven, engaging, and meets the needs of a wide variety of academic abilities. Students work in collaborative teams to solve timely and complex problems that often encourage their success as responsible, globally-conscious citizens. All students are taught, evaluated, and assessed on five learning outcomes in every project in every class.

- Agency (10%): The ability to grow one's own intelligence and skill through effort, practice, and challenge and the ability to learn how to learn and monitor progress to be successful on tasks, school, and life.
- Collaboration (10%): The ability to be a productive member of diverse teams through strong interpersonal communication, a commitment to shared success, leadership, and initiative.
- Knowledge & Thinking (50%): The ability to reason, problem solve, develop sound arguments or decisions, and create new ideas by using appropriate sources and applying the knowledge and skills of a discipline.
- Oral Communication (15%): The ability to communicate knowledge and thinking through effective oral presentations.
- Written Communication (15%): The ability to effectively communicate knowledge and thinking through writing by organizing and structuring ideas and using discipline appropriate language and convention.

In addition, students are immersed in an environment of TRR (trust, respect, and responsibility) as part of a commitment to a school-wide culture of empowerment.

BTA and WTA are 1:1 schools, and each student uses a Macbook to complete course work. Some classes are integrated while others are single subject. **ALL BTA AND WTA GENERAL COURSE DESCRIPTIONS ARE THE SAME AS TRADITIONAL CLASSES. The primary difference is in the delivery of the curriculum (project based/problem based learning) and in the assessed learning outcomes (agency, collaboration, knowledge and thinking, oral communication, and written communication).**

Students in BTA and WTA are able to enroll in both Piedmont Governor's School and ACE as juniors and seniors while remaining in the tech academy program.

NEW TECH ACADEMIES *(continued)*

Courses Offered in Bengal Tech Academy and Warrior Tech Academy

Class	Grade Level: 9	Grade Level: 10	Grade Level: 11	Grade Level 12:	Integrated*	Single Subject**	PBL+	PrBL++
Classical Connections <i>(English 9 and World History I)</i>	X				X		X	
Homeo-Stay-Fit <i>(Biology and Health/PE 9)</i>	X				X		X	
Language of Life <i>(English 10 and Ecology)</i>		X			X		X	
Global Connections <i>(World History II)</i>		X				X	X	
American Dreamers <i>(English 11 and US/VA History)</i>			X		X		X	
Read, Write, Blue <i>(English 12 and US Government)</i>				X	X		X	
The X Factor <i>(Algebra I)</i>	X					X		X
Out of the Box <i>(Geometry)</i>	X	X				X		X
Let's Get Radical <i>(Algebra II)</i>	X	X	X			X		X

* **+ Integrated Courses/PBL** - In the integrated New Tech classes, learning is contextual, creative, and collaborative because project-based learning (PBL) is at the center of the instructional approach. Students collaborate on meaningful projects that require critical thinking, creativity, and communication in order to answer challenging questions or solve complex problems rooted in both subjects.

****+Single Subject Course/PBL (World History II)** - In the New Tech single subject World History II course, learning is contextual, creative, and collaborative because project-based learning (PBL) is at the center of the instructional approach. Students collaborate on meaningful projects that require critical thinking, creativity, and communication in order to answer challenging questions or solve complex problems rooted in world history.

****++Single Subject Courses (Math)/PrBL**- In the New Tech single subject math courses, learning is contextual, creative, and shared because problem-based learning (PrBL) is at the center of the instructional approach. Students collaborate on meaningful real-world problems that require critical thinking, creativity, and communication in order to solve.

PATRICK HENRY COMMUNITY COLLEGE

CTE Course Descriptions

Patrick Henry Community College offers several career specific programs that include Electricity, Motorsports Technology, Building Trades, and Computer Aided Drafting. Students interested in these courses must submit a written request to the principal who will work collaboratively with PHCC instructors to develop a student schedule incorporating high school/PHCC course offerings.

Enrollment in Dual Enrollment Classes is contingent upon a student achieving all of the following by May 1: qualifying scores on PHCC placement tests and acceptance in the course by the college. Course availability is based on the number of credentialed instructors and student enrollment.

MOTORSPORTS ACADEMY

Motorsports Technology I & II

Motorsports Technology I introduces the student to the various systems of the racecar. This course focuses on the inter-related functions and the theoretical concepts of the high performance race engine and emphasizes hands-on skills with identification and installation of component parts of a race engine.

Motorsports Technology III & IV (Prerequisite: Motorsports Technology I)

This program focuses on motorsports, as well as chassis and engines. While working with motorsports fabrication, students will learn about shop safety, race car set-up including weight, balance, suspension and other factors that influence performance. This is a predominately hands on program where students fabricate, design, cut and build racing parts and performance vehicles. Students learn metal working, welding, sheet metal fabrication and principals of Aerodynamics. The engines portion of the program will be broken into four distinct phases of engine tear down and inspection, machining, assembly and tuning. This program has pathways into the automotive and/or motorsports program.

CYBER SECURITY ACADEMY

Cyber Security Academy– Junior/Senior (Prerequisite: CIS)

Students who enroll in the Cyber Security Career Academy will study computer operations, repair, study fundamentals of networking environments, the basics of router operations, and the basic router configuration. Students who successfully complete will be eligible to test for the CompTIA A+ Certification and CISCO Certified Entry Networking Technician (CCENT).

PUBLIC SAFETY ACADEMY

Public Safety Academy

The Public Safety Academy is designed to offer students the opportunity to study criminal law and law enforcement. These courses will focus on developing a working knowledge of the criminal justice field and investigations. This is a hands on lab oriented program where students will have the opportunity to learn about the investigative processes, techniques, and participate in simulated Crime Scene Investigations (CSI).

IDEA ACADEMY

Innovate. Design. Engineer. Accelerate.

The IDEA Academy will provide students a project based learning approach to solving Engineering problems. This program will offer students the opportunity to gain college credits and certifications in a multitude of pathways. Students who complete the two year sequence will have completed at PHCC 30% of the General Engineering Technologies program, 60% Advanced Manufacturing, 57% Industrial Electronics CSC, 100% MSSC- CPT Industry credential. This pathway incorporates several different areas of study including Mechatronics, Robotics, Hydraulics and Pneumatics, Design, and Machining. This is a hands on intensive program where students may be asked to design and build products, then evaluate and test the products for quality. The IDEA Academy is a part of a National Science Foundation grant and students may have the opportunity to participate in some of the grant activities.

SDV 108 – College Survival Skills

Provides and orientation to the college. Introduces study skills, careers and life planning. Offers an opportunity to engage in activities aimed at self-discovery. Emphasizes development of “coping skills” such as listening, interpersonal; relations, competence, and improved self-concept. Recommended for students enrolled in developmental courses.

MEC 140 – Intro to Mechatronics

Presents foundational concepts in mechatronics including analog and digital electronics, sensors, actuators, microprocessors, and microprocessor interfacing to electromechanical systems. Surveys components and measurement equipment used in the design, installation, and repair of mechatronic equipment and circuits.

SAF 126 – Principles of Industrial Safety

Teaches principles and practices of accident prevention, analysis of accidental causes, mechanical safeguards, fire prevention, housekeeping, occupational diseases, first aid, safety organization, protection equipment, and general safety principles and promotion.

ELE 246 – Industrial Robotics Programming

Introduces industrial robotics and their programming for repetitive manufacturing systems. Includes the design of software that ensures safe operation and programming of both on- and off-line robot operations. This course is cross-listed with IND 246. Credit will not be awarded for both.

MEC 165 – Applied Hydraulics, Pneumatics and Hydrostatics

Teaches fluid power system design, operation, testing, maintenance and repair. Includes reservoirs, pump connecting valves, cylinders, pressure regulating valves, flow control valves, hydraulic motors, and introduction to basic hydrostatic hydraulic systems.

MEC 155 – Mechanisms

Studies the purpose and actions of cams, gear trains, levers, and other mechanical devices used to transmit control. Focuses on motion, linkages, velocities, and acceleration of points within a link mechanism; layout method for designing cams and gear train. Requires preparation of weekly laboratory reports.

IND 125 – Installation and Preventive Maintenance

Studies practices in the installation of machinery, including mounting, grouting, leveling, and alignment. Examines methods of preventive maintenance including inspection, scheduled maintenance, controls, record keeping, repair parts stocking, and safety considerations.

MEC 112 – Processes of Industry

Analyzes the processes of manufacturing products from materials for industry/engineering. Includes machining, casting, forming, molding, hot/cold working, chipless machining, and welding. Addresses quality assurance and inspection procedures.

IND 101 – Quality Assurance Technology I

Studies principles and techniques of quality engineering for the management, design, engineering economic, production, and assurance of quality. Emphasizes fundamentals of total quality assurance for product and process control. May include design review, fundamentals of statistics procurement control, sampling and control chart systems, quality reporting, process capability analysis, tool and gauge control, document control, or troubleshooting quality control.

PIEDMONT GOVERNOR'S SCHOOL

Students selected to attend The Piedmont Governor's School for Mathematics, Science and Technology are enrolled for two years in a half-day program located at an off-site location provided by Patrick Henry Community College. Students interested in applying to Governor's School should speak with a school counselor regarding their plan of study. It is recommended that students complete their third year of foreign language.

Students wishing to attend the Piedmont Governor's School should meet the following criteria:

- Possess a GPA of 3.2 or higher
- Have completed Biology AND Algebra II by the end of his/her 10th grade year

Those interested in attending the Piedmont Governor's School should contact a school counselor for information about applying in the fall of their sophomore year. Admission to the Piedmont Governor's School is highly competitive. Selection criteria include PSAT scores, standardized test scores, and academic performance through tenth grade along with teacher recommendations.

The Piedmont Governor's School offers opportunities which will strengthen students in areas that will help them excel in college, a career, and life after high school. The curriculum at PGS is characterized by and contains the following:

- Heavy research flow
- Student and faculty collaboration
- Completion of a digital portfolio
- Program oriented field trips
- Interdisciplinary units
- Robotics team
- Hands-on labs
- Project based learning

PGS JUNIOR COURSE DESCRIPTIONS

Juniors must take College Chemistry; for math, juniors must take either Advanced Mathematical Analysis or Advanced Calculus. All juniors are required to take Research Methodology and Design.

College Chemistry - 1 high school credit/8 College semester hours/year

The course explores the fundamental laws, theories, and mathematical concepts of chemistry. Topics will include: structure of matter, states of matter, reactions (types stoichiometry, equilibrium, kinetics, and thermodynamics) and descriptive chemistry. There is an emphasis on the laboratory experience as a primary means for the development of chemical concepts. Experimental design, gathering data, and the use of statistics to analyze data is studied jointly with the research methodology and design course or senior research application and evaluation. The course will cover the Standards of learning for chemistry. Students will take the End-of-Course test for the course at their base school.

Statistical Reasoning (MTH 155 - ½ high school credit/3 College semester hours/year (Prerequisite: Algebra II)

Presents elementary statistical methods and concepts including visual data presentation, descriptive statistics, probability, estimation, hypothesis testing, correlation, and linear regression. Emphasis is placed on the development of statistical thinking, simulation, and the use of statistical software.

PreCalculus w/ Trigonometry (MTH 167 -1 high school credit/5 College semester hours/year (Prerequisite: Algebra II)

Presents topics in power, polynomial, rational, exponential, and logarithmic functions, systems of equations, trigonometry, trigonometric applications, including Law of Sines and Cosines, and an introduction to conics.

PGS JUNIOR COURSE DESCRIPTIONS (continued)

Calculus I – (MTH 263 1 high school credit/4 College semester hours/year)

Presents concepts of limits, derivatives, differentiation of various types of functions and use of differentiation rules, application of differentiation, antiderivatives, integrals and applications of integration.

Junior Research Methodology and Design – 1 high school credit/3 College semester hours/year (Prerequisite: None)

The course is an introduction to the research process which includes research design, sampling techniques, elementary statistical analysis, library research, scientific writing, presentation skills, and development of multimedia presentations. All students will complete the preliminary report of an original research project. Students design the study, collect and analyze data, and report results.

ITE 119 – Information Literacy

Presents the information literacy core competencies focusing on the use of information technology skills. Skills and knowledge will be developed in database searching, computer applications, information security and privacy, and intellectual property issues.

ITN 260 – Network Security Basics

Provides instruction in the basics of network security in depth. Includes security objectives, security architecture, security models and security layers; risk management, network security policy, and security training. Includes the five security keys, confidentiality integrity, availability, accountability and auditability.

Linear Algebra (MTH 266 – 3 College semester hours)

Covers matrices, vector spaces, determinants, solutions of systems of linear equations, basis and dimension, eigenvalues, and eigenvectors. Designed for the mathematical, physical, and engineering science programs.

PGS SENIOR COURSE DESCRIPTIONS

Seniors must choose either college physics, college biology, human anatomy or microbiology; seniors must choose among Laboratory Calculus, Advanced Calculus II, or college statistics. All seniors are required to take senior research application and evaluation course.

College Physics-1 high school credit/8 College semester hours/year (Prerequisite: Advanced Mathematical Analysis)

The course is an advanced curriculum that stresses development of problem solving, thinking and laboratory skills. The content covers mechanics, thermodynamics, wave phenomena, electricity and magnetism, and selected topics in modern physics. Classroom activities include collecting and analyzing data in a computer-based lab and introducing students to application of theoretical concepts. Experimental design, gathering data, and the use of statistics to analyze data are studied jointly with the research methodology and design course or senior research application and evaluation.

College Biology -1 high school credit/8 College semester hours/year (Prerequisite: Algebra II)

This course is a college-level introduction focusing on the fundamental characteristics of living matter from the molecular level to the ecological community level. Introduces the diversity of living organisms, their structure, function, and evolution. Topics covered include major concepts in molecular and cellular biology, microbiology, biochemistry, genetics, botany, physiology, and ecology.

Human Anatomy – 1 high school credit/ 8 college semester hours/year (Prerequisite: College Chemistry)

This course integrates anatomy and physiology of cells, tissues, organs, and systems of the human body. Integrates concepts of chemistry, physics, and pathology.

Calculus I (MTH 263 - 1 high school credit/4 College semester hours/year)

Presents concepts of limits, derivatives, differentiation of various types of functions and use of differentiation rules, application of differentiation, antiderivatives, integrals and applications of integration.

Calculus II (MTH 264 - 1 high school credit/4 College semester hours/year)

Continues the study of calculus of algebraic and transcendental functions including rectangular, polar, and parametric graphing, indefinite and definite integrals, methods of integration, and power series along with applications. Designed for mathematical, physical, and engineering science programs.

PGS SENIOR COURSE DESCRIPTIONS *(continued)*

Statistics I (MTH 245 – 3 college semester hours/year (Co-requisite: Calculus II)

Presents an overview of statistics, including descriptive statistics, elementary probability, probability distributions, estimation, hypothesis testing, correlation, and linear regression.

Statistics II (MTH 246 – 1 high school credit/3 College semester hours/year (Prerequisite: Advanced Mathematical Analysis)

Continues the study of estimation and hypothesis testing with emphasis on advanced regressions topics, experimental design, analysis of variance, chi-square tests, and non-parametric methods.

Senior Research Application and Evaluation – 1 high school credit/3 College semester hours/year (Prerequisite: Research Methodology and Design)

This course provides students with the opportunity to explore an area of personal interest that promotes the mission of the school. Students take an active part in formulating the problems and the methods by which the problems are investigated. Appropriate investigative techniques are utilized to produce or analyze raw data and/or produce original interpretations rather than rely exclusively on the conclusions of others. When completing projects, students select from a wide range of alternative products and communicate their results to real, rather than a contrived audience in a professionally appropriate manner. Students actively participate during their junior year in planning their senior research experience.

ACE ACADEMY

Accelerated College Education Academy (ACE)

ACE Academy is a partnership between Patrick Henry Community College and Henry County Public Schools. Students selected to participate in the ACE Academy will earn an Associate's Degree from Patrick Henry Community College by taking courses during their junior and senior years of high school. The Advanced Placement curriculum will be taught in the courses offered at the student's home school.

Students will attend Patrick Henry for one-half day during their senior year. All other courses will be taught at their home school. Students interested in enrolling in the ACE Academy should speak with a school counselor regarding their plan of study. It is recommended that students complete their third year of foreign language by the end of their sophomore year.

Students should contact a school counselor in the winter of their sophomore year for an application. Admission to the ACE Academy is highly competitive. Selection criteria include GPA, SOL scores, Virginia Placement Test scores, teacher recommendations and acceptance to Patrick Henry Community College.

COURSES PRIOR TO THE BEGINNING OF THE JUNIOR YEAR

Students enrolled in the ACE Academy must complete one introductory course prior to the beginning of their junior year. These courses are scheduled by staff at Patrick Henry Community College and are offered at least twice.

College Survival Skills - (SDV 108: 1 college credit)

This course assists students in transition to college and provides overviews of college policies, procedures, and curricular offerings. This course encourages contacts with other students and staff, assists students toward college success through information regarding effective study habits, career and academic planning, and other college resources available to students. College Survival Skills may include English and math placement testing and is strongly recommended for beginning students. This course is required for graduation.

ACE ACADEMY JUNIOR COURSE DESCRIPTIONS

AP/DE US/VA History—1 high school credit (HIS 121-122: 6 college credits)

The focus of this course is on the major themes, events, and ideas that shaped the history of the United States. Students probe, in depth, the dynamics of American political and diplomatic decision-making, national and sectional interests, and a variety of personalities and social movements related to the development of the United States. Distinguishing characteristics of cultures are examined through literature, art, architecture, music, religion, philosophy and geography. Students will be required to write thoughtful and factually supported papers on historical topics.

AP/DE English 11 —1 high school credit (ENG 111: 3 College credits)

AP/DE English 11 incorporates the requirements for the regular English 11 classes in addition to extensive writing assignments and novel studies, as well as, summer reading assignments. This course introduces students to critical thinking and the fundamentals of academic writing. Through the writing process, students refine topics; develop and support ideas; investigate; evaluate and incorporate appropriate resources; edit for effective style and usage; and determine appropriate approaches for a variety of contexts, audiences, and purposes. Writing activities will include exposition and argumentation with at least one research project. SAT preparation will be included as a unit of study.

AP/DE Language and Composition—1 high school credit (ENG 112: 3 college credits)

This course offers advanced language studies and provides opportunities to practice a variety of rhetorical modes through assignment of frequent essays. Students read certain works of British, American, and world literature, and complete follow-up assignments requiring application of advanced techniques of literary analysis. A documented research paper and an oral presentation are required.

DE World Religions—1 high school credit (REL 231-232: 6 college credits)

This course is designed to focus on the origin, doctrine, and history of each religion. The student will take an in-depth view of the major religions and the effect they have had on the formation of governments and countries as well as what impact it has had on society through time. Additionally, this course is intended to help students to have a broader understanding of how and why people worship.

AP/DE Psychology—1 high school credit (PSY 200: 3 college credits)

This course introduces students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about ethics and methods psychologists use in their science and practice. Major topics in the course include methods, approaches and history; biological bases of behavior; sensation and perception; states of consciousness; learning; cognition; motivation and emotion; developmental psychology; personality; testing and individual differences; psychological disorders; treatment of psychological disorders; social psychology.

ACE ACADEMY SENIOR COURSE DESCRIPTIONS

AP/DE English 12—1 high school credit (ENG 243-244: 6 college credits)

This course engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone.

AP/DE US/VA Government—1 high school credit (PLS 211-212: 6 college credits)

AP/DE US/VA Government provides students with challenging assignments in reading, analysis, synthesis, writing, and speaking. Students examine the principles and practices of government, particularly of American government, at national, state, and local levels. The framework for this course includes units on the development of the theories of government, law and the justice system, and current domestic and foreign policy. Students will be required to differentiate among the operations of each of the levels of the United States Government.

ACE ACADEMY SENIOR COURSE DESCRIPTIONS (continued)

AP/DE Biology—1 high school credit (BIO 101-102: 8 college credits)

In this course, students are provided in-depth coverage of molecular biology, genetics, cellular biology, embryology, plant and animal physiology, and human anatomy and physiology. Experience will be provided in special techniques and laboratory materials and equipment used in modern biological research.

AP/DE Math Analysis/Pre-Calculus-1 High School Credit (MTH 167: 5 college credits) Prerequisite Trigonometry/Math Functions

Students enrolled in Mathematical Analysis are assumed to have mastered Algebra II concepts and have some exposure to trigonometry. Mathematical Analysis develops students' understanding of algebraic and transcendental functions, parametric and polar equations, sequences and series, and vectors. The content of this course serves as appropriate preparation for a calculus course. This is a year-long class combined with calculus.

AP/DE Calculus –1 high school credit (MTH 263 & 264: 6 college credits) Prerequisite Math Analysis/Pre-calculus

AP/DE Calculus extends the theory of elementary functions. Topics include: derivatives of algebraic functions, and transcendental functions; derivatives of the sum, difference, product, quotient and power of algebraic/ transcendental functions; the definite integral and improper integrals and concepts related to integration; logarithmic differentiation; techniques of integration; differential equations, and applications of the derivative and the definite integral. Both applications and formal proof are emphasized. This is a year-long class combined with Pre-Calculus.

Information Literacy — 1/2 high school credit (ITE 119: 3 College credits)

Presents the information literacy core competencies focusing on the use of information technology skills. Skills and knowledge will be developed in database searching, computer applications, information security, and privacy, and intellectual property issues.

Music Appreciation 1—1/2 high school credit (MUS 121—3 college credits)

Increases the variety and depth of the student's interest, knowledge, and involvement in music and related cultural activities. Acquaints the student with traditional and twentieth century music literature, emphasizing the relationship music has as an art form with man and society. Increases the student's awareness of the composers and performers of all eras through listening and concert experiences.

Introduction to Communication-1/2 high school credit (CST 110)-3 college credits)

Examines the elements affecting speech communication at the individual, small group and public communication levels with emphasis on practice of communication at each level.

HLT 116 – Introduction to Personal Wellness Concepts

Introduces students to dimensions of wellness including the physical, emotional, environmental, spiritual, occupational and social components.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)

Notice for Directory Information

The *Family Educational Rights and Privacy Act (FERPA)*, a Federal law, requires that Henry County Public Schools, with certain exceptions, obtain a parent's or legal guardian's written consent prior to the disclosure of personally identifiable information from their child's education records. However, Henry County Public Schools may disclose appropriately designated "directory information" without written consent, unless parents or guardians have advised the school division to the contrary in accordance with procedures. The primary purpose of directory information is to allow Henry County Public Schools to include this type of information from students' education records in certain school publications. Examples include:

- A playbill, showing your student's role in a drama production
- The annual yearbook
- Honor roll or other recognition lists
- Graduation programs
- Sports activity sheets, such as for wrestling, showing weight and height of team members

Directory information, which is information that is generally not considered harmful or an invasion of privacy if released, can also be disclosed to outside organizations without a parent's prior written consent. Outside organizations include, but are not limited to, companies that manufacture class rings or publish yearbooks. In addition, two federal laws require local educational agencies (LEAs) receiving assistance under the *Elementary and Secondary Education Act of 1965 (ESEA)* to provide military recruiters, upon request, with three directory information categories – names, addresses and telephone listings – unless parents have advised Henry County Public Schools that they do not want their student's information disclosed without their prior written consent.¹ If parents do not want Henry County Public Schools to disclose directory information from their child's education records without their prior written consent, they must notify the school division in writing. Henry County Public Schools has designated the following information as directory information:

- Student's name
- Address
- Telephone listing

¹These laws are: Section 9528 of the ESEA (20 U.S.C. 7908) as amended by the *No Child Left Behind Act of 2001* (P.L. 107-110), the education bill, and 10 U.S.C. 503, as amended by section 544, the *National Defense Authorization Act for Fiscal Year 2002* (P.L. 107-107), the legislation that provides funding for the Nation's armed forces.

AHERA Notification Concerning Asbestos Materials in School Buildings

All Henry County Public Schools have been inspected for presence of asbestos containing materials. The results of these inspections have been compiled into a management plan for each school. These management plans are available in the main office of each school for inspection. Any individual who wishes may review these plans. Each six months, a specified maintenance technician inspects the building and assesses any building materials still containing asbestos. The technician verifies that the materials have not been damaged, deteriorated, or become friable by any other means causing a hazard to the occupants of the building. Should any situation be detected, it would be dealt with quickly by a trained and licensed abatement professional. Additionally, each three years, an independent contractor, who is trained and licensed in asbestos inspections and abatement, is employed to inspect each school to ensure the asbestos containment and that the removal plans are being followed. Also, this contractor reports any building materials containing asbestos that might become a hazard.