

# Pittsylvania County Schools

## *High School Course Selection Guide*



**2019**



**2020**





# PITTSYLVANIA COUNTY SCHOOLS

P.O. Box 232 39 Bank Street S.E. Chatham, Virginia 24531

February 2019

Dear Students, Parents and Guardians:

The *Course Selection Guide* for Pittsylvania County High Schools is provided to serve as a guide to the regulations, procedures, and programs offered in the high schools. We hope you will use this document for a reference as you plan your high school sequence of courses. Both general and specific information about curricular offerings and services are provided. In our efforts to be clear and concise, we have written brief, objective descriptions of the many elements of the programs. You may obtain more information on most of the topics by contacting the guidance counselor at each of the high schools.

The *Course Selection Guide 2019-20* will simplify the process in which the planning and selection of a challenging course of study is conducted for each student. All students have many choices as they pursue their interests and expand their experiences. By working together, the student, the parents, and the counselor can plan the student's years in school and can make appropriate revisions along the way. The student's long-range goals, as well as the very important requirements for graduation, should guide decision-making, and this document supports that process. Contact with the Guidance Office will reveal many other supports, such as providing small-group tutorial assistance in many departments in which students are preparing for end-of-course tests.

Contained in this booklet, you will find listings of courses offered. These courses reflect the unique direction the school has taken in meeting the specific needs of the students and in capitalizing on the strengths and interests of the staff. By following the mission set forth in Pittsylvania County Schools' Strategic Plan, *to educate and nurture students to be successful and productive citizens*, these programs are revised and courses are added each year to reflect the expectations of an ever-changing world.

We encourage you to maintain communication with the staff through orientations, Open House, parent-teacher conferences, and other scheduled opportunities. You may also contact and schedule an individual appointment with school staff.

We hope you take advantage of the many opportunities available to you during these years of high school. You play a vital role in your education.

Sincerely,

Mark R. Jones  
Division Superintendent

**TELEPHONE NUMBERS: (434) 432-2761 • (434) 793-1624 (Danville) • (434) 630-1817 (Gretna) • FAX (434) 432-9560**

Pittsylvania County Schools do not discriminate on the basis of gender, age, color, religion, qualified disabling condition, or national origin in employment or in its educational programs and activities.



All students need to select courses in terms of sequence and relate courses to a possible post high school career choice. Early program planning can have a substantial impact on the development of a good education and career plan for students in high schools. Parent involvement is a significant aspect of the planning process.

On the succeeding pages, the school division's graduation requirements are followed by a listing of all courses in the high school curriculum. A variety of elective courses is offered. The listing contains titles, course numbers, and grade(s) in which students may select a particular course. Credit value, prerequisites to enroll, and a brief description of each course is provided.

An Academic & Career Plan (ACP) has been created to assist the student and parent(s) in developing a five-year program of study. This guide is located on page 4 of the course selection guide. This planning guide should be maintained in the student's guidance folder and a copy retained by the student and parent(s). The student and parent(s) should review and update the plan yearly.

This Course Selection Guide should be kept in a safe place to be used as a reference in future scheduling.

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# Career Planning

## JUMP-START A RIGOROUS HIGH SCHOOL PROGRAM OF STUDY

### *Early College Scholars: How to be Successful*

**WHAT:** The primary goal of *Early College Scholars* is to increase the number of high school graduates who successfully complete a specified program of academic courses that are designed to prepare them to enter community colleges and universities ready to succeed. *Early College Scholars* is targeted to "middle majority" and first generation college-bound students. *Early College Scholars* is part of a statewide initiative that uses business leaders to motivate students, beginning with the eighth grade, to complete a rigorous course of study in high school. This rigorous preparation will give students a boost in college and in their chosen career. The *Early College Scholars* program recognizes and certifies student completion of post-secondary courses and provides access to virtual Advanced Placement Courses.

**WHY:** *Early College Scholars* program provides a framework to promote a rigorous high school course of study. Research shows that completing a challenging high school program of study can increase wages both for students who enroll in and complete post-secondary education, and for students who enter the workforce directly from high school. Students who are Pell-Grant eligible qualify for federal grants worth between \$750 and \$6,095. The majority of jobs that will be available for students in the future will require some level of post-secondary training.

**HOW:** Students designated as *Early College Scholars* must successfully complete program parameters as defined on the next page.

### **Pittsylvania County**

## Strategic Plan for Education

**Vision -** To be recognized as having an innovative, challenging and exemplary school system.

**Mission -** To educate and nurture students to be successful and productive citizens.

### **Students**

▶▶ Each student at the grade level/subject area tested will attain state-identified level of proficiency for the Standards of Learning.

▶▶ Each student will be promoted based on a documented assessment of proficiency on grade level/subject content.

▶▶ Each student entering 8th grade will graduate on schedule by passing all courses taken and receiving verified credits for all applicable subjects.

▶▶ Each student will attend scheduled classes on a daily basis.

▶▶ Each student will adhere to the code of conduct by receiving no discipline referrals.

▶▶ Each student will be an active participant in physical fitness programs through classes and organized activities.

### **Graduates**

▶▶ Each graduate will require no remediation or retraining for entering higher education, the workforce or the military.

▶▶ Each graduate will display life skills through oral and written communications, mathematical and technical applications and human relations.

▶▶ Each graduate will exhibit civic responsibility and awareness of diverse cultures through participation in school/community activities.

▶▶ Each graduate will demonstrate a knowledge of computer technology as it applies to the use of computer hardware and software in a modern business, industry or education environment as measured by a technology skills assessment during the senior year.

## Early College Scholars

The *Early College Scholars* program allows eligible high school students to earn at least 15 hours of transferable college credit while completing the requirements for an Advanced Studies Diploma. The result is a more productive senior year and a substantial reduction in college tuition. To qualify for the *Early College Scholars* program, a student must:

- Have a "B" average or better;
- Be pursuing an Advanced Studies Diploma; and
- Take and complete college-level course work (i.e., Advanced Placement, International Baccalaureate, Cambridge, or dual enrollment) that will earn at least 15 transferable college credits.

### **Early College Scholars Agreement**

Participating students sign an *Early College Scholars* Agreement, which is also signed by the student's parents or guardians, principal, and school counselor. Students who meet the terms of the agreement are recognized as *Early College Scholars* and receive a certificate of recognition from the Governor.

## Commonwealth Scholars

*From Competence to Excellence*

### **Core Course of Study**



Commonwealth Scholars take this rigorous curriculum in high school - which is patterned after the recommendation of the National Commission on Excellence in Education. Requirements for a Virginia high school diploma, including verified credits, must be met for recognition as a Commonwealth Scholar. Commonwealth Scholars must successfully complete these specific core courses:

English	4 Courses	
Mathematics	3 Courses	Algebra I Geometry Algebra II
Laboratory Science	3 Courses	Biology Chemistry Physics
History & Social Science	4 Courses	<i>Chosen from:</i> VA & US History World History VA & US Government Economics Financial Literacy
Fine Arts or Career & Technical Education	1 Course	
Foreign Language	2 Courses	<i>In the same language</i>



## GOVERNOR'S *EARLY COLLEGE SCHOLARS* AGREEMENT

The responsibilities of each party are outlined herein and the corresponding signature assures acceptance of responsibility of each party.

### The student agrees to:

- Earn an Advanced Studies Diploma with a Governor's Seal;  
To receive a Governor's seal, students must:
  - Complete the requirements for the Advanced Studies Diploma;
  - Earn a "B" average or higher; and
  - Successfully complete at least one Advanced Placement course (AP), International Baccalaureate (IB), or one college-level course for credit
- Earn at least 15 transferable college credits while enrolled in high school. College credits toward completion of this Agreement will be considered earned by:
  - Completing dual enrollment/dual credit courses and earning a "C" or better in the courses
  - Completing advanced placement courses i.e., AP, IB or Cambridge **and**
    - Scoring a "3" or higher on the AP examinations **or**
    - Scoring a "4" or higher on any form of the IB examinations **or**
    - Scoring a "D" or better on the Cambridge examinations
  - Earning college credits by passing College Level Examination Program (CLEP) examinations
  - Completing college-level courses and documenting credit awarded
- Apply and be accepted to a college or university

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

### The parent/guardian agrees to:

- Support and monitor student's academic work and progress in school, particularly as it relates to fulfillment of the requirements for the Governor's *Early College Scholars* Agreement.

I understand that the actual number of transferable college credits awarded depends on the criteria of the admitting college or university.

\_\_\_\_\_  
Parent/Guardian Signature

\_\_\_\_\_  
Date

### The high school agrees to:

- Provide the student opportunities to access college-level courses and/or advanced placement courses needed to fulfill this agreement.
- Provide the counseling services needed to fulfill the requirements of the Governor's *Early College Scholars* Agreement, including assisting students in developing a program of study.
- Provide the Virginia Department of Education with data regarding participation and completion of the Governor's *Early College Scholars* program.

\_\_\_\_\_  
High School Principal Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
High School Guidance Counselor

\_\_\_\_\_  
Date



# Profile of a Virginia Graduate

Virginia's revised graduation requirements maintain high expectations for learning in English, math, science and history/social science while reducing the number of Standards of Learning (SOL) tests students must pass to earn a high school diploma. The new standards also implement the "Profile of a Virginia Graduate."

## Profile of a Virginia Graduate

A student meeting the Profile of a Virginia Graduate has achieved the commonwealth's high academic standards and graduates with workplace skills, a sense of community and civic responsibility and a career plan aligned with his or her interests and experiences.

### The Five C's

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

- **C**ritical thinking
- **C**reative thinking
- **C**ommunication
- **C**ollaboration
- **C**itizenship

## Profile of a Virginia Graduate

*In Virginia, the Life Ready Individual Will  
During His or Her K-12 Experience:*



## 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 a life beyond high school graduation.
- Explores multiple subject areas that reflect personal interests and abilities

## COMMUNITY ENGAGEMENT AND 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.

## 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.

## CAREER PLANNING

- 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.

**C**ritical thinking -- **C**reative thinking -- **C**ommunication -- **C**ollaboration -- **C**itizenship



Student Name Initiation Date Review Date Review Date Graduation Date	<b>Pittsylvania County Schools</b>  <b>ACADEMIC &amp; CAREER PLAN</b> <b>(ACP)</b>	Graduate of Merit Career Cluster Career Goal
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**SECONDARY AND POSTSECONDARY CAREER PATHWAYS**

Agriculture, Food & Natural Resources Cluster	Education & Training Cluster	Hospitality & Tourism Cluster	Manufacturing Cluster
Architectural & Construction Cluster	Finance Cluster	Human Services Cluster	Marketing, Sales & Service Cluster
Arts, A/V Technology & Communication Cluster	Government & Public Administration Cluster	Information Technology Cluster	Science, Technology, Engineering & Mathematics Cluster
Business, Management & Administration Cluster	Health Science Cluster	Law & Public Safety, Corrections & Security Cluster	Transportation, Distribution & Logistics Cluster

SECONDARY EDUCATION			
GOAL	DIPLOMA TYPE		DIPLOMA RECOGNITION
	<input type="checkbox"/> Standard	<input type="checkbox"/> Advanced	<input type="checkbox"/> Early College Scholars <input type="checkbox"/> Commonwealth Scholars
<b>POST SECONDARY GOAL</b>	<input type="checkbox"/> 4-Year College/University	<input type="checkbox"/> 2-Year Community College/Technical Program	Diploma Seal(s) Earned:
	Selected Military Branch: Other:		
<b>TEST DATA</b>	<input type="checkbox"/> PSAT	<input type="checkbox"/> SAT	Other:
<b>CAREER ASSESSMENT</b>	Career Assessment Information: Industry Certification/Date:		

PROGRAM OF STUDY							
GRADE	ENGLISH/ LANGUAGE ARTS	MATHEMATICS	SCIENCE	SOCIAL STUDIES/ SCIENCE	HEALTH AND PHYSICAL EDUCATION	OTHER REQUIRED COURSES	RECOMMENDED ELECTIVES and CAREER AND TECHNICAL COURSES
8	English:						
9	English:						
10	English:						
11	English:						
12	English:						
Verified Credits							
Optional School Based & Non-School Based Activities	Extracurricular Activities (clubs, organizations, offices held): Career & Technical Student Organizations: Work-Based Learning Experience: Community Service Hours:						

Colleges/Universities of Interest			
Name of College	Early Decision/ Application Deadline	Date Transcript Sent	Comments

Parent's/Guardian's Signature	Student's Signature
School Official's Signature	Date Initiated
	Date Reviewed
	Date Reviewed



# Graduate of Merit

## PROGRAM

- ♦ Graduates who attain a specified point total accumulated during their high school studies qualify as a Pittsylvania County Graduate of Merit.
- ♦ Points are earned throughout the time that the student is enrolled in grades 9-12. Areas evaluated for inclusion extend beyond the academic area to include attainment in other areas perceived as relating to life success.

## OBJECTIVES

- ♦ To recognize and acknowledge accomplishments of graduates who exemplify attributes of achievement, proficiency, character and social development
- ♦ To provide additional insight into credentials of individuals who demonstrate qualities and traits beyond those of fellow graduates
- ♦ To provide prospective employers with an avenue to evaluate candidates for further employment through this recognition
- ♦ To allow area businesses the opportunity to stress to graduates the need for qualities essential to employment success

## COMPONENTS

- ♦ Grade Point Average
- ♦ Total Courses
- ♦ Course Work
- ♦ Attendance
- ♦ Conduct
- ♦ Community Service
- ♦ School Activities



## ROLE OF BUSINESS

- ♦ The program is sponsored concordantly between the school division and the business community. Each participating business will be recognized as a sponsor of the "Graduate of Merit."

## RECOGNITION/ ACKNOWLEDGMENT

- ♦ Each recipient will be honored during a public ceremony/banquet. This event is to be held at the end of the final semester and attended by the students, parents, business sponsors and school officials.
- ♦ Permanent notation will be located at the respective schools and businesses.
- ♦ Each recipient will receive an engraved medallion to be worn during commencement exercises and a recognition plaque.

Web site: <http://www.pcs.k12.va.us/merit/>

*Pittsylvania County Schools' Graduate of Merit Program  
was the recipient of the*

**2000 Horizon Award Governor's  
Partnership in Education**

*Presented by Governor Jim Gilmore*

## QUALIFICATIONS

To be awarded a **Graduate of Merit**, the student is required to earn a minimum of **170 points** from the following categories:

FINAL GRADE POINT AVERAGE	
40 points + possible additional points	<ul style="list-style-type: none"> <li>♦ 10 points per year for attaining a 3.0 average or above - <b>40 points</b></li> <li>♦ 1 additional point awarded for each tenth of a point cumulative average above 3.0 after final GPA averages have been calculated - <b>Variable points awarded</b></li> </ul>
TOTAL COURSES	
20 points maximum	♦ 5 points per year in which a student takes a full complement of credit-bearing courses
COURSEWORK	
20 points maximum	♦ 5 points per year in which all courses are passed
ATTENDANCE	
20 points + possible additional points	<ul style="list-style-type: none"> <li>♦ 5 points per year with 95% or above attendance average - <b>20 points</b></li> <li>♦ 1 additional point per each percent above 95% (cumulative four-year average) - <b>5 points</b></li> </ul>
CONDUCT	
20 points maximum	♦ 5 points each year absent bus suspensions and/or out-of-school suspensions
COMMUNITY SERVICE	
50 points maximum	♦ 10 points per 25 hours of service - <b>Maximum 50 points</b>
SCHOOL ACTIVITIES	
20 points maximum	♦ 5 points per year in which student participated in four or more activities - curricular and extra-curricular (clubs & sports) <u>sponsored by the school</u> . Participation shall be defined as a member in good standing.
GRAND TOTAL of POINTS	
<b>170 minimum points</b>	<ul style="list-style-type: none"> <li>♦ The student is required to earn a <b>minimum of 170 total points to qualify.</b></li> <li>♦ Points must be earned from each category.</li> </ul>

## GUIDELINES

- ♦ **Application (including the community service log) must be submitted to guidance by last day of first semester, senior year.**
- ♦ **Points must be earned from each category.**
- ♦ Community service is defined as volunteer or non-paying activities (home, church and community) performed that are beneficial to both parties.
  1. Community service would be validated at the end of each 25 hours earned and documented on the form provided.
  2. Community service hours earned as part of the requirements in other organizations would not be counted towards **Graduate of Merit** certification.
- ♦ **Must attach completed Community Service log to application.**



# Pittsylvania County Schools Graduate of Merit Program



Must be submitted to guidance by

- ★ Last day of September, senior year for **EARLY CANDIDATE CONSIDERATION** (includes completed application and community service log to date) OR
- ★ Last day of first semester, senior year



Type or print legibly

Applicant's Full Name \_\_\_\_\_ (Last) \_\_\_\_\_ (First) \_\_\_\_\_ (M.I.)

Present Address \_\_\_\_\_ (Street) \_\_\_\_\_ (City) \_\_\_\_\_ (State) \_\_\_\_\_ (Zip)

Telephone Number ( ) \_\_\_\_\_ Present Grade \_\_\_\_\_

High School ☐ Chatham ☐ Dan River ☐ Gretna ☐ Tunstall

## CATEGORIES:

A - FINAL GRADE POINT AVERAGE (10 points per year with 3.0 or better average)					
9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>	Final GPA *	GRAND TOTAL ** of Points Earned
Total Points					

\*Add one additional point for each tenth of a point cumulative average above 3.0 after final 12<sup>th</sup> grade GPA averages have been calculated.

\*\*9<sup>th</sup> grade points + 10<sup>th</sup> grade points + 11<sup>th</sup> grade points + 12<sup>th</sup> grade points + Final GPA Points = Grand Total in Category A

B - TOTAL COURSES (5 points per year in which student takes a full complement of credit-bearing classes)				
9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>	GRAND TOTAL * of Points Earned
Total Courses				
Total Points				

\*9<sup>th</sup> grade points + 10<sup>th</sup> grade points + 11<sup>th</sup> grade points + 12<sup>th</sup> grade points = Grand Total in Category B

C - COURSE WORK (5 points per year in which all courses are passed)				
9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>	GRAND TOTAL * of Points Earned
Taken				
Passed				
Total Points				

\*9<sup>th</sup> grade points + 10<sup>th</sup> grade points + 11<sup>th</sup> grade points + 12<sup>th</sup> grade points = Grand Total in Category C

D - ATTENDANCE (5 points per year with 95% or above attendance average)					
9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>	Final Attendance Average*	GRAND TOTAL ** of Points Earned
ATT					
Total Points					

\*Add one additional point for each percent above 95% for the four-year cumulative average.

\*\*9<sup>th</sup> grade points + 10<sup>th</sup> grade points + 11<sup>th</sup> grade points + 12<sup>th</sup> grade points + Final Attendance Points = Grand Total in Category D

E - CONDUCT (5 points per year absent bus suspensions and/or out-of-school suspensions)					
9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>		GRAND TOTAL * of Points Earned
Bus Suspensions					
School Suspensions					
Total Points					

\*9<sup>th</sup> grade points + 10<sup>th</sup> grade points + 11<sup>th</sup> grade points + 12<sup>th</sup> grade points = Grand Total in Category E

F - COMMUNITY SERVICE (10 points per 25 hours of community service) - MAXIMUM 50 POINTS (Additional community services hours beyond the maximum are advantageous to students for scholarships and may be used for possible tie breaker in awards.)					
9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>		GRAND TOTAL * of Points Earned
Hours					
Total Points					

\*9<sup>th</sup> grade points + 10<sup>th</sup> grade points + 11<sup>th</sup> grade points + 12<sup>th</sup> grade points = Grand Total in Category F

G - SCHOOL ACTIVITIES (5 points per year in which student participates in four or more activities [participation shall be defined as a member in good standing])					
9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>		GRAND TOTAL * of Points Earned
Activities					
Total Points					

\*9<sup>th</sup> grade points + 10<sup>th</sup> grade points + 11<sup>th</sup> grade points + 12<sup>th</sup> grade points = Grand Total in Category G

GRAND TOTAL of Points Earned From All Categories	
Beginning with the Graduating Class of 2013, the student is required to earn a minimum of 170 total points to qualify.	

## GUIDELINES:

- ◆ Students must earn a minimum of 170 points to qualify.
- ◆ Points must be earned from each category.
- ◆ Community service is defined as volunteer or non-paying activities (home, church, and community) performed that are beneficial to both parties.
  - ✓ Community service would be validated at the end of each 25 hours earned and documented on the form provided.
  - ✓ Community service hours earned as part of the requirements in other organizations would not be counted towards Graduate of Merit certification.





# Diploma Options



## STANDARD DIPLOMA

To graduate from high school, a student shall meet the requirements for the 22-credit diploma. (See chart)

Students who will graduate with a standard diploma are required to have earned at least two (2) sequential electives.

## ADVANCED DIPLOMA

As an elective for students, each high school shall offer an Advanced Studies Program. For students entering 9th grade prior to 2011-2012, advanced diploma graduates are required to earn 24 units of credit. For students entering 9th grade beginning in 2011-2012, advanced diploma graduates are required to earn 26 units of credit. (See chart on next page.)

## APPLIED STUDIES DIPLOMA

Students with disabilities who complete the requirements of their Individualized Education Program (IEP) and do not meet the requirements for other diplomas shall be awarded an Applied Studies Diploma.

New standards for Accrediting Public Schools in Virginia require all students to take end-of-course tests **IN ALL COURSES WHERE SUCH TESTS EXIST until the required number of verified credits in each discipline has been obtained.** Beginning with the ninth grade class of 2000-2001, a student who receives a **standard diploma** will be required to pass six (6) end-of-course SOL tests. A student who receives an **advanced diploma** must pass nine (9) SOL tests. For students entering 9th grade beginning in 2018-2019, five (5) SOL tests must be passed to receive a Standard or Advanced Diploma. See the Standard & Advanced Diploma charts for specific diploma requirements.

### COURSES THAT HAVE END-OF-COURSE TESTS

The Board of Education has approved additional tests for the purpose of awarding verified credit. A list of tests is available in the guidance department.

#### Science - 3 tests

Earth Science  
Biology  
Chemistry

#### Mathematics - 3 tests

Algebra I  
Geometry  
Algebra II

#### History & Social Science - 3 tests

World History & Geography to 1500 AD  
World History & Geography 1500 AD to Present  
U. S. History

#### English 11 - 2 tests

Writing Test - includes multiple choice, technology-enhanced questions and response to a persuasive writing prompt  
Reading Test

## STANDARD DIPLOMA

Beginning with students entering ninth grade for the **first time in 2013-2014**, a student must also:

- Earn a board-approved career and technical education credential to graduate with a Standard Diploma; and
- Successfully complete one virtual course, which may be non-credit bearing.

Beginning with students entering ninth grade for the **first time in 2016-2017** school year, a student must 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.

Beginning with students entering ninth grade for the **first time in 2018-2019** school year, a student shall:

- Either complete an Advanced Placement, honors or International Baccalaureate course, or earn a career and technical education credential; and
- Shall acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication and citizenship (Five Cs).

Discipline Area	For students entering 9th grade BEGINNING IN 2011-2012		For students entering 9th grade BEGINNING IN 2018-2019	
	Units of Credit	# of Verified Units Required	Units of Credit	# of Verified Units Required
English	4	2	4	2
Mathematics	3 <sup>1</sup>	1	3 <sup>1</sup>	1
Laboratory Science <sup>6</sup>	3 <sup>2</sup>	1	3 <sup>2</sup>	1
History & Social Sciences <sup>6</sup>	3 <sup>3</sup>	1	3 <sup>3</sup>	1
Health & Physical Ed.	2		2	
Foreign Language, Fine Arts or Career & Technical Ed.	2 <sup>7</sup>		2 <sup>7</sup>	
Economics & Personal Finance	1		1	
Electives	4 <sup>4</sup>		4 <sup>4</sup>	
Student Selected Test		1 <sup>5</sup>		
TOTAL	22	6	22	5
<p>Verified units of credit (VC) are awarded upon successful completion of a core academic class and passing the corresponding Standards of Learning (SOL) end-of-course test.</p> <p><sup>6</sup> Students who complete a career and technical education program sequence and pass a Board of Education approved industry certification, occupational competency assessment, or licensure 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 as an additional test to verify student achievement.</p> <p><b>Beginning with the ninth grade class of 2011-2012</b>, students shall earn the required verified units of credit described above.</p> <p><sup>1</sup> At Algebra I and above to include two different selections from Algebra I, Geometry, Algebra, Functions and Data Analysis, Algebra II or other courses above the level of Algebra II.</p> <p><sup>2</sup> Courses from at least two different science disciplines from Earth Science, Biology, Chemistry or Physics</p> <p><sup>3</sup> World History &amp; Geography to 1500 AD or World History &amp; Geography 1500 AD to Present, VA/US History, VA/US Government</p> <p><sup>4</sup> Courses to satisfy this requirement shall include at least two sequential electives.</p> <p><sup>5</sup> May utilize additional tests for earning verified credit in computer science, technology, career and technical education (CTE) and economics.</p> <p><sup>7</sup> Credits earned shall include one credit in fine or performing arts or CTE.</p> <p><b>Beginning with the ninth grade class of 2018-2019</b>, students shall earn the required verified units of credit described above.</p> <p><sup>1</sup> At Algebra I and above to include two different selections from Algebra I, Geometry, Algebra, Functions and Data Analysis, Algebra II or other courses above the level of Algebra II. A computer science course credit earned by students may be considered a mathematics course credit.</p> <p><sup>2</sup> Courses from at least two different science disciplines from Earth Science, Biology, Chemistry or Physics. A computer science course credit earned by students may be considered a science course credit.</p> <p><sup>3</sup> World History &amp; Geography to 1500 AD or World History &amp; Geography 1500 AD to Present, VA/US History, VA/US Government</p> <p><sup>4</sup> Courses to satisfy this requirement shall include at least two sequential electives.</p> <p><sup>7</sup> Credits earned shall include one credit in fine or performing arts or CTE. A computer science course credit earned by students may be considered a career and technical course credit.</p>				



# ADVANCED STUDIES DIPLOMA

Beginning with students entering ninth grade for the **first time in 2013-2014**, a student must successfully complete one virtual course, which may be non-credit bearing, to graduate with an Advanced Studies Diploma.

Beginning with students entering ninth grade for the **first time in 2016-2017** school year, a student must 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.

Beginning with students entering ninth grade for the **first time in 2018-2019** school year, a student shall:

- Either complete an Advanced Placement, honors or International Baccalaureate course, or earn a career and technical education credential; and
- Shall acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication and citizenship (Five Cs).

Discipline Area	For students entering 9th grade BEGINNING IN 2011-2012		For students entering 9th grade BEGINNING IN 2018-2019	
	Units of Credit	# of Verified Units Required	Units of Credit	# of Verified Units Required
English	4	2	4	2
Mathematics	4 <sup>1</sup>	2	4 <sup>1</sup>	1
Laboratory Science <sup>6</sup>	4 <sup>2</sup>	2	4 <sup>2</sup>	1
History & Social Sciences <sup>6</sup>	4 <sup>3</sup>	2	4 <sup>3</sup>	1
Foreign Language	3 <sup>4</sup>		3 <sup>4</sup>	
Health & Physical Ed.	2		2	
Fine Arts or Career & Technical Ed.	1		1	
Economics & Personal Finance	1		1	
Electives	3		3	
Student Selected Test		1 <sup>5</sup>		
<b>TOTAL</b>	<b>26</b>	<b>9</b>	<b>26</b>	<b>5</b>
<p>Verified units of credit (VC) are awarded upon successful completion of a core academic class and passing the corresponding Standards of Learning (SOL) end-of-course test.</p> <p><b>ELECTIVES:</b> Fine Arts and CTE: require one standard unit Foreign Language: require either three years of one foreign language or two years of two languages See #6 under Standard Diploma.</p> <p><b>Beginning with the ninth grade class of 2011-2012</b>, students shall earn the required verified units of credit described above.</p> <p><sup>1</sup> At Algebra I and above to include three selections from Algebra I, Algebra Functions, Geometry, Algebra II or other courses above the level of Algebra II.</p> <p><sup>2</sup> Courses from at least three different science disciplines from Earth Science, Biology, Chemistry or Physics</p> <p><sup>3</sup> World History &amp; Geography to 1500 AD, World History &amp; Geography 1500 AD to Present, VA/US History, VA/US Government</p> <p><sup>4</sup> Three years of one language or two years of two languages</p> <p><sup>5</sup> May utilize additional tests for earning verified credit in computer science, technology, career and technical education and economics.</p> <p><b>Beginning with the ninth grade class of 2018-2019</b>, students shall earn the required verified units of credit described above.</p> <p><sup>1</sup> At Algebra I and above to include three selections from Algebra I, Geometry, Algebra, Functions and Data Analysis, Algebra II or other courses above the level of Algebra II. A computer science course credit earned by students may be considered a mathematics course credit.</p> <p><sup>2</sup> Courses from at least three different science disciplines from Earth Science, Biology, Chemistry or Physics. A computer science course credit earned by students may be considered a science course credit.</p> <p><sup>3</sup> World History &amp; Geography to 1500 AD, World History &amp; Geography 1500 AD to Present, VA/US History, VA/US Government</p> <p><sup>4</sup> Three years of one language or two years of two languages</p>				

## PROGRAM OF INSTRUCTION

Pittsylvania County secondary schools shall provide each student a program of instruction in the academic areas of English, mathematics, science, and history/social science that enables each student to meet the graduation requirements described in 8 VAC 20-131-50 and shall offer opportunities for students to pursue a program of studies in academics, fine arts, and career and technical areas including:

1. Career and technical education choices that prepare the student as a career and technical education program completer in one of three or more occupational areas and that prepare the student for technical or preprofessional postsecondary programs;
2. Course work and experiences that prepare the student for college-level studies including access to at least three (3) advanced placement courses or three (3) college-level courses for credit;
3. Preparation for college admissions tests; and
4. Opportunities to study and explore the fine arts.

*Regulations Establishing Standards for Accrediting Public Schools in Virginia 8 VAC 20-131-10 et seq.*

## CERTIFICATES

Students who do not earn units of credit or complete the requirements of their individualized education program do not qualify for diplomas, but do qualify for certificates if they complete a prescribed course of study as defined by the local school board.

## Credits Required for Graduation Notification

Students with disabilities who have an IEP and who fail to meet the requirements for graduation have the right to a free and appropriate education to age 21, inclusive.

Students who fail to graduate or to achieve the number of verified units of credit required for graduation and who have not reached 20 years of age on or before August 1<sup>st</sup> of the school year have the right to a free public education. If the student is one for whom English is a second language, the student's opportunity for a free public education is in accordance with Va. § Code 22.1-5.

## CREDITS

### Credits Required for Promotion

Grade 9 to Grade 10	6 credits + 1 verified
Grade 10 to Grade 11	12 credits + 2 verified
Grade 11 to Grade 12	Eligible to graduate at the conclusion of the school year.





## GENERAL ACHIEVEMENT ADULT HIGH SCHOOL DIPLOMA (GAAHSD)

The GAAHSD is intended to provide a diploma option for high school dropouts and individuals who exit high school without a diploma. It should not be a first option for high school students.

Individuals who are at least 18 years of age and not enrolled in public school or not otherwise meeting the compulsory school attendance requirements set forth in the Code of Virginia 22.1-254 shall be eligible to earn the GAAHSD. Diploma candidates may be individuals who are of the age (who has not reach twenty years of age on or before August 1 of the school year) to enroll in a public school whether they choose to enroll or not; or individuals who because of their age are not eligible to enroll in a public school.

Requirements for the award of a GAAHSD have been established by the Board of Education. To receive this diploma candidates should have (i) achieved a passing score on the GED® examination; (ii) successfully completed an education and training program designated by the Board of Education; earned a Board of Education-approved career and technical education credential such as the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness skills assessment.

Current credit and assessment requirements for graduation with a GAAHSD are as noted.

Discipline Area	Standard Units of Credit Required	Assessment Required
English	4	Achieve a passing score on the GED® examination
Mathematics <sup>1</sup>	3	
Science <sup>1</sup>	2	
History & Social Science <sup>2</sup>	2	
Electives <sup>3</sup>	9	
<b>TOTAL</b>	<b>20</b>	

1 - Shall include content in mathematics/science courses that incorporate or exceed the content of courses approved by the Board to satisfy any other Board-recognized diploma.

2 - Shall include one unit of credit in Virginia and U. S. History and one unit of credit in Virginia and U. S. Government in courses that incorporate or exceed the content of courses approved by the Board to satisfy any other Board-recognized diploma.

3 - Shall include at least two sequential electives in an area of concentration or specialization, which may include career and technical education and training.

## GRADING SYSTEM

The following marking system shall be used in evaluating student's work, reporting to parents and completing other school reports:

A = Excellent (94-100)  
B = Good (86 - 93)  
C = Average (78 - 85)  
D = Experiencing Difficulty (70 - 77)  
F = Failing (Below 70)  
W = Withheld

The teacher will use the numerical grade in his/her grade book. All grades should be recorded on report cards and permanent records as letter grades.

Conduct shall be graded as follows:

S = Satisfactory  
N = Needs Improvement (*Pending board approval*)  
U = Unsatisfactory

At the end of the third week of each six weeks marking period, school-developed interim reports will be sent to parents of students in grades 9-12. At the end of each six weeks marking period, grades will be recorded on the student's report card.

At the end of each semester, the final grade and the cumulative course credits will be recorded on the student's cumulative record.

No high school student will be exempt from taking an examination in a course with the exception of a student, regardless of grade level, who has (1) received a passing score on an end-of-course Standards of Learning (SOL) test or an Industry Certification assessment or (2) earned an "A" average on the grades earned for the three six weeks of the semester, provided that the student

does not have the option of receiving a passing score on an end-of-course Standards of Learning test or an Industry Certification assessment. A student who is eligible to take an end-of-course Standards of Learning test or an Industry Certification test must take the test as a means of exempting the exam; the student may not use an "A" average as a means of exempting the exam. *PCS policy IKH-PC on exam exemptions does not apply to Dual Enrollment courses. Dual enrollment courses must adhere to the exam policy of the higher education institution.*

The following method shall be used in determining the final grade for each student unless exceptions are deemed necessary and are approved by the teacher and principal:

- The six-weeks grade will be determined by the average of grades recorded during the six weeks. The weight of a specific grade will be determined by the nature and the content of the activity within the subject area.
- The three six-weeks grades will count 75% of the final grade and the exam 25% of the final grade.

Pittsylvania County Schools - Policy IKH-PC (Revised 11.12.18)

## CLASS RANK

**SINGLE RANKING SYSTEM** for the Graduates of 2003 and Beyond

### G.P.A. (Grade Point Average)

Total number of quality points divided by the number of credits attempted. The higher the average; the higher the rank. *See Points Per Credit.*

Points Per Credit	
Advanced & Advanced Placement Courses	All Other
A = 5	A = 4
B = 4	B = 3
C = 3	C = 2
D = 2	D = 1
F = 0	F = 0

### Valedictorian/Salutatorian

In case of a tie for the number one ranking, co-valedictorians shall be declared with no salutatorian. In case of a tie for the number two ranking, co-salutatorians shall be declared.

Valedictorians and salutatorians will be determined by class rank at the end of the first semester of the senior year.

### Piedmont Governor's School for Mathematics, Science and Technology Valedictorian/Salutatorian

Pittsylvania County Schools recognizes a valedictorian and salutatorian from the division's seniors attending the PGSMST. The ranking, calculated at the end of the fifth six weeks of the senior year, is based on the quality point average of courses taken at the Governor's School. In case of a tie see Valedictorian/Salutatorian criteria above.

### Academy for Engineering and Technology Valedictorian/Salutatorian

The Academy recognizes a valedictorian and salutatorian from the combined senior cohort from Pittsylvania County Schools and Danville Public Schools.

### Honor Graduates

To qualify as an honor graduate, the student must acquire a 3.2 average on all units of credit attempted for subjects which are designated as ninth grade or above and must have a good conduct record.

The first semester grade of each senior shall be averaged with his previous yearly averages to determine the selection of honor graduates.

## ADVANCED COURSES

Advanced courses carry special grade point value. Recommended criteria for course enrollment is as follows:

- ◆ Designated performance on standardized tests
- ◆ Teacher recommendations
- ◆ Student performance in previous courses
- ◆ Parental consent



## ADVANCED PLACEMENT

Advanced placement (AP) courses carry special grade point value. The content for these courses follows closely the syllabus as defined by The College Entrance Examination Board. Recommended criteria for course enrollment is as follows:

- ◆ Motivation and commitment to complete course
- ◆ Understanding of what is expected in an AP course
- ◆ Parental support at home
- ◆ Possessing appropriate skills - Reading/ Writing
- ◆ Teacher recommendations
- ◆ Completion of prerequisite courses where applicable
- ◆ Overall GPA indicates high achievement (B's or better in core academic courses)
- ◆ Past performance in courses in the same subject area for which student is applying

Students are strongly encouraged to take Advanced Placement examinations, thus demonstrating achievement at the third-year college level. If students choose to take the AP examination, they will be responsible for the fee assessed by ETS unless financial assistance application to low-income and needy students is approved.

## DUAL ENROLLMENT

Students receive both high school and college credit with Danville Community College in these courses. Enrollment requirements must be met for college credit.

## VIRTUAL ADVANCED PLACEMENT (VAP) SCHOOL

The Virtual Advanced Placement School provides a variety of college-level AP courses, enabling students to earn college credit, regardless of their home high school's ability to offer college-level courses. Courses are taught via online through this program.

Students eligible for this program must be identified as an Early College Scholar and are required to take the associated AP Exam.

## BLOCK (4X4) SCHEDULING

All Pittsylvania County high schools operate under a block scheduling system. Students take four (4) subjects per day, receiving a total of eight (8) credits in one year. Most classes meet for approximately 90 minutes each day. This enables students to take the courses required for their chosen pathway as well as other electives of interest.

## GUIDELINES FOR DROPPING SECONDARY CLASSES

Students that drop a course after the first fifteen days or the day after first progress reports are issued, whichever is later, on a 4 X 4 schedule and after the first thirty days on a yearlong schedule will receive a failing grade for that course.

Students may not change from one elective class to a different class after the first day of enrollment, unless there is an error in scheduling.

A student's request to change a course requires administrator, teacher, and counselor recommendations.

Level changes within a specified course may occur if grades from original course transfers to the new course assignment.

Legitimate justification for course changes are as noted:

1. scheduling error
2. improper level placement
3. severe personal illness (requires administrator, teacher and counselor review).

Noted justification must prevent the completion of course requirements.

## DIPLOMA SEALS

### Board of Education Seal:

Students who earn either a Standard or Advanced Studies Diploma and graduate with an average grade of "A" or better shall receive a Board of Education Seal on the diploma.

### Governor's Seal

Students who complete the requirements for an Advanced Studies Diploma with an average of "B" or better and successfully complete at least three advanced placement (AP) or three college academic level course for credit shall receive a Governor's Seal on the diploma.

### Career and Technical Education Seal

The Board of Education's Career and Technical Education Seal will be awarded to students who earn a Standard or Advanced Studies Diploma and complete a prescribed sequence of courses in a career and technical education concentration or specialization that they choose and maintain a "B" or better average in those courses; or (i) pass an examination or an occupational competency assessment in a career and technical education concentration or specialization that confers certification or an occupational competency credential from a recognized industry, trade or professional association, or (ii) acquire a professional license in that career and technical education field from the Commonwealth of Virginia.

### Advanced Mathematics and Technology Seal

The Board of Education's Seal of Advanced Mathematics and Technology will be awarded to students who earn either a Standard or Advanced Studies Diploma and (i) satisfy all of the mathematics requirements for the Advanced Studies Diploma (4 units of credit including Algebra II; two verified units of credit) with a "B" average or better; and (ii) either (a) pass an examination in a career and technical education field that offers certification from a recognized industry, or trade or professional association; (b) acquire a professional license in a career and technical education field from the Commonwealth of Virginia; or (c) pass an examination approved by the Board that confers college-level credit in a technology or computer science area.

### 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 U.S. History and Virginia and U.S. 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 iii) 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."

### Biliteracy

"The Board of Education's Seal of Biliteracy certifies attainment of a high level of proficiency by a graduating high school student in one or more languages in addition to English, and certifies that the graduate meets the following criteria: (1) pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level; and (ii) be proficient at the intermediate-mid level or higher in one or more languages other than English, as demonstrated through an assessment from a list to be approved by the Superintendent of Public Instruction. For purposes of this article, "foreign language" means a language other than English, and includes American Sign Language.

### Excellence in Science and the Environment

"The Board of Education's Seal for Excellence in Science and the Environment shall be awarded to students who earn either a Standard Diploma or Advanced Studies Diploma and (i) complete at least three different first-level board-approved laboratory science courses and at least one rigorous advanced-level or postsecondary-level laboratory science course, each with a grade of "B" or higher; (ii) complete laboratory or field-science research and present that research in a formal, juried setting; and (iii) complete at least 50 hours of voluntary participation in community service or extracurricular activities that involve the application of science such as environmental monitoring, protection, management, or restoration.



# DUAL ENROLLMENT *Danville Community College - Pittsylvania County Schools*

## Dual Enrollment

The Danville Community College Dual Enrollment program allows high school students to meet the requirements for high school graduation while simultaneously earning college credit. Taking a dual enrollment class will allow students to get college credit while in high school which means saving money and time.

Please be aware that a dual enrollment course is a college level course. The student will receive a grade for the class from DCC as well as from the high school.

Enrolling in Dual Enrollment (DE) coursework is a three-step process. All prospective DE students must receive qualifying Virginia Placement Test (VPT) scores or earn qualifying ACT, SAT or PSAT scores in order to enroll in a DE course. If there are questions about the process, please contact the high school guidance counselor.

## Student Eligibility for Dual Enrollment

All students taking dual enrollment courses must take the Virginia Placement Test (VPT) and achieve satisfactory scores. Eligible PSAT/SAT/ACT scores can also be used for placement, official score forms should be submitted to the DCC Dual Enrollment Coordinator. Eligible scores for all accepted tests are shown:

*	VA Placement Test (VPT)	PSAT	SAT	ACT	SOL
ADMISSION CRITERIA FOR TRANSFER COURSES					
English/Writing	ENG 111	N/A	N/A	18	N/A
Reading	ENG 111	N/A	N/A	18	N/A
Writing/Reading	ENG 111	390	480	N/A	N/A
Mathematics	MTE 1	500	530	22	Algebra I - Pass
ADMISSION CRITERIA FOR CTE COURSES					
English/Writing	ENF 1	N/A	N/A	18	N/A
Reading	ENF 1	N/A	N/A	18	N/A
Writing/Reading	ENF 1	390	480	N/A	N/A
Mathematics	MTE 1	500	530	22	Algebra I - Pass

\* Admissions criteria scores updated by DCC 1.2018

## Enrolling in Dual Enrollment Courses

**1 - Complete an Online Admissions Application** at <https://apply.vccs.edu>. Once confirmation is received that the application has been processed, the student is to complete the Dual Enrollment Parent Permission Form. The student will be assigned a Student ID number so that the student's Social Security Number will not be used as their identifying number. Please note: It is recommended that the student enter their Social Security Number, as not doing so will limit their ability to access DCC's online student resources. The application must be completed before the student can take the VPT.

**2 - All Students** taking dual enrollment courses must **take the Virginia Placement Test** and test eligible to receive college credit or submit qualifying ACT, PSAT, and SAT scores. Call 434.797.8460 or e-mail [admissions@dcc.vccs.edu](mailto:admissions@dcc.vccs.edu) for an appointment. ALL STUDENTS are encouraged to take the practice assessment which is available at [www.dcc.vccs.edu/studentServices/Admissions/PlacementTesting](http://www.dcc.vccs.edu/studentServices/Admissions/PlacementTesting).

**3 - Have the Dual Enrollment Parent Permission form** completed and signed by the student's Parent/ Legal Guardian. It is to be returned to the dual enrollment instructor if the course has started or to the guidance counselor if the course has not started.

If a student has questions about the Dual Enrollment Admissions Application or about the dual enrollment program, please contact Cathy Pulliam, Coordinator of Admissions, Enrollment Management and Student Outreach at 434.797.8538 or [cpulliam@dcc.vccs.edu](mailto:cpulliam@dcc.vccs.edu).

## Dual Enrollment Course Offerings

CC = College Credits

CSC = DCC Career Studies Certificate

TRANSFER COURSES							
College Course	DCC Course	CC	PCS Course				
General Biology I	BIO 101	4	Advanced Biology II	Introduction to Business Law	BUS 240	3	Business Law
College Composition I & II	ENG 111/112	3/3	College Composition I & II/ AP English Language & Composition	Introduction to Business	BUS 100	3	Business Management
Literature I & II	ENG 243/244	3/3	AP English Literature & Composition	Cosmetology Theory I	COS 081	4	Cosmetology I & II
Statistical Reasoning	MTH 155	3	Introductory College Statistics	Coordinated Internship	COS 190	4	
Precalculus I & II	MTH 161/162	3/3	Pre-calculus Mathematics I & II	On-Site Training	COS 196	4	
Linear Algebra	MTH 266	3	Linear Algebra	Cosmetology Theory II	COS 082	5	Cosmetology III
Spanish	SPA 203	3	Spanish IV	Coordinated Internship	COS 290	4	
TRANSFER COURSES - PGSMST				Seminar & Project	COS 198	3	
General Biology I & II	BIO 101/102	4/4	College Biology	On-Site Training	COS 296	5	
Human Anatomy & Physiology	BIO 141	4	College Anatomy & Microbiology	Sanitation & Safety	HRI 158	3	Culinary Arts
General Microbiology	BIO 205	4	College Chemistry	<b>Law Enforcement:</b>			
College Chemistry I & II	CHM 111/112	4/4	College Chemistry	Survey of Criminal Justice	ADJ 100	3	Criminal Justice I & II
College Composition I & II	ENG 111/112	3/3	English 11	Special Enforcement Topics	ADJ 116	3	
Advanced Composition	ENG 210	3	Senior Research Application & Evaluation	<b>Crisis Intervention:</b>			
Literature I & II	ENG 243/244	3/3	English 12	Survey of Criminal Justice	ADJ 100	3	
Precalculus with Trigonometry	MTH 167	5	Advanced Integrated Math Analysis	Crisis Intervention	ADJ 118	3	
Calculus I & II	MTH 263/264	4/4	Laboratory Calculus	Advanced Desktop Publishing	AST 253/255	2/1	Design, Multimedia and Web Technologies
Statistics I & II	MTH 245/246	3/3	College Statistics	I/Lab			
Calculus I	MTH 263	4	Advanced Calculus I	Emergency Medical Services	EMS 112/113	4/3	Emergency Medical Technician
Linear Algebra	MTH 266	3	Advanced Calculus II	Cardiopulmonary Resuscitation	HLT 105	1	* CSC Available
Calculus II	MTH 264	4		EMT - Basic Clinical	EMS 120	1	
Calculus III	MTH 265	4		Computer Aided Drafting & Design III	CAD 233	3	Engineering Drawing & Design
General College Physics I & II	PHY 201/202	4/4	College Physics	Introduction to Computer Application and Concepts	ITE 115	3	Computer Information Systems (CIS)
Technical Report Writing	ENG 131	3	Introduction to Research & Statistics	Advanced Computer Applications and Integration	ITE 215	4	Advanced Computer Information Systems (CIS)
Statistical Reasoning	MTH 155	3		Microcomputer Operating Systems	ITN 106	3	Cybersecurity Systems Technology
TRANSFER COURSES - AET				PC Hardware & Troubleshooting	ITN 107	3	
College Composition I & II	ENG 111/112	3/3	English 11	Intro to Cybersecurity	ITN 195	2	
Precalculus with Trigonometry	MTH 167	5	Precalculus with Trigonometry	Network Fundamentals CISCO I	ITN 154	4	Computer Network Hardware
Calculus I	MTH 263	4	Calculus I	Introductory Routing CISCO II	ITN 155	4	Operations I-IV
Survey of English Literature I & II	ENG 243/244	3/3	English 12	Electricity I	ELE 113	3	Electricity I & II
Calculus I	MTH 273	4	Calculus I	Electrical Control Systems	ELE 156	3	
Intro to Engineering	EGR 120	2	Engineering Explorations	Industrial Electricity	ELE 216	3	
Seminar and Project	EGR 198	3		Electrical Electronic Calculations III	ELE 154	3	
Engineering Graphics	EGR 115	2	Engineering Analysis and Applications	Industrial Safety - OSHA 10	SAF 130	1	
Topics in Engineering	EGR 195	3		Electrical Electronic Calculations	ELE 152	3	Electrical Automation and Robotics II
CTE				Electrical Control Systems	ELE 156	3	
Accounting I	ACC 111	3	Accounting	Principles & Applications of Mechatronics	IND 243	3	
Accounting II	ACC 112	3	Advanced Accounting	Metal Layout I	AIR 117	3	Heating, Ventilation, Air Conditioning, and Refrigeration I & II (HVAC)
Automotive Engines I	AUT 111	4	Auto Technology - 1st Year	Air Conditioning & Refrigeration I	AIR 121	3	
Intro to Automechanics	AUT 130	3		Refrigerant Usage EPA Certification	AIR 276	1	
Lubrication	AUT 127	3		Heating, Air Conditioning, and Refrigeration Calculations I	AIR 161	3	
Automotive Braking Systems	AUT 265	3	Auto Technology - 2nd Year	Industrial Safety - OSHA 10	SAF 130	1	
Fuel Systems	AUT 121	4		Industrial Safety - OSHA 10	SAF 130	1	Industrial Technician - Mechanical
				Industrial Pipe Fitting	MEC 148	2	
				Mechanical Maintenance	MEC 154	3	
				Applied Hydraulics & Pneumatics	MEC 162	3	
				Pump Systems	MEC 168	2	
				Mechanical Maintenance II	MEC 254	2	
				Fundamentals of Welding	WEL 120	2	



Principles of Marketing	MKT 100	3	Advanced Marketing
Nursing Assistant	NUR 25	3	Nursing Assistant
Nurse Aide	NUR 27	3	*CSC Available
Seminar & Project	NUR 98	3	
Machine Shop I	MAC 101	8	Precision Machining I
Industrial Safety OSHA 10	SAF 130	1	
Machine Shop II	MAC 102	7	
Technical Math	MTH 111	3	
Adv. Machine Tool Operations	MAC 221	7	Precision Machining II
Numerical Control I	MAC 121	3	
Adv. CNC Programming	MAC 127	3	
Machine Blueprint Reading	DRF 160	3	
Machinist Handbook	MAC116	2	

Observation & Participation in Early Childhood/Primary Settings	CHD 165	3	Teachers for Tomorrow
Introduction to Teaching as a Profession	EDU 200	3	
Drafting I	DRF 114	4	Technical Drawing & Design
Fundamentals of Welding	WEL 120	2	Welding I
Industrial Safety OSHA 10	SAF 130	1	
Arc Welding	WEL 121	2	Welding II
Inert Gas Welding	WEL 135	2	
MS Word for Windows/Lab	AST 238/239	2/1	Word Processing



## College Credential Options

Danville Community College - Pittsylvania County Schools



Students interested in seeking a college credential while in high school, have several options from Danville Community College. Students are encouraged to work closely with their High School Career Coach and/or a DCC representative to meet credentials. Students choosing one of these options should notify their high school guidance counselor before or by the start of their junior year in high school. For more information on DCC pathways, visit [www.danville.edu](http://www.danville.edu) - click on Dual Enrollment.

DCC General Education Certificate			
DCC Course Name	DCC Course	College Credits	PCS Course (AP or *Dual Enrollment)
General Biology I & II	BIO 101 & 102	4/4	AP Biology
College Composition I	ENG 111	3	College Composition I *
College Composition II	ENG 112	3	College Composition II *
Survey of English Literature I	ENG 243	3	AP English Literature & Composition *
Survey of English Literature II	ENG 244	3	AP English Literature & Composition *
United States History I	HIS 121	3	AP US History
United States History II	HIS 122	3	AP US History
Precalculus I	MTH 161	3	Pre-calculus Mathematics I
US Government I	PLS 211	3	AP Government
College Success Skills	SDV 100	1	Online *
<b>TOTAL COLLEGE CREDITS</b>		<b>33</b>	

DCC Associate of Arts and Sciences in Science (Option for Piedmont Governor's School for Math, Science and Technology [PGSMST] Students)			
DCC Course Name	DCC Course	College Credits	PCS Course (AP or *Dual Enrollment)
General Biology I	BIO 101	4	AP Biology
College Chemistry I & II	CHM 111/112	4/4	College Biology (PGSMST) *
College Composition I	ENG 111	3	College Composition I (PGSMST) *
College Composition II	ENG 112	3	College Composition II (PGSMST) *
Advanced Composition	ENG 210	3	Senior Research Application and Evaluation (PGSMST) *
Survey of English Literature I	ENG 243	3	AP English Literature & Composition (PGSMST) *
Survey of English Literature II	ENG 244	3	AP English Literature & Composition (PGSMST) *
United States History I and United States History II	HIS 121/122	6	AP US History
Precalculus I	MTH 161	3	Pre-calculus Mathematics I *
Precalculus II	MTH 162	3	Pre-calculus Mathematics II *
Calculus I or Statistics I	MTH 263 or MTH 245	3 or 3	Laboratory Calculus (PGSMST) *
Calculus II or Statistics II	MTH 264 or MTH 246	3 or 3	College Statistics (PGSMST) *
General College Physics I & II	PHY 201 & 202	4/4	College Physics (PGSMST) *
US Government I	PLS 211	3	AP Government
Principles of Psychology	PSY 200	3	AP Psychology
College Success Skills	SDV 100	1	Online *
Physical Education Course	PED **	1	College Course (DCC Campus)
<b>TOTAL COLLEGE CREDITS</b>		<b>61</b>	

Notes:  
 At least 25% of the total credits required for graduation must be earned from Danville Community College.  
 AP - In order for college credit to be awarded for an AP course, the student will have to receive a score of 3 or better on the AP exam and submit the appropriate test score form to Danville Community College.  
 \* Dual Enrollment Courses  
 \*\* Students may also take a 3 credit health (HLT) course which is offered online. The student is responsible for paying for this course. (Suggested course HLT 116).

DCC Associate of Arts and Sciences in Liberal Arts			
DCC Course Name	DCC Course	College Credits	PCS Course (AP or *Dual Enrollment)
General Biology I & II	BIO 101 & 102	4/4	AP Biology
Principles of Macroeconomics	ECO 201	3	AP Macroeconomics
College Composition I	ENG 111	3	College Composition I *
College Composition II	ENG 112	3	College Composition II *
Survey of English Literature I	ENG 243	3	AP English Literature & Composition *
Survey of English Literature II	ENG 244	3	AP English Literature & Composition *
Western Civilization I and Western Civilization II	HIS 101/102	6	AP European History
United States History I and United States History II	HIS 121/122	6	AP US History
History Electives	HIS	6	AP World History
Humanities Elective	HUM	3	AP Human Geography
Introduction to Computer Applications	ITE 115	3	Computer Information Systems (CIS) *
Precalculus I	MTH 161	3	Pre-calculus Mathematics I *
Precalculus II	MTH 162	3	Pre-calculus Mathematics II *
US Government I	PLS 211	3	AP Government
Principles of Psychology	PSY 200	3	AP Psychology
College Success Skills	SDV 100	1	Online *
Physical Education Course	PED **	2	College Course
<b>TOTAL COLLEGE CREDITS</b>		<b>62</b>	

## PCS High School Scheduling Parameters

Courses, with the exception of Governor's School, Academy of Engineering & Technology (AET) and Career and Technical Center programs, will be scheduled utilizing the four, 90 minute block scheduling format. Advanced Placement courses that require year-long scheduling will be paired with complementary courses to promote full-year exposure to content.

The following classes should be scheduled as year long sequences:

FIRST SEMESTER	SECOND SEMESTER
AP Biology (43706)	AP Environmental Science (42706) or Advanced Bio Lab (43256)
AP Chemistry (44706)	Advanced Chemistry Lab Studies (44256)
Advanced Environmental Science (43406)	AP Environmental Science (42706)
AP English Language and Composition (11966)	Advanced English 11 (11506)
AP English Literature and Composition (11956)	Advanced English 12 (11606) (College Composition I-II)
Advanced 20th Century History (23876)	AP U. S. History (23196)
AP Calculus (31776)	Advanced Lab Calculus (31706)
AP Calculus (31776)	AP Calculus BC (31778)
AP Statistics (31926)	Advanced Math Lab (31606)

- Any modifications to the above pathways will be outlined in writing and agreed upon by the College and school division. Any modifications will not prevent students from obtaining the plan's intended credential.
- In order to participate in the above pathway, a student must meet all dual enrollment admission requirements and College program requirements and complete VCCS placement tests. In order to enroll in any of the courses noted in the pathway, all course pre-requisites must be met. Students may also substitute other courses as approved by DCC.
- Program information including purpose, occupational objectives, admission requirements, notes, computer competency requirements, and course requirements may be found in the College catalog found at: [www.dcc.vccs.edu](http://www.dcc.vccs.edu).



# Course Selection Guide -- Academic

COURSE	Course ID #	9	10	11	12	ADV	AP	Dual	VAP
<b>ART -- Page 15</b>									
Art I	9120	X	X	X	X				
Art II	9130	X	X	X	X				
Art III	9140		X	X	X				
Art IV	9145			X	X				
Art V	9147			X	X				
Graphic Design	91530			X	X				
AP Art History	91514 VAP			X	X		X		X
Art VI	91990			X	X				
<b>ECONOMICS AND PERSONAL FINANCE -- Page 15 (Required for 9th grade students beginning 2011-2012) (Industry Certification)</b>									
Economics and Personal Finance	6120			X	X				
<b>ENGLISH - Pages 15-17 - English 9-11 Adv. courses available for honors students.</b>									
English 9	1130	X				X			
English 10	1140		X			X			
English 11	1150			X		X			
English 12	1160				X				
College Comp. I-II	11606			X	X	X		X	
Shakespeare	11650			X	X				
World Mythology	11654 VAP		X	X	X				X
Survey of Poetry	11658			X	X				
Creative Writing	11710 11714 VAP		X	X	X				X
Developmental Reading	11817	X	X	X	X				
Ethnic Literature	11651			X	X				
World Literature	11652			X	X				
AP English Literature and Composition	11956 11954 VAP		X	X	X		X	X	X
AP English Language and Composition	11966 11964 VAP		X	X	X		X	X	X
Journalism I	1200	X	X	X	X				
Journalism II	1210		X	X	X				
Mass Media/Library Science	12200	X	X	X	X				
Media Arts/Yearbook	12201	X	X	X	X				
Speech Fundamentals	1300	X	X	X	X				
Speech & Drama	1399	X	X	X	X				
Theatre Arts Exploration (Drama 1)	1410	X	X	X	X				
Theatrical Production (Drama 2)	14200		X	X	X				
Advanced Theatre Arts (Drama 3)	14230			X	X				
Drama 4	14260			X	X				
Classical Literature & Mythology	11653			X	X				
<b>ENGLISH AS A SECOND LANGUAGE (ESL) - Page 17</b>									
ESL I	5710	X	X	X	X				
ESL II	5720	X	X	X	X				
ESL III	5730	X	X	X	X				
<b>SCHOLASTIC APTITUDE TEST PREPARATION - Page 17</b>									
SAT Preparation	15150		X	X	X				
<b>HIGH SCHOOL TRANSITION - Page 17</b>									
Freshman Seminar	0130	X							

COURSE	Course ID #	9	10	11	12	ADV	AP	Dual	VAP
<b>FOREIGN LANGUAGE - Page 18</b>									
French I	5110	X	X	X	X				
French II	5120	X	X	X	X				
French III	5130	X	X	X	X				
French IV	51406		X	X	X	X			
French V	51506		X	X	X	X			
Latin I	53104 VAP	X	X	X	X				X
Latin II	53204 VAP		X	X	X				X
Latin III	53304 VAP			X	X				X
AP Latin Literature	53704 VAP			X	X		X		X
Spanish I	5510	X	X	X	X				
Spanish II	5520	X	X	X	X				
Spanish III	5530	X	X	X	X				
Spanish IV	55406		X	X	X	X		X	
Spanish V	55506		X	X	X	X			
AP Spanish Language	55704 VAP				X		X		X
Chinese I	58104 VAP			X	X				X
<b>HEALTH &amp; PHYSICAL EDUCATION - Page 19</b>									
Physical Ed./Health	7300	X							
Physical Ed./Health/Driver Ed.	7405		X						
Adv. Physical Ed.	7640			X	X				
Adv. Physical Ed. II	7650			X	X				
<b>MATHEMATICS - Pages 19-20</b>									
Personal Living & Finance	3120	X	X	X	X				
Applications of Math	3126		X	X	X				
Algebra I	3130	X	X	X	X				
Algebra I, Part 1	3131	X	X	X	X				
Algebra I, Part 2	3132	X	X	X	X				
Algebra Functions & Data Analysis	3134	X	X	X	X				
Algebra II	3135	X	X	X	X				
Geometry	3143	X	X	X	X	X			
Geometry, Part 1	3144	X	X	X	X				
Geometry, Part 2	3145	X	X	X	X				
Advanced Algebra/Trigonometry	31506			X	X	X			
Pre-calculus Mathematics I-II	31626			X	X	X		X	
Linear Algebra	31666				X	X		X	
AP Calculus AB	31774 VAP			X	X		X		X
AP Calculus	31776				X		X		
AP Calculus BC	31778			X	X		X		X
Computer Math/Science	3184		X	X	X				
Adv. Computer Programming	31806			X	X	X			
AP Statistics	31924 VAP 31926		X	X	X		X		X
Introductory College Statistics	31906			X	X	X		X	
<b>MUSIC - Page 21</b>									
Music Appreciation	92220	X	X	X	X				
Marching Band	9234	X	X	X	X				
Concert Band	9296	X	X	X	X				
Chorus I	9260	X	X	X	X				
Chorus II	9285	X	X	X	X				
Chorus III	9289		X	X	X				



Course	Course ID#	9	10	11	12	ADV	AP	Dual	VAP
<b>SCIENCE - Pages 21-22</b>									
Earth Science	4210	X	X	X	X				
Advanced Earth Science	42106	X	X	X	X	X			
Geology	42400			X	X				
Astronomy	4260			X	X				
AP Environmental Science	42706 42704 VAP			X	X		X		X
Biology I	4310	X	X	X	X				
Advanced Biology I	43106	X	X	X	X	X			
Adv. Lab Studies in Biology	43206				X	X			
Anatomy & Physiology	4330			X	X				
Environmental Science	43400			X	X				
Adv. Environmental Science	43406			X	X	X			
AP Biology	43706 43704 VAP			X	X		X		X
Chemistry I	4410		X	X	X				
Adv. Lab Studies in Chemistry	44256			X	X	X			
AP Chemistry	44706 44704 VAP			X	X		X		X
Physics I	45106			X	X	X			
Adv. Honors Physics	45104 VAP			X	X	X			X
Adv. Placement Physics	45706 45704 VAP		X	X	X		X		X
Survey of Earth Science	46101	X	X	X	X				
Survey of Biology	46102	X	X	X	X				
Forensic Science	46106			X	X	X			
<b>SOCIAL STUDIES - Pages 23-24</b>									
Citizenship Studies	2995		X	X					
AP Human Geography	22126 22124 VAP		X	X	X		X		X
World History & Geography to 1500 AD	2215	X	X						
Advanced World History & Geography to 1500 AD	22156	X	X			X			
World History & Geography 1500 - Present	2216		X						
Advanced World History & Geography 1500 - Present	22166		X			X			
AP Government	22456				X		X		
Humanities	23150				X				
AP U. S. History	23196			X			X		
VA & U. S. History	2360			X					
AP World History	23806 23804 VAP			X	X		X		X
Twentieth Century History	23870 23876 ADV			X	X	X			
AP European History	23996 23994 VAP			X	X		X		X
History of Minority Groups	2997		X	X	X				
VA & U.S. Government	2440				X				

Course	Course ID#	9	10	11	12	ADV	AP	Dual	VAP
AP Government and Politics - U.S.	24456 24454 VAP				X		X		X
AP Government and Politics - Comparative Course	24506 24504 VAP				X		X		X
Sociology I	2500			X	X				
Sociology II	2502				X				
Economics	2800			X	X				
Advanced Placement Microeconomics	28026 28024 VAP		X	X	X		X		X
Advanced Placement Macroeconomics	28036 28034 VAP		X	X	X		X		X
Virginia (Old Dominion) History	2998		X	X	X				
Psychology	29000			X	X				
Advanced Placement Psychology	29026 29024 VAP		X	X	X		X		X
Comparative Religion	29961	X	X	X	X				
Survey of United States History	29962	X	X	X	X				
Survey of United States Government	29963	X	X	X	X				

**PIEDMONT GOVERNOR'S SCHOOL FOR MATHEMATICS, SCIENCE & TECHNOLOGY - Pages 25-26**

English 11	11505			X		X		X	
Precalculus with Trigonometry	31995			X		X		X	
Introduction to Research and Statistics	31905			X		X		X	
Calculus I	31765			X		X		X	
College Biology	43205			X	X	X		X	
College Chemistry	44205			X		X		X	
English 12	11605				X	X		X	
Calculus II	32005				X	X		X	
Statistics I & II	31925				X	X		X	
College Anatomy & Microbiology	43305				X	X		X	
College Physics	45205				X	X		X	
Senior Research Application and Evaluation	46105				X	X		X	

**ACADEMY OF ENGINEERING AND TECHNOLOGY (AET) - Page 27**

English 11	11503			X		X		X	
Engineering Explorations I	84503			X		X		X	
Precalculus with Trigonometry	31623			X		X		X	
English 12	11603				X	X		X	
Engineering Analysis and Applications	84513				X	X		X	
Calculus I	31763				X	X		X	

# KEY:


(Reflects notations throughout the course guide.)

\* Denotes classes with special grade point value.

\*\* Denotes dual enrollment with Danville Community College.

DCC enrollment requirements must be met for college credit.

**VAP** - Denotes Virtual Advanced Placement  
(college-level online AP courses)

 - Denotes courses that administer Industry Certification



This logo identifies courses that will be administering SOL End-of-Course tests.



# COURSE DESCRIPTIONS

## ART

### Art I (9120)

Grades 9-12, Credit - 1 Unit  
Prerequisite: None

Art I is a basic introductory course open to all students. The elements and principles of design will be stressed in all of the techniques and media explored. The objective of Art I is to give the student a general knowledge of the breadth of art and to increase his/her cultural awareness.

### ART II (9130)

Grades 9-12, Credit - 1 Unit  
Prerequisite: Art I

Art II is a continuation of theories and skills taught in Art I. There will be emphasis on in-depth student involvement with making choices and personal expression. Overviews of periods of art will be studied to increase the student's awareness of why man creates.

### Art III (9140)

Grades 10-12, Credit - 1 Unit  
Prerequisite: Art II & Teacher  
Recommendation

In Art III the student will concentrate on techniques and skills in fewer areas to develop a personal style and direction. The student will work primarily on an individual basis under the direction of the instructor to study certain media and techniques probably choosing to concentrate in either two or three dimensional work. The development of a portfolio should be of prime consideration.

### ART IV (9145)

Grades 11-12, Credit - 1 Unit  
Prerequisite: Art III & Teacher  
Recommendation

In Art IV the student with the instructor will plan an individualized course of study. The course will concentrate on strengthening his/her personal style and increasing his competency in media areas that interest him.

### ART V (9147)

Grades 11-12, Credit - 1 Unit  
Prerequisite: Art IV & Teacher  
Recommendation

In Art V the student, with instructor input, will plan an individualized course of study designed to prepare student to continue the study of art in college or to pursue an art career. Students, working independently, will be engaged in special projects and activities designed to develop his or her creativity and to promote competency in preferred media.

### GRAPHIC DESIGN (91530)

Grades 11-12, Credit - 1 Unit  
Prerequisite: Art I & Teacher  
Recommendation

Creation of designs intended for extensive duplication in articles used by the masses - cards, advertisements, clothing design, etc.

## ADVANCED PLACEMENT ART HISTORY (91514) \*/VAP

Grade 11-12, Credit -1 Unit  
College Credit to be determined by performance on AP examination.  
Course Length: Two semesters

AP Art History is designed to provide students with an understanding and knowledge of architecture, sculpture, painting, and other art forms with diverse and historical and cultural contexts. Students will examine and critically analyze major forms of artistic expression from the past and the present from a variety of cultures.

### ART VI (91990)

Grades 11-12, Credit - 1 Unit  
Prerequisite: Art V & Teacher  
Recommendation

In Art VI the student, with instructor input, will plan an individualized course of study designed to promote competency in preferred media. The student will develop a portfolio.

## CAREER ACADEMY

The Career Academy offers a small learning community within each high school for students 14 to 17 years old. The Career Academy provides an alternative learning option for eligible students in partnership with Pittsylvania County Community Action. The Academy focuses on providing remediation, intervention and opportunities for acceleration to students through the use of integrated learning systems and computer assisted instruction. Academic success is based on mastery in all content areas. Students in the Academy focus on basic skill development with an emphasis on school-to-work and employability skills. Pathways are established to afford students the opportunity to pursue a General Equivalency Diploma (GED ®), Modified Standard Diploma, Standard Diploma, or Advanced Diploma. Specially trained teachers provide computer-based instruction to students who voluntarily enroll in the program.

## ECONOMICS AND PERSONAL FINANCE

### (6120)

Grades 11-12  
Credit - 1 Unit  
Prerequisite: None

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 course will also study basic occupational skills and concepts in preparation for entry-level employment in the field of finance.

## ENGLISH

### ENGLISH 9 (1130)

Levels \*Advanced, Regular  
Grade 9, Credit - 1 Unit  
Prerequisite: English 8

The primary purpose of this course is to continue developing skills in recognition of various types of literature. Within the framework of this course, the student continues to acquire competence in correct usage, sentence elements, vocabulary building, and expository forms of writing with the opportunity to explore creative forms. Provisions are made for those students requiring either advanced or remedial studies.

### ENGLISH 10 (1140)

Levels \*Advanced, Regular  
Grade 10, Credit - 1 Unit  
Prerequisite: English 9

This course focuses on the study of literary types using an anthology of selections from world literature. Short stories, poetry, biography, a Shakespearean play, essays, modern plays, medieval tales, and novels are studied according to individual and class needs. In written composition, assignments are largely narrative and descriptive. Rules of spelling and techniques of building vocabulary receive continual stress. Provisions are made for those students requiring either advanced or remedial studies.

### ENGLISH 11 (1150)

Levels \*Advanced, Regular  
Grade 11, Credit - 1 Unit  
Prerequisite: English 10

This course is designed as a flexible program to meet the needs of the students in areas of grammar, composition, mechanics, and vocabulary development. This course offers a rather complete look at the development of American thought and literature from the colonial period to the present. Although such a view touches all periods, special emphasis is placed on selected authors. This course also includes frequent writing of essays and preparation for a term paper. The specific units vary in content and approach in relation to the abilities of the students.



This course is required for ALL students. Satisfies virtual and industry certification\*.

\*Student will take the Wise-Financial Literacy Certification to satisfy the new graduation requirement.





**ENGLISH 12 (1160)**

Grade 12, Credit - 1 Unit

Prerequisite: English 11

English 12 is a flexible program designed to meet the needs of students in areas of grammar, composition, mechanics, reading and vocabulary. This course offers a survey of English literature for the past twelve centuries. For the understanding and appreciation of so rich a literature as England's, the course provides the necessary background of history and acquaintance with major periods and literary trends. The specific units vary in content and approach in relation to the abilities of the students.

**COLLEGE COMPOSITION I-II (11606)\*/\*\***

Grade 12, Credit - 6 Semester Hours College Credit and 1 High School Credit each semester - 2 Semester Course

Prerequisite: Receive a B in Advanced English 11 or an A in English 11

This course develops the student's writing ability for study, work, and other areas of writing based on experience, observation, research, and reading of selected literature. The course emphasizes writing as a process: understanding audience and purpose, exploring ideas and information, composing, revising, and editing. Students write by integrating experiences in thinking, reading, listening, and speaking.

**SHAKESPEARE (11650)**

Grades 11-12

Credit - 1 Unit

Prerequisite: English 10

This course will offer students the opportunity to closely examine the three types of Shakespearean drama: comedy, history and tragedy. The in-depth study will allow students to enjoy literature that is "not of an age, but for all time."

**WORLD MYTHOLOGY (11654) VAP**

Grades 10-12, Credit -1 Unit

World Mythology introduces students to major themes, stories, and characters in the mythologies of several different cultures. The course will concentrate on Greek and Roman mythology, but will also include material from Norse, Celtic, Native American, African, and Egyptian mythology. The course will be taught using an interdisciplinary approach that considers literary and artistic themes from diverse perspectives, including theology, sociology, anthropology and history.

**SURVEY OF POETRY (11658)**

Grades 11-12, Credit - 1 Unit

Prerequisite: English 10

This course will focus on poetry from around the world, with an emphasis on American and British authors. Students will respond to the author's use of diction, figurative language, meter, rhyme and musical devices as well as recognizing how individual elements contribute to the total effect of the poem. Understanding and appreciation will be demonstrated by the student's oral and written responses, including opportunities to write (and speak) creatively.

**CREATIVE WRITING (11710/11714 VAP)**

Grades 10-12, Credit - 1 Unit

Prerequisite: English 9

This class is intended for students who feel that they have a talent for imaginative writing of any kind and who will profit from an experience in a creative atmosphere. Creative writing begins for the student with a look at self, personal experiences, opinions, prejudices, and ideas about life. The student expresses him/herself in writing first through the paragraph, then through various other media such as the biographical sketch, the essay, the book review, poetry, and the short story. The writing techniques involved in the various written forms of communication are emphasized. The student is encouraged to express him/herself freely in order that he/she may experiment with style.

**DEVELOPMENTAL READING (11817)**

Grades 9-12, Credit -1 Unit

Developmental Reading offers specially designed instruction to enhance student reading skills. The course focuses on increasing word recognition, phonics, reading fluency, and reading comprehension skills. Developmental Reading does not meet the requirements for an Advanced, Standard, or Modified Standard Diploma.

**ETHNIC LITERATURE (11651)**

Grades 11-12, Credit - 1 Unit

Prerequisite: English 10

The objective of this course is to expose students to the literary works of various cultures within the United States. The students will study selections from Native American, African American and other ethnic groups.

**WORLD LITERATURE (11652)**

Grades 11-12, Credit - 1 Unit

Prerequisite: English 10

This course consists of the study of world literature with a focus on the cultural and historical significance of the selections. The student will develop an appreciation of other cultures through the reading of both ancient and modern literary works.

**ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION (11956) \*/\*\*/ VAP (11954)**

Grades 11-12, Credit -- Dual Enrollment - 6 Semester Hours College Credit or AP

3 Semester Hours of College Credit to be determined by performance on AP examination; 1 High School Credit each semester

AP English Literature and Composition is designed to challenge the student's ability to think critically, to synthesize literature, and to write effectively. The course will emphasize British literature, but will include literary works from many countries. Students will analyze literature independently and will correlate concepts with literary backgrounds. In addition, each student will prepare a research paper using the current MLA standards.

**ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION (11966) \*/\*\* VAP (11964)**

Grades 11-12, Credit -- Dual Enrollment - 6

Semester Hours College Credit or AP - 3

Semester Hours of College Credit to be determined by performance on AP examination;

1 High School Credit each semester

AP English Language and Composition will train students to become skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts. Students will become skilled writers who compose for a variety of purposes. Students will engage in peer reviews and writing workshops. The end-of-course project will be an online writing portfolio.

**JOURNALISM I (1200)**

Grades 9-12, Credit - 1 Unit

Prerequisite: None

This course is designed to provide the learner with a knowledge of the mechanics of news writing. There will be emphasis on finding and recognizing news. The student will learn to use the special grammar and sentence structure of news writing.

**JOURNALISM II (1210)**

Grades 10-12, Credit - 1 Unit

Prerequisite: Journalism I and Teacher's Recommendation

This course is a continuation of Journalism I. It is devoted to the points of straight news writing and carries through to the more creative endeavors of column and editorial writing.

**MASS MEDIA/LIBRARY SCIENCE (12200)**

Grades 9-12, Credit - 1 Unit

In Library Media, students will develop the foundation necessary to pursue a library media degree. Students will develop skills in the areas of classification, cataloging, circulation, and marketing through class assignments. Students will be able to demonstrate a working knowledge of the following: Destiny (the electronic card catalog and circulation system), on-line databases, reference and non-fiction books, the Internet as a research tool, citations, genres of fiction, and other skills pertinent to the library. Students will attain practical skills such as completing set tasks at the circulation desk, shelving books, reading the shelves, use of Microsoft Office programs, using audiovisual equipment and assisting with library inventory. Students will be given specific assignments to assess their knowledge.

**MEDIA ARTS/YEARBOOK (12201)**

Grades 9-12, Credit - 1 Unit

Prerequisite: Advisor Recommendation and Desktop Publishing Software Expertise Highly Recommended

This course is designed to introduce students to a variety of writing styles, including straight news, editorials, features, and columns. Students will be introduced to layout and design, graphics, photography, headline writing and caption writing. It will be the responsibility of this class to produce the school yearbook.



## **SPEECH FUNDAMENTALS (1300)**

Grades 9-12, Credit - 1 Unit  
Prerequisite: None

The primary objective of this course is to offer instruction and practice in the basics of speech with emphasis on correct articulation, improved voice, organized thinking and development of poise in speaking situations.

## **SPEECH & DRAMA (1399)**

Grades 9-12, Credit - 1 Unit  
Prerequisite: None

This course is designed as a survey class of speech and dramatic activities. It includes voice production and diction, various types of speeches, oral interpretation, acting, theatrical production and a brief study of theater history, great playwrights, and dramatic literature.

## **THEATRE ARTS EXPLORATION (Drama 1) (1410)**

Grades 9-12, Credit - 1 Unit  
Prerequisite: None

This course is designed to introduce the student to theatre and his/her part in this world. The course features instruction in voice production and diction, proper reading techniques and basic acting skills. Students will be expected to read aloud before a group and to act in scenes for classroom use. The course also provides the opportunity for students to learn the technical theatre, including light design, set building, costuming and make-up. Students will read and view plays and will perform scenes from plays studied. This is a performance oriented class which will allow the student greater skills in performing before a group.

## **THEATRICAL PRODUCTION (Drama 2) (14200)**

Grades 10-12, Credit - 1 Unit  
Prerequisite: Theatre Arts Exploration

The sequence of dramatic skills continues with this course. Students who have already learned basic theatre skills will now work and practice them in detail. Students will increase vocal skills by performing in a Reader's Theatre. Students will do extensive acting, both in scenes and in one-act plays. Time will be spent in acting and characterization improvements as well as in studying the director and his/her duties. Students will then choose a play, analyze it, design a set for it, make a prop list, design the costumes and make-up of one character and cast, and direct a scene from this play. The student will gain a working understanding of theatre production.

## **ADVANCED THEATRE ARTS (Drama 3) (14230)**

Grades 11-12, Credit - 1 Unit  
Prerequisite: Theatrical Production

This course is designed for the serious drama student who wants to emphasize acting improvement. Students are expected to know the fundamental acting and directing skills. Each individual student will be given scenes and plays to push him as an actor. Students will analyze play and scene structure and will study the various styles of theatrical production as actors, set designers and directors. Students will attempt to reach within themselves to become the best actors possible.

## **DRAMA 4 (14260)**

Grades 11-12, Credit - 1 Unit  
Prerequisite: Adv. Theatre Arts

This performance-based class will permit the advanced students to bring together the acting, directing and play production skills learned in the previous drama classes. A major theatrical production will provide the focus for the students at this level.

## **CLASSICAL LITERATURE & MYTHOLOGY (11653)**

Grades 11-12, Credit - 1 Unit  
Prerequisite: English 10

The focus of this class is on Edith Hamilton's *Mythology*, plays by Sophocles and Euripides, and *The Iliad* by Homer. The literary works will be correlated with the history of ancient Greece and Rome.



## **Scholastic Aptitude Test Preparation (15150)**

Grade 10 - 12, Credit 1 Unit  
The online SAT Prep course is designed to improve student performance on the SAT. It includes verbal, mathematical, and writing strategies designed to promote student achievement. In addition, test taking, problem solving, and critical thinking skills will be included in this preparation program.

# **ENGLISH AS A SECOND LANGUAGE (ESL)**

## **ESL I (5710)**

Grades 9-11  
Credit - 1 Unit  
Prerequisite: None

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, the student prepares to enter academic content classes. The student will become familiar with the culture and structure of an American high school and the community. Placement is made following assessment by the ESL entry assessment staff and the ESL teacher. **This course earns elective credit and may be repeated for additional elective credits.**

## **ESL II (5720)**

Grades 9-11  
Credit - 1 Unit  
Prerequisite: None

Students continue to engage in listening, speaking, reading and writing. They read a variety of fiction and non-fiction and expand their understanding of writing as a process. Using an integrated approach to language study, students increase their vocabulary and understanding of the structure of English. Placement in this course is made following assessment by the ESL teacher and/or ESL entry assessment staff. This course is a literature-based class and a content-based class. **This course may be repeated for elective credit.**

## **ESL III (5730)**

Grades 9-11  
Credit - 1 Unit  
Requisite: ESL II

Students read a variety of literature and relate life situations to literary themes. They continue to develop their writing skills and continue to study the structure of the English language through a variety of writing assignments. Students refine their listening and speaking skills through class discussions and oral presentations. Placement in this course is made following assessment by the ESL teacher and/or the ESL entry assessment staff. **The course may be repeated for elective credit.**

# **HIGH SCHOOL TRANSITION**

## **FRESHMAN SEMINAR (0130)**

Suggested Grade - 9  
Credit - 1 Unit  
Prerequisite: None

The freshman seminar course is an innovative, project-based course designed to engage students transitioning from middle school to high school. Course content is presented in micro-units designed to enhance communication skills, test taking and study skills, technology literacy, people

skills, time management, career awareness, and financial literacy. Course modules will provide opportunities for students to identify individual learning styles, and to realize that personal choices made early in their high school experience will have life-long consequences. Successful completion of this course will enable students to perform at a higher level of achievement in high school and will promote post-secondary success.



# FOREIGN LANGUAGE

## **FRENCH I (5110)**

Grades 9-12, Credit - 1 Unit

Prerequisite: None

This course is designed to introduce the students to the fundamentals of French. It stresses hearing, reading, speaking and writing. The student will learn to manipulate the most important structures of the language within the basic vocabulary and idiom range. Relevant cultural aspects, inherent in language learning, will be examined.

## **FRENCH II (5120)**

Grades 9-12, Credit - 1 Unit

Prerequisite: French I

The student will continue to learn and use basic French in oral and written work. This course will also introduce the student to more history, geography, and culture as well as literature. Most of the class time will be spent using the target language.

## **FRENCH III (5130)**

Grades 9-12, Credit - 1 Unit

Prerequisite: French II

This course will begin with a general review of all aspects of the language studied during the two preceding years. Structure vocabulary, comprehension, speaking, and cultural aspects will be reinforced. The student will broaden his/her knowledge of idiomatic expressions and vocabulary in spoken and written forms. Conversation in target language will be encouraged and emphasized. An introduction to literature will follow the general review.

## **FRENCH IV (51406) \***

Grades 10-12, Credit - 1 Unit

Prerequisite: French III

This course will be concerned with French literature and advanced conversation. Grammar will be studied according to needs, and the primary emphasis will be on self-expression in the target language in both written and spoken form. The course will introduce the student to techniques and vocabulary necessary to the study of literary movements and periods of general study.

## **FRENCH V (51506) \*/+**

Grade 10-12, Credit - 1 Unit

Prerequisite: French IV

The Advanced Placement Program in French offers two course descriptions and examinations+: French Language and French Literature. Each is intended for qualified students who wish to complete studies in secondary school comparable in difficulty of content to such third-year college level courses.

## **LATIN I (53104) VAP**

Grades 9-12, Credit - 1 Unit

Prerequisite: None

This course will introduce the students to the fundamentals of Latin grammar from the first declension through the use of participles. Emphasis will be placed on vocabulary and the ability to read from Latin to English as well as the ability to render English into Latin. Basic culture patterns will also be studied.

## **LATIN II (53204) VAP**

Grades 10-12, Credit 1 Unit

Prerequisite: Latin I

Class activities will focus on Latin techniques of emotional expression. Reading will narrate significant incidents of ancient legends and history.

## **LATIN III (53304) VAP**

Grades 11-12, Credit - 1 Unit

Prerequisite: Latin II

This course will begin with a general review of all grammar pertinent to the study of selected authors and their works. Vocabulary will be broadened with emphasis in idiomatic expressions and historical figures. There will be a condensed but thorough study of politics and social problems of the first century B.C.

## **ADVANCED PLACEMENT LATIN LITERATURE \*/VAP (53704)**

Grade 11-12, Credit -1 Unit

College Credit to be determined by performance on AP examination.

Course Length: Two semesters

AP Latin Literature requires that students have the ability to translate accurately from Latin into English the poetry or prose they are reading and to demonstrate a grasp of grammatical structures and vocabulary. Stylistic analysis is an integral part of the advanced work in AP Latin Literature.

## **SPANISH I (5510)**

Grades 9-12, Credit - 1 Unit

Prerequisite: None

This course is designed to introduce the student to the fundamentals of Spanish. It stresses hearing, reading, speaking and writing. The student will learn to manipulate the most important structures of the language within the basic vocabulary and idiom range. Relevant cultural aspects, inherent in language learning will be examined.

## **SPANISH II (5520)**

Grades 9-12, Credit - 1 Unit

Prerequisite: Spanish I

The student will learn to use basic Spanish structures in their oral and written work and speak Spanish in a conversational manner. This course will also introduce the student to Spanish history, geography and culture as well as some literature.

## **SPANISH III (5530)**

Grades 9-12, Credit - 1 Unit

Prerequisite: Spanish II

This course will begin with a general review of all aspects of the language studied during the two preceding years. Vocabulary, comprehension, speaking, and cultural aspects will be reinforced. The student will broaden his/her knowledge of idiomatic expressions and vocabulary in spoken and written forms. Conversation in target language will be encouraged and emphasized. An introduction to literature will follow the general review.

## **SPANISH IV (55406) \*/\*\***

Grades 10-12, Credit - Dual Enrollment 3 Semester Hours College Credit and 1 High School Credit

Prerequisite: Spanish III

The first part of this course is an oral review. Spanish drama will be read and discussed. Spanish-American novels will be read and discussed in Spanish. Emphasis will be on oral interpretation.

## **SPANISH V (55506) \*/+**

Grades 10-12, Credit - 1 Unit

Prerequisite: Spanish IV

The Advanced Placement Program in Spanish offers two course descriptions and examinations+: Spanish Language and Spanish Literature. Each is intended for qualified students who wish to complete studies in secondary school comparable in difficulty of content to such third-year college level courses.

## **ADVANCED PLACEMENT SPANISH LANGUAGE \*/VAP (55704)**

Grade 12, Credit -1 Unit

College Credit to be determined by performance on AP examination.

AP Spanish Language students will practice perfecting their Spanish speaking, listening, reading, and writing skills. This study will include vocabulary, grammar, and cultural aspects of the language. Students will apply lessons learned in extensive written and spoken exercises.

## **CHINESE I (58104) VAP**

Grade 11-12, Credit -1 Unit

Course Length: Two semesters

Chinese I is designed to develop the ability for students to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills; listening, speaking, reading, and writing, with emphasis on the ability to communicate orally and in writing.

### **NOTE FOR FOREIGN LANGUAGE OFFERINGS:**

- \* Denotes classes with special grade point value.
- + Students may take both examinations if they choose, thus demonstrating achievement with both language and literature at the third-year college level. If students choose to take the AP examination, they will be responsible for the fee assessed by ETS unless financial assistance application to low-income and needy students is approved.





# HEALTH & PHYSICAL EDUCATION

*The Health and Physical Education Program offers courses designed to meet students' needs, interests and graduation requirements. Each student must successfully complete two courses in health and general physical education (grades 9 and 10).*

## PHYSICAL EDUCATION/HEALTH (7300)

Grade 9, Credit - 1 Unit  
Prerequisite: None

Physical Education 9 is offered in conjunction with Health Education 9. The equivalent of one semester is spent in each area. Physical Education 9 places emphasis on vigorous individual sports and physical fitness. Squads and teams are organized within classes, according to scores on physical skill tests. Health Education 9 consists of units in personal health, nutrition, physical fitness and first aid, and the understanding of oneself and others.

Student will 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.

## PHYSICAL EDUCATION/HEALTH/DRIVER ED. (7405)

Grade 10, Credit - 1 Unit  
Prerequisite: Physical Ed. 9

Physical Education 10 is offered in conjunction with Health Education 10. The equivalent of one semester is spent in each area and a 36-hour classroom course of driver education is taught. **Classroom Driver Education** - This unit is to develop proper techniques and the attitude essential to safe driving. **Mental Health** - This course of study enables the pupil to understand him/herself, how and why he/she reacts the way he/she does and the many problems that may affect mental health.

## ADVANCED PHYSICAL EDUCATION (7640)

Grades 11-12, Credit - 1 Unit  
Prerequisite: Physical Ed. 10

Content includes physical fitness, conditioning, individual and team sports, recreation and athletic careers. May be taken only once; may not be taken for audit.

## ADVANCED PHYSICAL EDUCATION II (7650)

Grades 11 or 12, Credit - 1 Unit

Prerequisite: Advanced Physical Education  
The Advanced Physical Education II curriculum will include physical fitness, conditioning, and weight training. An emphasis on individual and team sports, recreation, and athletic careers will be noted points of emphasis. This course may be taken only once; students may not audit the course.

# MATHEMATICS

## PERSONAL LIVING AND FINANCE (3120)

Grades 9-12, Credit - 1 Unit  
Prerequisite: None

This course is designed to help high school students develop and understand a personal/family budget, compute and understand taxes, examine and compare various savings options, and identify consumer rights and responsibilities.

## APPLICATIONS OF MATH (3126)

Grades 10-12, Credit - 1 Unit  
Prerequisite: None

This course is designed to give a knowledge and mastery of general math and its application as used in trade and industry; including construction practices, combustion engines, forces and hydraulic systems.

## ALGEBRA I (3130)

Grades 9 - 12,  
Credit - 1 Unit  
Prerequisite: None, Teacher recommendation preferred



This course deals with the four fundamental operations of rational numbers; basic properties, variables, expressions involving variables, relations, functions, statistics, equations, inequalities, and application of the above to problem solving. May be taken in Grade 8 by above average students with teacher recommendation for ninth grade credit.

## ALGEBRA I - Part 1 & 2 \*\*\*\*

Part 1 (3131), Credit - 1 Unit  
Part 2 (3132), Credit - 1 Unit  
Grades 9 - 12  
Prerequisite: None



This is a mathematics program that is designed for students who are not mathematically oriented even though they may be college bound. The content of this program provides comprehensive coverage of Algebra I without unnecessary stress on structure. Also provided in the program is a review and extension of topics such as integers, fractional numbers and other topics dealing with number theory.

## ALGEBRA FUNCTIONS AND DATA ANALYSIS (3134)

Grades 9-12  
Credit - 1 Unit  
Prerequisite: Algebra I

Algebra Functions and Data Analysis is designed for students who have successfully completed Algebra I in a one or two semester sequence. Within the context of mathematical modeling and data analysis, students will study functions and their behavior, systems of inequalities, probability, experimental design and implementation and data analysis. Data will be generated by practical applications arising from science, business and finance. Students will solve problems that require formulation of linear, quadratic, negative exponential, or logarithmic equations or a system of equations.

## ALGEBRA II (3135)

Levels: \*Advanced, Regular  
Grades 9-12,  
Credit - 1 Unit



Prerequisite: Algebra I and Geometry  
Algebra II provides a thorough treatment of advanced algebraic concepts through the study of functions, "families of functions," equations, inequalities, systems of equations and inequalities, polynomials, rational and radical equations, complex numbers, statistics, and sequences and series. Emphasis will be placed on practical applications and modeling throughout the course of study. This course also includes a transformational approach to graphing functions. Graphing utilities (graphing calculators) and other appropriate technology tools will be used to assist in teaching and learning.

### Special Considerations for Mathematics

All students should take at least one (1) mathematics course each year. The level of mathematics taken the senior year will greatly impact the students' future earning potential.

Examples of course combinations that will satisfy the mathematics requirement for the:

Standard Diploma	Advanced Studies Diploma
Algebra I, Part I	Algebra I, Part I
Algebra I, Part II	Algebra I, Part II
Algebra Functions & Data Analysis	Algebra Functions & Data Analysis
Geometry	Geometry
Algebra I, Part I	Algebra II
Algebra I, Part II	
Algebra Functions & Data Analysis	Algebra I, Part I
Geometry, Part I	Algebra I, Part II
Geometry, Part II	Algebra Functions & Data Analysis
	Geometry, Part I
Algebra I	Geometry, Part II
Algebra Functions & Data Analysis	Algebra II
Geometry, Part I	
Geometry, Part II	Algebra I
	Algebra Functions & Data Analysis
Algebra I	Geometry, Part I
Algebra Functions & Data Analysis	Geometry, Part II
Geometry	Algebra II
Computer Mathematics	
Algebra I	Algebra I
Algebra Functions & Data Analysis	Algebra Functions & Data Analysis
Geometry	Geometry
Algebra II	Algebra II
	Computer Mathematics

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### NOTE for .....

#### Algebra, Part 1 & 2 and Geometry, Part 1 & 2

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Part I may be used as an elective credit and Part II may be used to satisfy one unit of mathematics credit for students entering the ninth grade in the fall of 2010 and beyond.



**GEOMETRY (3143)**

Levels: \*Advanced, Regular  
 Grades 9-12, Credit - 1 Unit  
 Prerequisite: Algebra I



This course deals with geometric figures such as circles and triangles, parallel lines and planes, graphing, construction, deductive and inductive reasoning and also includes methods for solving problems concerning physical objects.

**GEOMETRY (Part 1 & 2) \*\*\*\***

Part 1 (3144), Credit - 1 Unit  
 Part 2 (3145), Credit - 1 Unit  
 Grades 9-12



Prerequisite: Algebra I

This is a mathematics program that is designed for students that are not mathematically oriented even though they may be college bound. The content of this program provides comprehensive coverage of geometry at a pace that meets student needs. The course deals with geometric figures such as circles and triangles, parallel lines and planes, graphing, construction, deductive and inductive reasoning and also includes methods for solving problems concerning physical objects.

**ADVANCED ALGEBRA/TRIGONOMETRY (31506) \***

Grades 11-12, Credit - 1 Unit  
 Prerequisite: Geometry and Algebra II  
 (It is strongly recommended that a B or better be attained in Algebra II.)

This course is for students who have had little or no trigonometry. Topics included are trigonometry, advanced algebra, theory of equations, analytic geometry, probability, and statistics.

**PRE-CALCULUS MATHEMATICS I - II (31626)\*/\*\***

Grades 11-12, Credit - 6 Semester Hours  
 College Credit and 1 high school credit  
 Prerequisite: Algebra II or Adv. Algebra/Trigonometry and DCC requirements  
 (It is recommended that an A or B be attained in Algebra II or a C in Adv. Algebra & Trig.)

Presents the concepts and methods necessary for the study of calculus including algebra, analytic geometry, and the study of algebraic, exponential, logarithmic, and trigonometric functions.

**LINEAR ALGEBRA (31666)\*/\*\***

Grade 12, Credit - 1 high school credit and 3 Semester Hours College Credit  
 Prerequisite: Pre-Calculus and Concurrent Enrollment in AP Calculus

Linear algebra is an advanced study of equations that describe lines, planes, and higher generalizations. The course will provide opportunities for students to understand linear algebra computationally, analytically, and geometrically. Topics included are as noted: vectors, dot and cross product, lines and planes, eigen values, solving systems of equations, operations on matrices, matrix equations and inverses, linear system theory, determinants, linear dependence and independence, subspaces, basis and dimension, and a tank of a matrix.

**ADVANCED PLACEMENT CALCULUS AB \*/VAP (31774)**

Grade 11-12, Credit -1 Unit  
 College Credit to be determined by performance on AP examination.

Course Length: Two semesters

AP Calculus AB develops the students' understanding of the concepts of calculus and provides experience with it methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally.

**ADVANCED PLACEMENT CALCULUS AB (31776) \***

Grades 11-12, Credit - 1 Unit  
 Prerequisite: Pre-Calculus

*Note: This is a year-long course that is paired with 31706 - Advanced Lab Calculus OR 31778 AP Calculus BC.*

This course is intended for students who have a thorough knowledge of analytic geometry and elementary functions in addition to college preparatory algebra, geometry and trigonometry. The course emphasizes a multi-representational approach to differential and integral calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The content for the course follows closely the syllabus as defined by the College Entrance Examination Board for AP Mathematics: Calculus AB.

**ADVANCED PLACEMENT CALCULUS BC (31778) \***

Grades 11-12, Credit - 1 Unit  
 Prerequisite: Advanced Calculus 31776 or 31765

AP Calculus BC is an extension of AP Calculus AB. The course emphasizes a multi-representational approach to differential and integral calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The course includes all the AP Calculus AB content in addition to the BC specific content. The BC specific topics include advanced integration techniques, polynomial approximations and series with an emphasis on Taylor and Maclaurin series. BC students will also study parametric, polar, and vector functions and their applications to differential and integral calculus. The content for the course follows closely the syllabus as defined by the College Entrance Examination Board for AP Mathematics: Calculus BC.

**COMPUTER MATH/SCIENCE (3184)**

Grades 10-12, Credit - 1 Unit  
 Prerequisites:

- ◆ Algebra I and Geometry or be currently enrolled in Geometry.

- ◆ Students enrolled in Geometry - Part 1 and 2 should plan to enroll in Grade 11.

This course is for students interested in learning fundamental computer concepts. Various software programs will be used to teach the application of these concepts. Students will design algorithms for structured programs using basic languages. Current computer science topics such as cyber security and data manipulation will be introduced. No previous computer programming experience is necessary. Hands-on application will be emphasized..

**ADVANCED COMPUTER PROGRAMMING (31806) \***

Grades 11-12, Credit - 1 Unit  
 Prerequisite: Computer Math/Science and Algebra II

This course is designed especially for students who plan to major in Engineering, Mathematics, Physics or Computer Science and desire to strengthen their programming fundamentals. Software used in the introductory class will continue to be utilized. Structured programming languages will be a major focus.

**ADVANCED PLACEMENT STATISTICS (31926) \*/ VAP (31924)**

Grades 10-12, Credit - 1 high school credit and college credit based on student performance on the required AP examination given in the spring.

Course length: Two semesters

Prerequisite: Algebra II

*Note: This is a year-long course that is paired with 31706 - Advanced Lab Calculus*

AP statistics gives students hand-on experience collecting, analyzing, graphing, and interpreting real-world data. Students will learn to effectively design and analyze research studies by reviewing and evaluating real research examples taken from daily life experiences. Students will gain a basis of knowledge that will enable them to determine the validity of polling or study results. As the art of drawing conclusions from imperfect data and the science of real world uncertainties, statistics plays an important role in many fields. The equivalent of an introductory college-level course, AP Statistics prepares students for the AP Exam and for further study in science, sociology, medicine, engineering, political science, geography, and business.

**INTRODUCTORY COLLEGE STATISTICS (31906)\*/\*\***

Grades 11-12, Credit - 3 Semester Hours of College Credit and 1 high school credit  
 Prerequisite: Algebra II (minimum score "B" Average) and highly recommended Advanced Algebra/Trigonometry or Pre-Calculus (minimum score "C" average)

College statistics is an advanced college-level course in introductory statistics. This course is designed to present strategies for collecting, organizing, analyzing and drawing conclusions from data. Topics included are as noted: description statistics, elementary probability, probability distributions, estimation, hypothesis testing, and correlation and regression.



# MUSIC

## **MUSIC APPRECIATION (92220)**

Grades 9-12, Credit - 1 Unit

Prerequisite: None

The objective of this class is to develop the attribute of knowing and understanding the worth of music; thus enabling the student to be a more intelligent and discriminate consumer of music. The class will focus on the major composers and works from the Baroque, Classical, Romantic and Modern periods to Contemporary styles, forms and composers. Included will be study of the basic elements of music (melody, rhythm, harmony, form); the symphony, concerto, oratorio, cantata, and symphonic poem.

### **BAND**

*All band classes at the high school level are performance oriented and require the recommendation of the instructor for admission to the program. Participation in all performances is required except when excused by the director in advance for justifiable causes (see the school's band manual). Marching Band is a specialized activity, but it is a part of the band curriculum which requires some additional out-of-school rehearsal time in the spring and fall. Non-band members may be accepted into the auxiliary units, performing as members of the Marching Band. All non-credit members of any band organization must fulfill all requirements of the band activity or they will be terminated from the band activity.*

## **MARCHING BAND (Adv. Band) (9234)**

Grades 9-12, Credit - 1 Unit

Prerequisite: Beginner Band

Content includes a combination of musical skills and movement. The course provides the opportunity for enrichment activities in the solo and ensemble performance area. This course emphasizes team cooperation with a goal of developing various repertoire and performance skills. The ensemble uses audience and competition to help evaluate performances.

## **CONCERT BAND (9296)**

Grades 9-12, Credit - 1 Unit

Prerequisite: Advanced Band

Content includes an in-depth development of musical skills, a survey of great band literature and performance. A great amount of time is spent on information about time periods and composers, which allows students a better understanding of the musical content. This course deals with a variety of repertoire which meets state VBODA (Virginia Band & Orchestra Directors Association). This course includes opportunities in solo and ensemble performances with the high school band, the district band and the State Band of Virginia.

## **CHORUS**

*Chorus classes at the high school level include both introductory and performance oriented programs. All require placement by the instructor based on voice and proficiency. Both advanced chorus and vocal jazz ensemble can involve required participation in rehearsals and performances during out-of-school hours as the need dictates.*

## **CHORUS I (9260)**

Grades 9-11, Credit - 1 Unit

Prerequisite: None

Content includes choir training stressing instruction in music fundamentals, vocal techniques, and easy part reading. Placement is by voice.

## **CHORUS II (9285)**

Grades 9-12, Credit - 1 Unit

Prerequisite: Chorus I

Content stresses extensive reading skills and voice development and development of varied repertoire for public performance. Additional emphasis is placed on the development of individual skills.

## **CHORUS III (9289)**

Grades 10-12, Credit - 1 Unit

Prerequisite: Chorus II

Content includes development of performance skills in a varied repertoire of music in the jazz and pops idiom. Choreography and the use of electronic equipment and techniques are stressed.

# SCIENCE

*The science program offers a wide variety of courses in earth and environmental science, biology, chemistry, and physics. Three (3) units in science are required for graduation with a standard diploma and four (4) units are required for an advanced diploma. In addition, students are encouraged to select other science courses that meet their particular interest or vocational/career choices.*

## **EARTH SCIENCE (4210)**

Grades 9-12, Credit - 1 Unit

Prerequisite: None

An introductory lab/lecture study of earth and its non-living environment. Topics to be studied include: astronomy, meteorology, geology, oceanography, and identification of rocks and minerals.



## **ADVANCED EARTH SCIENCE (42106)\***

Grades 9-12, Credit - 1 Unit

Prerequisite: Teacher recommendation

Advanced Earth Science is a detailed study of the Earth's composition, structure, processes and history. Topics of discussion will include geology, astronomy, oceanography, and meteorology. Earth patterns, cycles, and the interrelationships in Earth/Space systems will be investigated in this inquiry-based course. This curriculum is aligned with the VA Standards of Learning for Earth Science.



## **GEOLOGY (42400)**

Grades 11-12, Credit 1 Unit

Prerequisite: Earth Science, Biology

This course is designed for students who want to further their earth science studies. The course content includes the study of rock formations, minerals and natural processes.

## **ASTRONOMY (4260)**

Grades 11 - 12, Credit - 1 Unit

Prerequisites: Earth Science and Biology

This course is designed for students who desire to further their earth science studies. Course contents include the study of planets, sun, stars and groups of stars in a more comprehensive manner. Students will make direct observations, collect, record and analyze data, simulate experimental conditions, and conduct research. The student will pay any admission or entrance costs to facilities visited on field trips.

## **ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE (42706) \*/VAP (42704)**

Grade 11-12, Credit -1 Unit, College Credit to be determined by performance on AP examination.

Course Length: Two semesters

AP Environmental Science will provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world.

It also is designed to identify and analyze environmental problems both natural and human-made, and to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them.

## **BIOLOGY I (4310)**

Grades 9-12, Credit - 1 Unit

Prerequisite: Earth Science

A lab/lecture study of the nature of life as related to plants and animals. Topics include: the continuity of life, microbiology, multicellular plants, biology of the vertebrates and invertebrates, human biology, and ecological relationships.



## **ADVANCED BIOLOGY I (43106) \***

Grades 9-12, Credit - 1 Unit

Prerequisite: Teacher Recommendation and Earth Science

Advanced Biology I is a laboratory course designed to challenge students with high academic abilities. This accelerated course deals with the fundamental characteristics of living matter from the molecular level to the ecological community with emphasis on general biological principles. Topics similar to Biology I are addressed in greater depth. Students are expected to work independently and with small groups. The Advanced Biology I curriculum is aligned with the VA Standards of Learning for Biology.





## **ADVANCED PLACEMENT BIOLOGY (43706) \*/VAP (43704)**

Grades 11-12, Credit - 1 Unit and college credit based on student performance on the required AP examination given in the spring. Prerequisite: Biology I or Advanced Biology I and Chemistry

In AP Biology, students build the conceptual framework necessary to understand science as a process. The course is divided into three sections, with correlating laboratory exercises: molecules and cells; heredity and evolution; and organisms and populations. Students will also explore evolution, energy transfer, continuity and change, the relationships of structure to function, regulations, interdependence in nature, and the balance of science, technology, and nature. The equivalent of an introductory college-level biology course, AP Biology prepares students for the AP Exam and for further study in health sciences.

## **ADVANCED LAB. STUDIES IN BIOLOGY (43206) \***

Grade 11-12, Credit - 1 Unit  
Prerequisite: Biology I and Advanced Biology

The course is designed for students who have an interest in pursuing biological studies. They will gain additional experience in the science laboratory and will work independently to improvise, conduct, and document research experiments. Some of the topics studies in Advanced Biology will be taught in more depth.

## **ANATOMY & PHYSIOLOGY (4330)**

Grades 11-12, Credit 1 Unit  
Prerequisite: Biology and Chemistry

This lab oriented class is designed to give the student an understanding of the structure and function of the human body. Designed for juniors and seniors interested in a medical profession.

## **ENVIRONMENTAL SCIENCE (43400)**

Grades 11 - 12, Credit - 1 Unit  
Prerequisite: Earth Science and Biology

This course will include current environmental problems on the local, national, and global levels. Kinds of ecosystems, energy flows in ecosystems and changes that occur will be studied. Methods to conserve and improve the environment will be a major focus.

## **ADVANCED ENVIRONMENTAL SCIENCE (43406) \***

Grades 11 - 12, Credit - 1 Unit  
Prerequisite: Earth Science, Biology and Chemistry

Advanced environmental science is designed to promote a global perspective of dynamic ecosystems. Inquiry- and project-based learning will be utilized to enhance the program's impact as relevant environmental topics are expanded.

## **CHEMISTRY I (4410)**

Grades 10-12, Credit - 1 Unit  
Prerequisite: Biology I, Geometry (strongly recommend C or better be attained), and completed or enrolled in Algebra II



A lab/lecture course involving a study of matter and changes in matter, broad concepts upon which chemistry is based, chemical bond, periodicity in behavior of chemical elements, the quantum mechanical model of the atom, molecular structure, and other chemical considerations.

## **ADVANCED LAB. STUDIES IN CHEMISTRY (44256) \***

Grade 12, Credit - 1 Unit  
Prerequisite: Chemistry and Adv. Chemistry  
This course is designed to give students additional experience in the chemistry laboratory. Students will be required to prepare their own solutions for each experiment and a formal lab report will be required. Former knowledge gained from Chemistry I and Advanced Chemistry will be synthesized and applied to realistic situations.

## **ADVANCED PLACEMENT CHEMISTRY (44706) \*/ VAP (44704)**

Grades 11-12, Credit - 1 Unit and college credit based on student performance on the required AP examination given in the spring. Prerequisite: Chemistry and Algebra II  
Course Length: Two semesters

AP Chemistry builds students' understanding of the nature and reactivity of matter. After studying the structure of atoms, molecules, and ions, students move on to solve quantitative chemical problems and explore how molecular structure relates to chemical and physical properties. Students will examine the molecular composition of common substances and learn to predictably transform them through chemical reactions. The equivalent of an introductory college-level chemistry course, AP Chemistry prepares students for the AP Exam and for further study in science, health sciences, or engineering.

## **ADVANCED HONORS PHYSICS (45104) \*/VAP**

Grades 11-12, Credit 1 Unit  
Prerequisite: Algebra II, Geometry, and highly recommend Chemistry

This is an on-line course that aids students in synthesizing the fundamental concepts and principles concerning matter and energy through the laboratory study of mechanics, wave motion, heat, light, electricity, magnetism, electromagnetism, and atomic and nuclear physics. Course requires an obligation to do a considerable amount of work outside the classroom, both in individual studies and in group work.

## **PHYSICS I (45106) \***

Grades 11-12, Credit 1 Unit  
Prerequisite: Algebra II, Geometry, and highly recommend Chemistry

A lab/lecture course designed for students who plan careers in engineering, science, and technology. The course deals with mechanics, motion and waves, light, electricity,

magnetism, the atom and nuclear forces, and emphasizes problem-solving.

## **ADVANCED PLACEMENT PHYSICS (45706) \*/VAP (45704)**

Grades 10-12, Credit - 1 Unit and college credit based on student performance on the required AP examination given in the spring. Prerequisite: Algebra II, Math Analysis or Trigonometry.

Course Length: Two semesters

AP Physics is a non-calculus survey course covering five general areas: Newtonian mechanics, thermal physics, electricity and magnetism, waves and optics, and atomic and nuclear physics. Students will gain an understanding of physics' core principles and then apply them to problem-solving exercises. They'll learn how to measure the mass of a planet without weighing it, find out how electricity makes a motor turn, and learn how opticians know how to shape the lenses for glasses. The equivalent of an introductory college-level course, AP Physics prepares students for the AP Exam and for further study in science and engineering.

## **SURVEY OF EARTH SCIENCE (46101)**

Grades 9-12, Credit -1 Unit

Survey of Earth Science is a broad study of the concepts related to the earth and its non-living environment. Topics to be studied include: concepts in astronomy, meteorology, geology, and oceanography. Survey of Earth Science does not provide complete instruction in the Earth Science SOL curriculum and does not meet the requirements for an Advanced, Standard, or Modified Standard Diploma.

## **SURVEY OF BIOLOGY (46102)**

Grades 9-12, Credit -1 Unit

Survey of Biology is a broad study of the concepts related to plant and animal life. Topics to be studied include: concepts of biology and botany. Survey of Biology does not provide complete instruction in the Biology SOL curriculum and does not meet the requirements for an Advanced, Standard, or Modified Standard Diploma.

## **FORENSIC SCIENCE (46106) \***

Grades 11 - 12, Credit - 1 Unit

Prerequisite: Chemistry and one additional advanced science course (Physics, Adv. Biology II, AP Biology, Adv. Chemistry or Anatomy and Physiology) and teacher recommendation

Forensic Science is an advanced level course designed to enable students to understand how science is related to criminal and civil laws that are enforced by law enforcement agencies in a criminal justice system. Chemistry, biology, physics, and geology are subjects that will be used in determining the importance of various information/evidence discovered at a crime scene. Curriculum components include: introduction/history of forensic science and collecting and processing crime scene evidence. Students will apply gained knowledge in laboratory assignments, crime scene simulations, and mock trials.

NOTE: Alternatives to animal dissection are provided to students. (Va. Code § 22.1-200.01)



# SOCIAL STUDIES

Offerings in social studies are designed to encourage students to evaluate their own beliefs, attitudes, values, and social conduct. The basic disciplines of social studies provide insight into the operation and results of various kinds of social, economic, governmental and political systems.

Three units of credit in the area of social studies are required for graduation with a standard diploma. These include one unit in world geography, one unit in United States History and one unit in United States Government.

A student will not be eligible to enroll in U. S. and Virginia History and U. S. and Virginia Government during the same school session unless enrollment in both enables the student to become eligible for graduation during the current school session.

## **CITIZENSHIP STUDIES (2995)**

Grades 10 - 11, Credit - 1 Unit

Prerequisite: None

Civics is the study of the rights and responsibilities of citizens. Subjects will include democracy, freedom, and individual rights, and the structure, function and problems of government on the local, state, national and international levels. The students will also learn about other economic, political and social institutions.

## **ADVANCED PLACEMENT HUMAN GEOGRAPHY (22126) \* /VAP (22124)**

Grades 10-12, Credit - 1 Unit and college credit based on student performance on the required AP examination given in the spring.

Prerequisite: None

Course Length: One semester

AP Human Geography introduces students to the systematic study of patterns and processes that have shaped human understanding and the alteration of the Earth's surface. Students will study diverse people and areas organized around concepts that include location and place, scale, pattern, spatial organization, and regionalization. They will also learn about the methods and tools geographers use in their science and practice. The course will prepare students to take the AP Exam.

## **WORLD HISTORY AND GEOGRAPHY TO 1500 AD (2215)**

Grades 9-10, Credit - 1 Unit

Prerequisite: None

World History and Geography is the study of the history of mankind from the dawn of civilization through the middle ages (1500 AD). Geography themes are included in this study, and students gain global and historical perspectives that equip them for challenges of the 21st Century.

## **ADVANCED WORLD HISTORY AND GEOGRAPHY TO 1500 AD (22156)**

Grades 9-10, Credit - 1 Unit

Prerequisite: None

Advanced World History and Geography is designed to increase students' knowledge from the beginning of time until the middle ages (1500 AD). The course is designed for students who have a prerequisite basic knowledge of the concepts and themes of geography. Students enrolled in this advanced level course are equipped to employ higher level thinking and creative strategies. Expanded technologies will be utilized to enhance students' historical perspectives.

## **WORLD HISTORY AND GEOGRAPHY 1500 AD - PRESENT (2216)**

Grade 10, Credit - 1 Unit

Prerequisite: None

Required for Advanced Diploma

This is an intensive study of the cultures and political development of the European countries with some sections devoted to Asian and African history. World history covers five basic areas: cultural, scientific, religious, economical and political trends of the past. Special emphasis is placed on the 18th, 19th and 20th centuries.

## **ADVANCED WORLD HISTORY AND GEOGRAPHY 1500 AD - PRESENT (22166) \***

Grade 10, Credit - 1 Unit

Prerequisite: None

Required for Advanced Diploma

Advanced World History focuses on cultural, scientific, religious, economical, and political trends of the past. The people and events of the eighteenth, nineteenth and twentieth centuries will be emphasized for their strong connections to contemporary issues. Higher level thinking and problem solving will be required for this in-depth examination of historical events as broad themes of history are probed and analyzed.

## **ADVANCED PLACEMENT GOVERNMENT (22456) \***

Grade 12, Credit - 1 Unit

Prerequisite: U.S. History and Teacher Recommendation

This course is intended for students who have a thorough knowledge of U. S. and Virginia Government and are planning to attend college. The content for the course follows the syllabus as defined by the College Entrance Examination Board for AP Government. Students are encouraged to take the AP Exam.

## **HUMANITIES (23150)**

Grade 12, Credit - 1 Unit

Prerequisite: Sociology I

This class is designed to give students the opportunity to explore issues in depth that have brought the United States and the world to where it is today. Some of the topics to be covered include Holocaust, 1960s, Vietnam, Watergate. Outside reading, student research, class lecture and discussion will be required.

## **ADVANCED PLACEMENT U. S. HISTORY (23196) \***

Grade 11, Credit - 1 Unit each semester

Prerequisite: World History and English Teacher Recommendation



This course is intended for students who have a thorough knowledge of U. S. and Virginia History and are planning to attend college. The content for the course follows the syllabus as defined by the College Entrance Examination Board for A. P. History. Students are encouraged to take the A. P. Exam.

## **VA AND U. S. HISTORY (2360)**

Grade 11, Credit - 1 Unit

Prerequisite: World History (for Adv. Diploma option students)

U. S. History is a survey course of the development of democratic processes in the United States. The course begins with colonial settlements in America and traces the major historical events of the nation up to the present challenges to the American way of life. Specific units of study include: the Revolutionary War, the Constitution, early administrations, westward expansion, Mexican War and sectionalism.

## **AP WORLD HISTORY (23806) \* /VAP (23804)**

Grade 11-12, Credit -1 Unit, College Credit to be determined by performance on AP examination.

Course Length: Two semesters

AP World History will develop greater understanding of the evolution of global processes and contacts in interaction with different types of human societies. Six primary course themes will be included in this study.

## **TWENTIETH CENTURY HISTORY (23870)/ADV. (23876) \***

Grades 11-12, Credit - 1 Unit

Prerequisite: World History

This contemporary history course examines significant events, ideologies, and movements that have shaped the world during the twentieth century. Special emphasis will be given to the major political, economic and social developments in the world which have affected the United States.

## **ADVANCED PLACEMENT EUROPEAN HISTORY (23996) \* /VAP (23994)**

Grade 11-12, Credit -1 Unit, College Credit to be determined by performance on AP examination.

Course Length: One semester

AP European History (1450 A.D.-present) introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. The course provides a basic narrative of events and movements as well as an understanding of some principal themes in modern European history.



**HISTORY OF MINORITY GROUPS (2997)**

Grades 10-12, Credit - 1 Unit

Prerequisite: None

This course is designed to enlighten students of the conflicts, hardships or adversities that have confronted minorities throughout the course of history. It will further examine the achievements and contributions of minority groups.

**VA AND U.S. GOVERNMENT (2440)**

Grade 12, Credit - 1 Unit

Prerequisite: U.S. History

U. S. Government introduces the student to the ideas and principles of American government including the organization and operation at the local, state and national levels. It involves an in-depth study with a brief review of the origins of government and democratic ideas down through the ages. At the national level emphasis is placed on the U. S. Constitution and its judicial branches; and the position of the U. S. in international affairs.

**ADVANCED PLACEMENT GOVERNMENT AND POLITICS - U.S. (24456) \*/VAP (24454)**

Grade 12, Credit -1 Unit, College Credit to be determined by performance on AP examination.

AP Government and Politics is designed to present students with an analytical perspective of government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies.

**ADVANCED PLACEMENT GOVERNMENT AND POLITICS - COMPARATIVE COURSE (24506) \*/VAP (24504)**

Grade 12, Credit -1 Unit, College Credit to be determined by performance on AP examination.

AP Government and Politics: Comparative will introduce students to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of settings. Six countries form the core of the AP Comparative Government and Politics course: China, Great Britain, Mexico, Nigeria, and Russia. In addition, Iran will be included as time allows. This course does NOT substitute for U.S. Government under the Virginia Standards of Learning.

**SOCIOLOGY I (2500)**

Grades 11-12, Credit - 1 Unit

Prerequisite: None

This is a basic survey course designed to lay a factual basis for an understanding of man in society. Attention is paid to building a vocabulary of basic sociological terms throughout the year by relating them to studies of the relationship between man and his environment, his culture, his society, his family structures, his government, his economy and his behavior.

**SOCIOLOGY II (2502)**

Grade 12, Credit - 1 Unit

Prerequisite: Sociology I and Teacher Recommendation

This course is a study of the major social

problems facing society today. Attention is given to the areas of criminology, poverty, urbanization, demography, mental health, marriage and the family, and minority groups. Current periodicals, the library and mass media are used instead of a textbook.

**ECONOMICS (2800)**

Grades 11 - 12, Credit - 1 Unit

Prerequisite: None

This course offers a study of basic concepts and their application to the real world. The course is designed to relate economic conditions of our society, including its relationship to the government's role to our economic theory. The course emphasizes principles, issues and the language for this field of study.

**ADVANCED PLACEMENT MICROECONOMICS (28026)****\*/VAP (28024)**

Grades 10-12, Credit - 1 Unit and college credit based on student performance on the required AP examination given in the spring.

Prerequisite: Algebra II

Course Length: One semester

AP Microeconomics is the study of the behavior of individuals and businesses as they exchange goods and services in the marketplace. Students will learn why the same product costs different amounts at different stores, in different cities, at different times. They'll learn to spot patterns in economic behavior and how to use those patterns to explain buyer and seller behavior under various conditions. Students will study the economic way of thinking, understanding the nature and function of markets, the role of scarcity and competition, the influence of factors such as interest rates on business decisions, and the role of government in promoting a healthy economy. The equivalent of a 100-level college course, AP Microeconomics prepares students for the AP Exam and for further study in business, history and political science.

**ADVANCED PLACEMENT MACROECONOMICS (28036)****\*/VAP (28034)**

Grades 10-12, Credit - 1 Unit and college credit based on student performance on the required AP examination given in the spring.

Prerequisite: Algebra II

Course Length: One semester

AP Macroeconomics students learn why and how the world economy can change from month to month, how to identify trends in our economy, and how to use those trends to develop performance measures and predictors of economic growth or decline. They'll also examine how individuals, institutions, and influences affect people, and how those factors can impact everyone's life through employment rates, government spending, inflation, taxes, and production. The equivalent of a 100-level college-level class, this course prepares students for the AP Exam and for further study in business, political science and history.

**VIRGINIA (OLD DOMINION) HISTORY (2998)**

Grades 10-12, Credit - 1 Unit

Prerequisite: None

This course includes a study of its people, its geography, its government, its social develop-

ment, and its religious institutions. Emphasis will be placed on early colonization, the leadership of Washington, Jefferson, Madison, and Monroe, the Civil War and Robert E. Lee, Reconstruction and William Mahone, Governor Claude Swanson, the New South and Industry and the Byrd Machine.

**PSYCHOLOGY (29000)**

Grades 11-12

Credit - 1 Unit

Prerequisite: None

This course covers basics of Psychology with emphasis on individual interests. Research papers and student involvement are required. Class discussion and the ability to work in groups are stressed.

**ADVANCED PLACEMENT PSYCHOLOGY (29026)****\*/VAP (29024)**

Grades 10-12, Credit - 1 Unit and college credit based on student performance on the required AP examination given in the spring.

Prerequisite: Biology or Advanced Biology

Course Length: One semester

AP Psychology provides an overview of current psychological research methods and theories. Students will explore the therapies used by professional counselors and clinical psychologists and examine the reasons for normal human reactions: how people learn and think, the process of human development and human aggression, altruism, intimacy, and self-reflection. They'll study core psychological concepts, such as the brain and sense functions, and learn to gauge human reactions, gather information, and form meaningful syntheses. Along the way, students will also investigate relevant concepts like study skills and information retention. The equivalent of a 100-level college survey course, AP Psychology prepares students for the AP Exam and for further studies in psychology and life sciences.

**COMPARATIVE RELIGION (29961)**

Grades 9-12, Credit -1 Unit

Course is an elective class that focuses on the basic tenets, history and religious observances and rites of world religions. Successful completion of this course will afford students an expanded ecumenical perspective.

**SURVEY OF UNITED STATES HISTORY (29962)**

Grades 9-12, Credit -1 Unit

This course is a broad study of the topics related to the understanding of American history. Survey of U.S. History does not provide complete instruction in the U.S. History SOL curriculum and does not meet the requirements for an Advanced, Standard, or Modified Standard Diploma.

**SURVEY OF UNITED STATES GOVERNMENT (29963)**

Grades 9-12, Credit -1 Unit

This course is a broad study of the topics related to the understanding of American government. Survey of U.S. Government does not provide complete instruction in the U. S. Government curriculum and does not meet the requirements for an Advanced, Standard, or Modified Standard Diploma.



# PIEDMONT GOVERNOR'S SCHOOL FOR MATHEMATICS, SCIENCE AND TECHNOLOGY



Students in Pittsylvania County have access to an academic year Governor's School funded by the Department of Education. By strengthening relationships between public high schools and participating colleges through the Governor's School, there are increased opportunities for dual enrollment as well as pupil contact on a regular basis with the advantages of higher education. The integrated, interdisciplinary nature of the instruction at the Governor's School reflects how issues and problems are defined and solved in the real world.

Traditional high school credits to be used toward graduation from the respective high schools are earned by students. As many as four such credits may be obtained each year by attending Governor's School. Classes are conducted during the regular school year on a half-day basis.

Students wishing to apply to attend Governor's School should have completed Advanced Algebra and Trigonometry. In all Governor's School courses, the approach to teaching the content is interdisciplinary and often project based. Requirements and course offerings are subject to change. **All PGSMST courses carry special grade point value and receive dual enrollment credits.**

Students are encouraged to make Governor's School a two-year experience. Therefore, they should be prepared to apply as sophomores. Students planning to apply to the Governor's School should contact their local guidance counselor.

## JUNIOR COURSE DESCRIPTIONS

*Juniors will take college chemistry; for math, juniors will take either PreCalculus with Trigonometry or Calculus I. All juniors are required to take Introduction to Research and Statistics and English 11.*

### Junior Curriculum

1. English 11
2. One (1) math course
3. One (1) science course
4. Research/Statistics

### ENGLISH 11 (11505)

Credit - 1 Unit and 6 college semester hours  
Prerequisite: English 10

This course focuses on English in action and strives to develop concepts, terminology, techniques, and understanding of methods of literature, language, and composition. Emphasis is on personal and critical response, literary analysis, community skills, and research using word-processing and other appropriate computer programs. Students are encouraged to discover the American experience as expressed in the literature of its people. Included in the course are oral tradition, poetry, drama, prose, and novel. The course will cover the Standards of Learning for English 11. Students will take the End-of-Course test for the course at the base school. The course will be organized within the interdisciplinary structure of the PGSMST.



### INTRODUCTION TO RESEARCH AND STATISTICS (31905)

Credit - 1 Unit and 6 college semester hours  
Prerequisite: None

The course is an introduction to the research process and elementary statistical methods and concepts. Students will be introduced to research design, sampling techniques, library research, scientific writing, presentations skills and development of multimedia presentations. The course also 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. Students will complete the preliminary report of an original research project. Students design the study, collect and analyze data, and report results.



### PRECALCULUS WITH TRIGONOMETRY (31995)

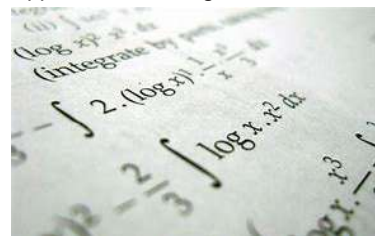
Credit - 1 Unit and 5 college semester hours  
Prerequisite: Advanced Algebra and Trigonometry

The course is an integrated mathematical analysis course which presents topics in power, polynomial, rational, exponential, and logarithmic functions, systems of equations, trigonometry, trigonometric applications, including Law of Sines and Cosines, sequences and series, and an introduction to conics. This course will build on the concepts learned in previous math courses and prepare students for higher level math classes.

### CALCULUS I (31765)

Credit - 1 Unit and 4 college semester hours  
Prerequisite: Precalculus with Trigonometry or Precalculus I and Precalculus II

Calculus I 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.



### COLLEGE CHEMISTRY (44205)

Credit - 1 Unit and 8 college semester hours  
Prerequisite: Chemistry (preferred)

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 are studied jointly with the research methodology and design course or senior research application and evaluation.





**SENIOR COURSE DESCRIPTIONS**

Seniors must choose either college physics, college biology or anatomy/microbiology; for math, seniors must choose either Calculus I, Calculus II, Statistics I and Statistics II. All seniors are required to take senior research application and evaluation course and English 12/college composition.

**Senior Curriculum**

1. English 12
2. One (1) math course
3. One (1) science course
4. Research Application and Evaluation

**ENGLISH 12 (11605)**

Credit - 1 Unit and 6 college semester hours  
Prerequisite: English 11

The course examines major British (and some world) writings from early times to the modern period and encourages students to discover the historical and global influence of British culture as reflected in the literature. The course develops writing ability for study and application taken from personal experience, observation, specified research, and reading of selected literature. The emphasis is on writing as a process including audience, purpose, tone, drafting, revising, and editing. The types of writing produced include description, exposition, narration, persuasion, and literary criticism. The course integrates experiences in thinking, reading, listening, and speaking. The course will cover the Standards of Learning for English. It is organized within the interdisciplinary structure of the PGSMST.

**CALCULUS I (31765)**

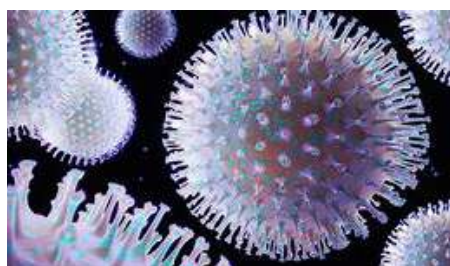
Credit - 1 Unit and 4 college semester hours  
Prerequisite: Precalculus with Trigonometry or Precalculus I and Precalculus II

Calculus I 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.

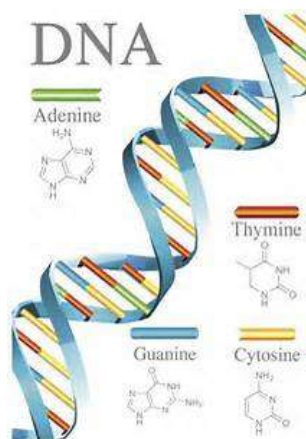
**CALCULUS II (32005)**

Credit - 1 Unit and 4 college semester hours  
Prerequisite: Calculus I

This course 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. Course is designed for mathematical, physical, and engineering science programs.

**STATISTICS I & II (31925)**

Credit - 1 Unit and 6 college semester hours  
Prerequisite: Precalculus with Trigonometry  
This course presents an overview of statistics, including descriptive statistics, elementary probability, probability distributions, estimation, hypothesis testing, correlation, and linear regression. Statistics II 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.

**COLLEGE BIOLOGY (43205)**

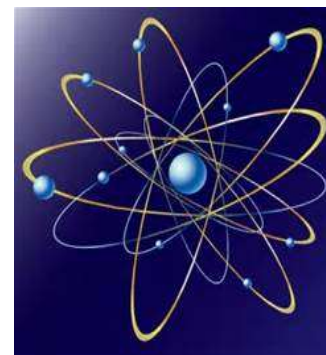
Credit - 1 Unit and 8 college semester hours  
Prerequisite: high school biology desired  
The course is a college-level introduction focusing on the fundamental characteristics of living matter from the molecular level to the ecological community level. The content introduces the diversity of living organisms, their structure, function and evolution. Topics covered include major concepts in molecular and cellular biology, microbiology, biochemistry, genetics, botany, physiology and ecology.

**COLLEGE ANATOMY AND MICROBIOLOGY (43305)**

Credit - 1 Unit and 8 college semester hours  
Prerequisite: College Biology  
The first semester of the course integrates anatomy and physiology of cells, tissues, organs, and systems of the human body. The course integrates concepts of chemistry, physics, and pathology. During the second semester, the course examines morphology, genetics, physiology, genetics, and control of microorganisms. There is an emphasis on application of microbiological techniques to selected fields.

**COLLEGE PHYSICS (45205)**

Credit - 1 Unit and 8 college semester hours  
Prerequisite: Advanced Integrated Mathematical Analysis and high school chemistry  
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 analysing data in a computer-based lab and introducing students to applications of theoretical 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.

**SENIOR RESEARCH APPLICATION AND EVALUATION (46105)**

Credit - 1 Unit and 3 college semester hours  
Prerequisite: Research Methodology and Design

The course provides the students 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 a real rather than a contrived audience in a professionally appropriate manner. Students actively participate during their junior year in planning their senior research experience.







# ACADEMY OF ENGINEERING AND TECHNOLOGY (AET)

A partnership with Danville Community College (DCC) and The Institute for Advanced Learning and Research (IALR) will offer students the opportunity to participate in a rigorous engineering curriculum that will equip students with a competitive future as they select a career or seek post-secondary education. The AET program will be housed at the IALR and will follow the same half-day schedule as Governor's School.

The two-year engineering curriculum will be comprised of courses that will introduce the concepts, ethics, and responsibilities related to engineering professions through theory-based lectures, hands-on activities and projects, and interactions with local engineering professionals. Along with their engineering explorations, students are also enrolled in rigorous English and mathematics courses that will further develop and enhance problem-solving, communication, and collaborative skills that are vital to today's workplace. The goal of the AET program is to provide a solid foundation that students will continue to build upon as they matriculate into future university studies and professional careers.

Traditional high school credits will be earned at the respective high schools.

All AET courses carry special grade point value and receive dual enrollment credits from Danville Community College.

AET is a two-year experience. Therefore, students should prepare to apply as sophomores and should contact their guidance counselor for further information.

## 2019-2020 Senior Curriculum

### ENGINEERING ANALYSIS AND APPLICATIONS (84513)

Grade 12

Credit - 2 Units and 6 college semester hours  
Prerequisite: Engineering Exploration

**EGR 126 (3 credits) & EGR 195 (3 credits)**

PCS COURSE	DCC COURSE
ENGINEERING (84513)	EGR 126: Computer Programming for Engineers
	EGR 195: Topics in Engineering
ENGLISH 12 (11603)	ENG 243 - Survey of English Literature I
	ENG 244 - Survey of English Literature II
MATH (31763)	MTH 273: Calculus I

# DCC

Danville Community College



## Junior Curriculum

PCS COURSE	DCC COURSE
ENGINEERING (84503)	EGR 120: Intro to Engineering
	EGR 198: Seminar & Project
ENGLISH 11 (11503)	ENG 111 - College Composition I
	ENG 112 - College Composition II
MATH (31623)	MTH 166: Precalculus with Trigonometry

### ENGLISH 11 (11503)

Credit - 1 Unit and 6 college semester hours  
Prerequisite: English 10

**ENG 111:** 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 context, audiences, and purposes. Writing activities will include exposition and argumentation with at least one researched essay.

**ENG 112:** Continues to develop college writing with increased emphasis on critical essays, argumentation, and research, developing these competencies through the examination of a range of texts about the human experience. Requires students to locate, evaluate, integrate, and document sources and effectively edit for style and usage.

### ENGINEERING EXPLORATIONS (84503)

Grade 11

Credit - 2 Units and 5 college semester hours  
Prerequisite: None

**EGR 120 (2 credits); EGR 198 (3 credits)**

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

### PRECALCULUS WITH TRIGONOMETRY (31623)

Credit - 1 Unit and 5 college semester hours

Prerequisite: Algebra II or Advanced Algebra/Trig

**MTH 166:** Presents college algebra, analytic geometry, trigonometry, and algebraic exponential and logarithmic functions.

## Senior Curriculum

PCS COURSE	DCC COURSE
ENGINEERING (84513)	EGR 115: Engineering Graphics
	EGR 195: Topics in Engineering
ENGLISH 12 (11603)	ENG 243 - Survey of English Literature I
	ENG 244 - Survey of English Literature II
MATH (31763)	MTH 273: Calculus I

### ENGLISH 12 (11603)

Credit - 1 Unit and 6 college semester hours  
Prerequisite: English 11

**ENG 243 & ENG 244:** Studies major English works from the Anglo-Saxon period to the present, emphasizing ideas and characteristics of the British literary tradition. Involves critical reading and writing.

### ENGINEERING ANALYSIS AND APPLICATIONS (84513)

Grade 12

Credit - 2 Units and 5 college semester hours  
Prerequisite: Engineering Exploration

**EGR 115 (2 credits) & EGR 195 (3 credits)**  
Engineering Analysis and Applications II is the second of a possible four-course sequence that will allow students to apply the engineering design process to areas of the designed world, explore ethics in a technological world, and examine systems in civil, mechanical, electrical, and chemical engineering. An introduction to the algorithmic process, using programming languages and problem solving software will be employed. Students will participate in STEM-based, hands-on projects as they communicate information through team-based presentations, proposals, and technical reports.

### CALCULUS I (31763)

Credit - 1 Unit and 4 college semester hours

Prerequisite: Precalculus with Trigonometry  
**MTH 263:** Presents topics in differential calculus of one variable including the theory of limits, derivatives, differentials, definite and indefinite integrals and applications to algebraic and transcendental functions. Designed for mathematical, physical, and engineering science programs.










# CAREER AND TECHNICAL EDUCATION



Career and Technical Education (CTE) provides the opportunity for students to expand their learning options by participating in courses in eight (8) different areas: agriculture education, business and information technology, education, family and consumer sciences, health and medical sciences, marketing education, technology education, and trade and industrial education. Courses in these areas provide students with learning environments which simulate the particular industry setting and the related necessary skill development. Students are prepared to continue their education in a postsecondary institution, apprenticeship program or enter the workforce directly. Students receive instruction to develop occupational skills, as well as good work habits and attitudes.

## Pittsylvania County Schools - Career and Technical Education High School Career Clusters with Related Courses

Agriculture, Food and Natural Resources	Architecture and Construction	Arts, Audio/Video Technology and Communications	Business, Management and Administration
Horticulture Sciences * Greenhouse Plant Production and Management * Landscaping * Introduction to Plant Systems Introduction to Animal Systems Agricultural Production Technology Agricultural Business Fundamentals Equine Management Production Small Animal Care/Veterinary Science * Small Engine Repairs Turfgrass Establishment & Maintenance Introduction to Natural Resources and Ecology Systems Fisheries and Wildlife Management Entrepreneurship	Architectural Drawing & Design Electrical Automation and Robotics I & II *^ Heating, Ventilation, Air Conditioning, and Refrigeration I & II (HVAC) *^ Electricity I & II *^ 	Computer Information Systems ^ Advanced Computer Information Systems ^ Technical Drawing and Design ^ Architectural Drawing & Design Design, Multimedia & Web Technologies ^ Office Administration Word Processing ^ Computer Programming ^ 	Accounting ^ Advanced Accounting ^ Business Law ^ Business Management ^ Computer Information Systems ^ Advanced Computer Information Systems ^ Office Administration Word Processing ^ Economics & Personal Finance Entrepreneurship 
Education and Training	Finance	Government and Public Administration	Health Science
Teachers for Tomorrow I & II *^ Small Engine Repairs Equine Management Production LET I - VIII (JROTC)	Accounting ^ Advanced Accounting ^ Business Law ^ Economics and Personal Finance Agricultural Business Fundamentals	Entrepreneurship LET I - VIII (JROTC) Accounting ^ Advanced Accounting ^ Business Law ^ Economics & Personal Finance	Emergency Medical Tech I & II * ^ Nursing Assistant I & II *^ Entrepreneurship Veterinary Science *
Hospitality and Tourism	Human Services	Information Technology	Law, Public Safety, Corrections and Security
Culinary Arts I & II *^ Introduction to Marketing Sports & Entertainment Marketing Entrepreneurship 	Cosmetology I, II & III * ^ Life Planning Nutrition & Wellness Child Development & Parenting Independent Living Entrepreneurship	Cybersecurity Systems Technology *^ Computer Applications Computer Information Systems ^ Advanced Computer Information Systems ^ Computer Hardware Operations I-V * ^ Design, Multimedia & Web Technologies ^ Entrepreneurship Office Administration Word Processing ^ Computer Programming ^	Criminal Justice I & II Business Law ^ Entrepreneurship LET I - VIII (JROTC) 
Manufacturing	Marketing, Sales & Service	Science, Technology, Engineering and Mathematics	Transportation, Distribution and Logistics
Manufacturing Systems I Materials and Processes Technology Welding I & II *^ Entrepreneurship Precision Machining Technology I & II *^ Industrial Technician - Mechanical I & II *^ * Pittsylvania Career and Technical Center course ^ May qualify for credit at Danville Community College	Introduction to Marketing Advanced Marketing ^ Entrepreneurship Agricultural Business Fundamentals Computer Information Systems ^ Advanced Computer Information Systems ^	Design, Multimedia & Web Technologies ^ Manufacturing Systems I Materials and Processes Technology Technical Drawing and Design ^ Engineering Drawing and Design ^ Accounting ^ Advanced Accounting ^ Computer Information Systems ^ Advanced Computer Information Systems ^ Entrepreneurship Equine Management Production Intro. to Natural Resources & Ecology Sys. Small Animal Care I & II * Small Engine Repairs Turfgrass Establishment & Maintenance Veterinary Science * Computer Programming ^ Horticulture Sciences * HVAC *^	Auto Body Technology I & II * Automotive Technology I & II *^ Accounting ^ Advanced Accounting ^ Computer Information Systems ^ Advanced Computer Information Systems ^ Entrepreneurship Marketing Advanced Marketing ^ LET I - VIII (JROTC) Office Administration Small Engine Repairs
<p><b>The Virginia Standards of Learning (SOL) are integrated into the curriculum of all career and technical education program areas, reinforcing the application of these standards.</b></p> <p><b>Career and Technical Education student organizations are an integral part of each CTE area's curriculum.</b></p>			



## Career and Technical Education

# Summary of Industry Certifications

All Career and Technical Education programs offer opportunities for students to earn a State Board of Education approved industry certification and/or a professional license issued by the Commonwealth of Virginia. Passing an industry-approved examination verifies that students have the knowledge and skill levels to compete for higher education and career opportunities after high school.

Beginning with students entering ninth grade for the first time in 2013-2014, a student must also earn a board-approved career and technical education credential to graduate with a Standard Diploma.

The list below identifies the certifications offered at the four high schools and the Pennsylvania Career and Technical Center (PCTC).

### High School CTE Courses

Department	Certification
Agricultural Education	<i>National Occupational Competency Testing Institute - NOCTI</i> Animal Systems Assessment
	<i>Virginia Department of Agriculture and Consumer Services</i> Private Pesticide Applicator License
Business and IT	<i>Microsoft Office Specialist Certification</i> MOS – Word MOS – Excel MOS – PowerPoint
	<i>National Occupational Competency Testing Institute - NOCTI</i> General Management Assessment
Economics & Personal Finance	<i>Wise-Financial Literacy Certification</i>
JROTC	<i>Armed Services Vocational Battery Examination (ASVAB)</i>
Marketing	<i>National Retail Federation</i> Customer Service Certification
	<i>National Occupational Competency Testing Institute - NOCTI</i> Recreation, Amusement, and Attractions
Across the Board	Virginia Workplace Readiness National Career Readiness Certificate

Certifications may be added or changed to meet the certification needs as identified and recognized by industry.



### PCTC CTE Courses

SUBJECT	CERTIFICATION
Auto Body Technology	<i>National Automotive Student Skills Standards</i> Automotive Technician Examination (ASE) NATEF – Non-Structural Analysis & Damage Repair NATEF – Paint & Refinishing NATEF – Structural Analysis & Damage Repair
Auto Science Technology	<i>National Automotive Student Skills Standards</i> Automotive Technician Examination (ASE) NATEF – Automatic Transmission/Transaxle NATEF – Brakes NATEF – Electrical/Electronic Systems NATEF – Engine Performance NATEF – Engine Repair NATEF – Heating & Air Conditioning NATEF – Maintenance & Light Repair NATEF – Manual Drive Train & Axles NATEF – Mechanical & Electrical NATEF – Suspension & Steering
Computer Network Hardware Operations I-IV	<i>CISCO</i> Certified Entry Networking Technician Examination <i>CompTIA</i> Network+ Security + <i>Microsoft Technology Associate</i> Security Fundamentals Networking Fundamentals
Cybersecurity Systems Technology I & II	<i>CompTIA</i> A+ Certification CompTIA IT Fundamentals <i>Microsoft Technology Associate</i> Windows Operating System Fundamentals Security Fundamentals Networking Fundamentals
Cosmetology	<i>Virginia Board of Cosmetology</i> Cosmetology License
Criminal Justice I	<i>National Occupational Competency Testing Institute (NOCTI)</i> Criminal Justice
Culinary Arts	<i>Education Foundation of the National Restaurant Association</i> ProStart Certification - Level I & Level II
	<i>National Restaurant Association Educational Foundation</i> ServSafe Manager Examination
Emergency Medical Technician	<i>Virginia Department of Health</i> Emergency Medical Technician
Electrical Automation and Robotics I & II Electricity I & II	<i>National Center for Construction Education and Research (NCCER)</i> NCCT Trades Core Introductory Craft Skills NCCT Electrician Level I Certification
Heating, Ventilation, Air Conditioning, and Refrigeration I & II (HVAC)	<i>National Center for Construction Education and Research (NCCER)</i> NCCT Trades Core Introductory Craft Skills NCCT HVAC, National Construction Career Certification Level I
	<i>Environmental Protection Agency (EPA)</i> Technical Certification
	<i>National Institute for Metalworking Skills, Inc. (NIMS)</i> NIMS Basic Mechanical Systems
Industrial Technician - Mechanical I & II	<i>National Center for Construction Education and Research (NCCER)</i> NCCT Trades Core Introductory Craft Skills
	<i>National Institute for Metalworking Skills, Inc. (NIMS)</i> NIMS Basic Mechanical Systems
Nursing Assistants	<i>Virginia Board of Nursing</i> Certified Nurse Aide
Precision Machining	<i>National Institute for Metalworking Skills, Inc. (NIMS)</i> NIMS Measurement, Materials & Safety Skills, Level I NIMS CNC Turning: Operations, Level I
Small Animal Care/ Vet Science	<i>National Occupational Competency Testing Institute (NOCTI)</i> Small Animal Science and Technology
Teachers for Tomorrow I & II	<i>Educational Testing Service</i> Praxis Part I Examination - Math ParaPro Assessment
Welding I & II	<i>National Center for Construction Education and Research (NCCER)</i> NCCT Trades Core Introductory Craft Skills NCCT Welding

**KEY:**

\*Denotes classes with special grade point value.

\*\*Denotes dual enrollment with Danville Community College. DCC enrollment requirements must be met for college credit.



IC - Industry Certification



## Course Selection Guide -- Career &amp; Technical Education

Course	Course ID#	9	10	11	12	ADV	AP	Dual	IC
<b>ADAPTIVE &amp; FUNCTIONAL CURRICULUM - Page 34</b>									
Independent Living Skills	7896	X	X						
Pre-Vocational Skills	7898		X	X	X				
<b>AGRICULTURAL EDUCATION - Pages 31</b>									
Introduction to Plant Systems	8007	X	X						
Intro. Animal Systems	8008	X	X						
Agricultural Pro. Technology	8010		X	X					X
Agricultural Business Fundamentals	8022		X	X					
Turfgrass Establishment & Maintenance	8051			X	X				X
Equine Management & Production	8080			X	X				X
Small Engine Repairs	8082			X	X				
Intro. to Natural Resources & Ecology Systems	8040	X	X						
Fisheries and Wildlife Management	8041			X	X				
<b>BUSINESS AND INFORMATION TECHNOLOGY - Pages 32</b>									
Business Law	6131		X	X	X			X	
Business Management	6135		X	X	X			X	X
Accounting	6320		X	X	X			X	
Advanced Accounting	6321			X	X			X	
Computer Applications	6611	X	X						
Computer Information Systems (CIS)	6612			X	X			X	X
Advanced Computer Information Systems	6613			X	X			X	
Office Administration	6621		X	X	X				
Word Processing	6625		X	X	X			X	X
Design, Multimedia, and Web Technologies	6630			X	X			X	
Computer Programming	6640			X	X			X	
<b>FAMILY AND CONSUMER SCIENCES - Page 33</b>									
Independent Living	8219	X	X						
Life Planning	8227		X	X	X				
Nutrition and Wellness	8229		X	X	X				
Child Development & Parenting	8232			X	X				X
<b>JROTC - Page 34</b>									
Army JROTC I	7913	X	X	X	X				
LET I	7913B	X	X	X	X				
Army JROTC II	7916		X	X	X				X
LET II	7916B		X	X	X				
Army JROTC III	7918			X	X				X
LET III	7918B			X	X				
Army JROTC IV	7919				X				
LET IV	7919B				X				
<b>MARKETING EDUCATION - Page 35</b>									
Introduction to Marketing	8110	X	X						
Entrepreneurship	9093	X	X						
Marketing (Co-op)	8120			X	X				X
Advanced Marketing (Co-op)	8130				X			X	
Sports & Entertainment Marketing (Co-op)	8175			X	X				X
<b>TECHNOLOGY EDUCATION and ENGINEERING - Page 36</b>									
Materials & Processes Technology	8433	X	X	X					
Manufacturing Systems I	8425		X	X	X				
Technical Drawing & Design	8435		X	X				X	
Engineering Drawing & Design	8436		X	X	X			X	X
Architectural Drawing & Design	8437		X	X	X			X	

Course	Course ID#	9	10	11	12	ADV	AP	Dual	IC
<b>PITTSYLVANIA CAREER &amp; TECHNICAL CENTER (PCTC) COURSES</b>									
<b>AGRICULTURE EDUCATION - Page 37</b>									
Horticultural Science	8043			X	X				
Greenhouse Plant Production and Management	8035			X	X				
Landscaping	8036			X	X				
Small Animal Care I & II	8083 8084			X	X				X
Veterinary Science	8088			X	X				X
<b>EDUCATION - Page 37</b>									
Teachers for Tomorrow I & II	9062 9072			X	X	X		X	X
<b>FAMILY &amp; CONSUMER SCIENCES - Page 37</b>									
Culinary Arts I & II	8275 8276			X	X			X	X
<b>HEALTH AND MEDICAL SCIENCES - Page 38</b>									
Emergency Medical Technician	8333 8334			X	X			X	X
Nursing Assistant	83606 83626			X	X	X		X	X
<b>ADVANCED MANUFACTURING - Page 38</b>									
Precision Machining Technology I	85396			X		X		X	X
Precision Machining Technology II	85406				X	X		X	X
<b>TRADE AND INDUSTRIAL EDUCATION - Pages 39-40</b>									
Auto Body Technology I & II	8676 8677			X	X				X
Automotive Technology I	8506			X				X	X
Automotive Technology II	8507				X			X	X
Computer Network Hardware Operations I-IV	8542 8543 8544 8545			X	X			X	X
Cybersecurity Systems Technology I & II	6302 8628 8629			X	X			X	X
Cosmetology I & II	8527 8528			X				X	
Cosmetology III	8529				X			X	X
Criminal Justice I & II	8702 8703			X	X			X	X
Electricity I & II	8533 8534			X	X			X	X
Heating, Ventilation, Air Conditioning & Refrigeration I & II (HVAC)	8503 8504			X	X			X	X
Industrial Technician - Mechanical I & II	8575 8576			X	X			X	X
Welding I	8672			X				X	X
Welding II	8673				X			X	X





# AGRICULTURAL EDUCATION

Agricultural education prepares students for employment or self-employment in the agricultural industry. The program includes basic training in agriscience, in occupations that process and market products, and in occupations that provide services and supplies to agriculturalists. After one or two years of basic agricultural science and mechanics, a student may choose to enter one of the specialized areas.

Introduction to Plant Systems or Intro to Animal Systems is considered a fundamental course for all agricultural programs. It is recommended that all courses listed for a particular specialization be taken in sequence. To be a completer, a student must complete two (2) concentration sequenced courses.

## **INTRODUCTION TO PLANT SYSTEMS (8007)**

Grades: 9-10

Prerequisite: None

Students develop competencies in each of the major areas of the Plant Systems career pathway including applied botany, plant propagation, plant care and selection. Instructional content also includes an introduction to the various divisions of the plant systems industry. Students learn agricultural mechanics application to plant systems. As with all agriculture courses, students will be exposed to principles of leadership and opportunities within student organizations along with Supervised Agricultural Experiences opportunities.

## **INTRODUCTION TO ANIMAL SYSTEMS (8008)**

Grades: 9-10

Prerequisite: None

Students develop competencies in each of the major areas of the Animal Systems career pathway including animal nutrition, reproduction, breeding, care, and management. Students learn agricultural mechanics application to animal systems. As with all agriculture courses, students will be exposed to principles of leadership and opportunities within student organizations along with Supervised Agricultural Experiences opportunities.

FFA is an integral part of agricultural education. FFA provides students opportunities to apply agricultural knowledge and skills learned in the classroom and laboratory. Leadership development is a key component of the FFA.



## **AGRICULTURAL PRODUCTION TECHNOLOGY (8010)**

Grade: 10-11

Required Prerequisite: 8007 or 8008

Agricultural Production Technology emphasizes the attainment of competencies in one or more areas of plant science, animal science, soil science, agricultural business management, and agricultural mechanization, based upon the student's employment objective. The course includes appropriate instruction in agricultural mechanics, crop production, and basic agricultural management. Supervised occupational experience programs and leadership training are important parts of the course.

## **AGRICULTURAL BUSINESS FUNDAMENTALS (8022)**

Grades: 10-11

Required Prerequisite: 8007 or 8040

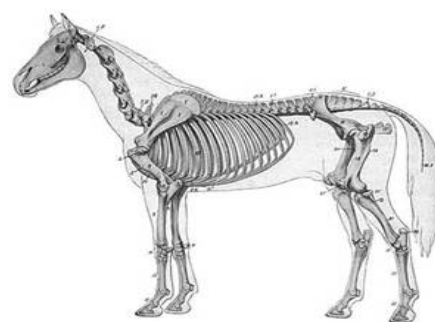
Students develop the necessary knowledge, skills, habits, and attitudes for employment in off-farm agricultural businesses. These businesses provide supplies and services to agriculturists and process and market agricultural products. Students acquire an understanding of agricultural business opportunities and the importance of an off-farm agricultural business. They develop product knowledge of items such as feed, seed, fertilizer, machinery, and agricultural chemicals. Leadership training is provided through the FFA.

## **TURFGRASS ESTABLISHMENT AND MAINTENANCE (8051)**

Grades 11-12

Required Prerequisites: Biology, Algebra I, Geometry & 8007

This program is designed to help high school students acquire job-entry skills as a groundskeeper or for continuing with post-secondary education. Instruction involves units in growing and maintaining turf grasses for areas such as lawns, golf courses and athletic fields. Instruction includes the proper operation, service and maintenance of turf management equipment. Students will experience hands-on, day-to-day operation of turf management activities. They will select, plant, install and maintain different varieties of grasses and sites for turf.



## **EQUINE MANAGEMENT PRODUCTION (8080)**

Grades: 11-12

Required Prerequisites: Biology, Algebra I & 8008

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. Additional topics may include tools, equipment, and facilities needed for equine enterprises.

## **SMALL ENGINE REPAIRS (8082)**

Grades: 11-12

Required Prerequisite: 8007 or 8008

This course offers an intensive study of the operation, maintenance, and repair of small gasoline and diesel engines. Instructional topics include principles of operation of gasoline and diesel engines, tune-up and maintenance procedures, and disassembly, overhaul, and reassembly. Instruction may also include the operation of two-cycle and four-cycle engines commonly found on lawn mowers, garden tractors, snow blowers, rotary tillers, chainsaws, and other equipment. The course emphasizes leadership activities and opportunities to participate in FFA functions.

## **INTRODUCTION TO NATURAL RESOURCES AND ECOLOGY SYSTEMS (8040)**

Grades 9-10

Required Prerequisite: None

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.

## **FISHERIES AND WILDLIFE MANAGEMENT (8041)**

Grades 11-12

Required Prerequisite: 8008 or 8040

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



# BUSINESS & INFORMATION TECHNOLOGY

*The Business and Information Technology (I.T.) program in Pittsylvania County Schools is an important segment of the total educational program. Program goals include the attainment of competencies for work, further education and training, and personal use. All students are provided opportunities to complement their academic preparation through the Business and IT program.*

*The course offerings in the Business and IT program have been streamlined to present courses that represent the greatest need for preparation for careers in the business world. Foundation courses allow opportunities for students to explore careers and to learn skills and concepts.*

*Courses are provided that will enable students to investigate opportunities in business, prepare for entry and advancement on the job, develop management skills, and identify further education and training necessary within a chosen career cluster. The framework for business meets current technological advances in computer applications, computer systems, and communications. Courses present opportunities to learn about economics and finance, accounting, law, desktop publishing, management and office administration.*

*To be a completer in Business and Information Technology, a student must take two (2) concentration sequenced courses.*

## COMPUTER APPLICATIONS (6611)

Grades: 9-10

Prerequisite: None

Students develop or review correct keyboarding techniques and gain a basic knowledge of word processing, spreadsheets, database, graphics, and telecommunications applications. Students demonstrate an understanding of computer concepts through application of knowledge. Students learn to use software packages and local and worldwide network communication systems. Grade 8 Computer/Technology Standards of Learning are incorporated and reinforced in this course.

## BUSINESS LAW (6131) \*\*

Dual Enrollment 3 Semester Hours

College Credit

Grades: 10-12

Prerequisite: None

Students examine the legal principles pertaining to the American legal system. They explore legal issues involving business laws, civil laws, and criminal laws.

## BUSINESS MANAGEMENT (6135) \*\*

Dual Enrollment 3 Semester Hours

College Credit

Grades: 10-12

Prerequisite: None

Students study basic management concepts and leadership styles as they explore business functions, planning, economics, international business, and human relations issues

such as employee motivation and conflict resolution. Student leadership skills may be enhanced by internship experiences.

## ACCOUNTING (6320) \*\*

Dual Enrollment 3 Semester Hours

College Credit

Grades: 10-12

Prerequisite: None

Students study the basic principles, concepts, and practices of the accounting cycle. Students learn fundamental accounting procedures using a manual and an electronic system.

## ADVANCED ACCOUNTING (6321) \*\*

Dual Enrollment 3 Semester Hours

College Credit

Grade: 11-12

Required Prerequisite: Accounting & Teacher Recommendation

Students gain in-depth knowledge of accounting procedures and techniques used to solve business problems and make financial decisions. Students use accounting and spreadsheet software to analyze and interpret business applications. Topics covered include the use of multiple journals, uncollectible accounts, accruals, corporate accounting, financial statement analysis, inventory systems, and accounting for notes and interest.

## COMPUTER INFORMATION SYSTEMS (CIS) (6612) \*\*

Dual Enrollment 3 Semester Hours

College Credit

Grades: 11-12

Required Prerequisite: Teacher Recommendation

Students apply problem-solving skills to real-life situations through (a) database, spreadsheet, and word processing software; (b) charting; and (c) integrated activities. They work individually and in groups to explore basic computer concepts, data/telecommunications, operating systems, and basic networking principles.

## ADV. COMPUTER INFORMATION SYSTEMS (6613) \*\*

Dual Enrollment 4 Semester Hours

College Credit

Grade: 11-12

Required Prerequisite: Computer Information Systems & Teacher Recommendation

Students study advanced integrated computer applications, programming, expert systems, networking, and telecommunications and the impact of new and emerging technologies in each of these areas. Two or more of these areas are emphasized.

## OFFICE ADMINISTRATION (6621)

Grades: 10-12

Prerequisite: None

Students enhance word processing and communication skills as they develop competencies needed by administrative support pro-

fessionals. Students study office procedures such as communications, records management, business problem-solving, document processing, reprographics, etc.

*Note: Completion of this course may prepare students for apprenticeship in an occupation related to administrative support.*

## WORD PROCESSING (6625) \*\*

Dual Enrollment 3 Semester Hours

College Credit

Grades: 10-12

Required Prerequisite: Teacher Recommendation

Students develop intermediate to advanced level word processing skills using a variety of software functions, including graphics and desktop publishing. Students gain competence integrating other applications such as database and spreadsheet into word processing activities. Classroom experiences also provide for skill development in communication. Students will be trained to take the Core MOS Certification test when completing the course.

## DESIGN, MULTIMEDIA, AND WEB TECHNOLOGIES (6630) \*\*

Dual Enrollment 3 Semester Hours

College Credit

Grade: 11 & 12

Required Prerequisites: 6612 or 6625

Students develop proficiency in designing and creating desktop-published projects, multimedia presentations/projects, and Web sites, using industry-standard application software. Students apply principles of layout and design in completing projects. Students create portfolios that include a resume and a variety of desktop-published, multimedia, and Web-site projects produced in the course. The cooperative education method is available for this course.

## COMPUTER PROGRAMMING (6640) \*\*

Grade: 11 & 12

Required Prerequisites: None

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

\*\*Denotes dual enrollment course.

**Future Business Leaders of America (FBLA)** is the career and technical student organization designed to develop personal employability and leadership skills for all individuals enrolled in business courses. Through participation in the organization, students learn to engage in individual and group business enterprises, to hold office and direct the affairs of a group, to work with representatives of other student organizations, and to compete honorably with their colleagues.





# FAMILY AND CONSUMER SCIENCES

Family and Consumer Sciences programs facilitate student progress toward a set of unifying goals in the areas of academic achievement, cultural and environmental issues, health and safety, individual and family relations, leadership and workplace ethics, and application of technology.

Classes provide opportunities for students to develop the knowledge, skills, attitudes, and behaviors needed for: strengthening the well-being of individuals and families across the life span; becoming responsible citizens and leaders in family, community, and work settings; promoting optimal nutrition and wellness across the life span; managing resources to meet the material needs of individuals and families; balancing personal, home, family and work lives; using critical and creative thinking skills to address problems in diverse families, community and work environments; exemplifying successful life management, employment, and career development; functioning effectively as providers and consumers of goods and services; appreciating human worth and accepting responsibility for one's actions and success in family and work life.

To be a program completer, a student must meet the requirements for a career and technical education concentration and all requirements for high school graduation. A concentration is two (2) concentration sequenced courses or Culinary Arts I and II.

## INDEPENDENT LIVING (8219)

Grades: 9-10

Prerequisite: None

This course allows students to explore successful strategies for living independently by actively participating in practical problem solving focusing on: (1) relating to others (relationships); (2) applying financial literacy; (3) managing resources in the areas of apparel, nutrition and wellness, and housing; (4) using leadership skills to reach individual goals; (5) planning for careers; (6) making consumer choices in a global environment. Teachers highlight the basic skills of math, science and communication when appropriate.

## LIFE PLANNING (8227)

Grade: 10-12

Required Prerequisite: 8219

Class equips students with skills to face the challenges in today's society. Students will develop a life management plan which includes: 1) developing career, community and life connections; 2) applying problem solving processes to life situations; 3) developing strategies for lifelong career planning; 4) developing a financial plan; 5) examining components of individual and family wellness; 6) demonstrating leadership within the community. Critical thinking and practical problem solving are emphasized through relevant life applications.

## NUTRITION AND WELLNESS (8229)

Grade: 10-12

Required Prerequisite: 8219

The focus of this course is: 1) making choices that promote wellness and good health; 2) analyzing relationships between psychological and social needs and food choices, choosing foods that promote wellness; 3) analyzing relationships between psychological and social needs and food choices; 4) choosing foods that promote wellness; 5) obtaining and storing food for self and family; 6) preparing and serving nutritious meals and snacks; 7) selecting and using equipment for food preparation; 8) identifying strategies to promote optimal nutrition and wellness of society. Teachers highlight basic skills of math, science, and communication when appropriate in the content.

NOTE: Recommended prerequisite for Culinary Arts.

## CHILD DEVELOPMENT & PARENTING (8232)

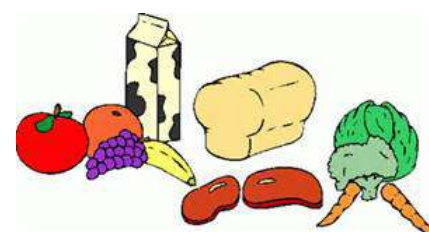
Grades: 11-12

Required Prerequisite: 8219

The focus of this course is: 1) assessing the impact of the parenting role in society; 2) taking responsibility for individual growth within the parenting role; 3) preparing for a healthy emotional and physical being for parent and child; 4) meeting developmental needs of children and adolescents; 5) building positive parent-child relationships; 6) using positive guidance and discipline to promote self-discipline, self-respect, and socially responsible behavior; 7) obtaining parenting information, support, and assistance; 8) planning ways that families and society can share in nurturing children and adolescents. Teachers highlight the basic skills of math, science, and communication when appropriate in the content.



## NUTRITION



## ADAPTIVE & FUNCTIONAL CURRICULUM

The Pittsylvania County Schools Adaptive and Functional Curriculum will address the academic, social adaptive development, and transition needs of students who have varying levels of intellectual disabilities. The curriculum is designed to promote productivity and independence for students with disabilities. This program promotes PCS's goal, "to effectively prepare students with disabilities to learn, live, and work as independently as possible in communities of their choice."

## INDEPENDENT LIVING SKILLS (7896)

Grades: 9-10

Credit - 1 unit; Prerequisites: None.

This course is designed to help students build life skills in areas of basic academics, independent living, and community participation.

## PRE-VOCATIONAL SKILLS (7898)

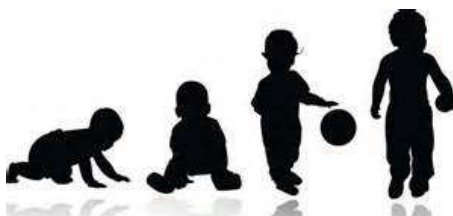
Grades: 10-12

Credit - 2 units; Prerequisites: None.

This course is designed for students to learn work related skills and behaviors that will enable them to find a job and to keep a job. It is a year-long class. During the sixth marking period, students will be given an opportunity for hands-on, practical application of skills taught in the classroom.

### Family Career and Community Leaders of America (FCCLA)

Inc. is a national career and technical education student organization. Membership is open to all students who are taking or having taken a course in Family and Consumer Sciences. FCCLA helps young men and women become leaders and address important personal, family, work and societal issues. FCCLA activities are designed to develop skills for life through character development, creative and critical thinking, interpersonal communications, practical knowledge, and career preparation.





# JROTC *Junior Reserve Officers' Training Corps*

The JROTC Program prepares high school students for responsible leadership roles while making them aware of their rights, responsibilities and privileges as American citizens. The program is a stimulus for promoting graduation from high school and it provides instruction and rewarding opportunities which will benefit the student, community and nation. JROTC provides education and training in skills and knowledge like leadership, map reading, and goal planning which are useful to students who elect to serve in any of the U. S. Armed Forces. Successful completion of JROTC courses may also be used for advanced placement credit in Army, Navy, or Air Force Senior ROTC programs in colleges and on applications for SROTC college scholarships. This program will provide progressive leadership/citizenship experience as a four year program.

Extracurricular activities offered include: Color Guard, which presents the U. S. and other flags at key community and school events; competition drill teams, and air rifle teams.

Enrollment requirements: Students must maintain an acceptable standard of academic achievement<sup>^</sup> and standing as required by JROTC and the school. All cadets will be screened at the end of each semester and will only be readmitted to JROTC with the approval of the Senior Army Instructor.

JROTC can now be offered all eight (8) semesters of electives for those students desirous of benefiting from the leadership learning experiences in Junior Reserve Officer's Training Corp.

## LEADERSHIP, EDUCATION, & TRAINING (LET) COURSES

### Army JROTC I (7913)

Grades 9 - 12, Credit - 1 Unit

Prerequisite: None

This course begins with an introduction to the JROTC curriculum and basic U. S. citizenship rights and responsibilities. It also covers techniques of communication and good study habits; leadership/management; physical fitness; leadership lab; drill and ceremonies; first aid; drug abuse prevention; map reading; history and citizenship; career opportunities, military and civilian; Army customs and courtesies; and proper uniform wear and personal appearance.

### LET I (7913B)

Grades 9 - 12, Credit - 1 Unit

Required Prerequisite: 7913

This course begins with an expectatious overview; builds on instruction through subjects like leadership education and opportunities to lead; role of U. S. Armed Forces; technology awareness; advanced drill and drill leadership; contemporary U. S. issues; and advanced communication techniques.

### Army JROTC II (7916)

Grades 10 - 12, Credit - 1 Unit

Required Prerequisite: 7913B

This course builds on instruction with emphasis on more development of leadership skills through practical work as command and staff leaders. Additional communication skills are developed including methods of instruction and preparation and conduct of cadet-led classes. Human relations, group dynamics, orienteering, contemporary U. S. issues and advanced military history studies are included.

### LET II (7916B)

Grades 10 - 12, Credit - 1 Unit

Required Prerequisite: 7916

This course will continue to emphasize the areas covered in previous courses with opportunities to demonstrate leadership and communication skills in command or staff positions within the cadet corps. Decision-making, ethical reasoning, physical fitness, American military history and community involvement in fighting drugs are included. The culminating emphasis is on marketing oneself for a job and high school graduation. The course is a two (2) semester course with one (1) credit for completion of each semester. One semester allowed with SAI approval.

### Army JROTC III (7918)

Grades 11 - 12, Credit - 1 Unit

Required Prerequisite: 7916B

The course allows the cadet to continue to develop leadership techniques with emphasis being placed on command and staff functions. Character, leadership development and theory and leadership application are also included. Additional subjects covered are foundations of success, wellness and first aid. Standards of Learning (SOL) reinforcement are taught in the areas of geography, earth science, citizenship and American history. Service learning projects and community involvement are also covered during this MS level.

### LET III (7918B)

Grades 11 - 12, Credit - 1 Unit

Required Prerequisite: 7918

This course further expands areas covered during the previous course. This course allows the cadet to continue to develop leadership techniques with emphasis being placed on command and staff functions. Character, leadership development and theory and leadership application are also included. Community involvement is stressed with emphasis on group dynamics, human relations and U.S. issues. Also covered during this level are the subjects of foundations of success, wellness and first aid. Standards of Learning (SOL) reinforcement are taught in the areas of geography, earth science, citizenship and American history.

### Army JROTC IV (7919)

Grade 12, Credit - 1 Unit

Required Prerequisite: 7918B

This course continues to emphasize the areas covered in previous courses with opportunities to demonstrate at the command and staff level those leadership theories and developmental skills acquired in the previous levels. Included in this level are the subjects of foundations of success, wellness and first aid. Additional subjects that are included are geography, earth science, citizenship and American history. These will reinforce the Standards of Learning (SOL) across the curriculum. This course allows the cadet to continue to develop leadership techniques with emphasis being placed on command and staff functions. Service learning projects are carried out during this level. Character, leadership development and theory and leadership applications are also included. Community involvement is stressed with emphasis on group dynamics, human relations and U.S. issues.

### LET IV (7919B)

Grade 12, Credit - 1 Unit

Required Prerequisite: 7919

This course will culminate the cadet's JROTC experience and program. It will emphasize the leadership development at the command and staff level those leadership theories and developmental skills acquired in the previous levels. With learned experiences in leadership theory and application as well as developing a leader, the senior cadet will demonstrate communication skills in cadet-led classes. Also included are the subjects of foundations of success, wellness and first aid. Geography, earth science, citizenship and American history are covered during this level. These classes will reinforce the Standards of Learning (SOL) across the curriculum. This course allows the cadet to continue to develop leadership techniques with emphasis being placed on command and staff functions. Community involvement is stressed with emphasis on group dynamics, human relations and U. S. issues. Service learning projects and community involvement are included.



<sup>^</sup> "Acceptable standard of academic achievement equals a grade point average of 2.0 on a 4 point grading scale."



# MARKETING EDUCATION

Marketing Education prepares students for careers in the marketing of goods or services: the buying, transport, and storage of goods; promotion of goods and services; marketing research; and marketing management.

Through the classroom instruction and supervised on-the-job training, Marketing Education enables students to develop competencies for entry into full-time employment or into advanced educational or training programs.

The cooperative method of instruction inherent in Marketing Education programs requires the joint interest and efforts of the school, local marketing businesses, and the community. In cooperative programs, school activities and work experiences are components of the total competency-based learning package designed by the teacher-coordinator, who implements the classroom instruction and, along with a supervisor at work also coordinates each student's on-the-job training. On-the-job training may take place either during part of the school day or outside regular school hours, ensuring maximum scheduling flexibility for students.

To be a completer in marketing, a student must take two marketing courses in a sequence.

The Virginia Department of Education does not require students enrolled in Marketing (8120), Advanced Marketing (8130), or Sports, Entertainment and Recreational Marketing (8175), to complete 396 hours of supervised on-the-job training (Coop). Therefore, students may enroll in the classroom course without participating in the cooperative experience.

The cooperative experience is a year-long class and requires a Marketing course (see above) to be taken during the same year. Students that do not successfully complete the on-the-job experience could still pass the classroom section. Credit for the co-op is awarded after the successful completion of classroom instruction.

## DECA:

**MISSION:** DECA prepares emerging leaders and entrepreneurs for careers in marketing, finance, hospitality and management.

**GUIDING PRINCIPLES:** Our guiding principles explain how we fulfill our mission by addressing what we do and the outcomes we expect. DECA enhances the preparation for college and careers by providing co-curricular programs that integrate into classroom instruction, applying learning in the context of business, connecting to business and the community and promoting competition. Our student members leverage their DECA experience to become academically prepared, community oriented, professionally responsible, experienced leaders.

**ATTRIBUTES AND VALUES:** Our attributes and values describe DECA's priorities and standards. We value competence, innovation, integrity and teamwork.



## Cooperative Education

In courses using the cooperative education method (identified as "co-op" in the course descriptions), students receive a combination of classroom instruction and a minimum of 396 hours of continual supervised on-the-job training throughout the school year. This training, which takes place in an appropriate local marketing business, is planned, supervised, and documented by the marketing education teacher-coordinator. Students work an average of 15 hours per week for 36 weeks. On-the-job training that takes place in the summer months may be counted toward the 396 hours, if documented by a training plan and supervised by the marketing teacher-coordinator.

## INTRODUCTION TO MARKETING (8110)

Grades: 9 & 10

Prerequisite: None

Introduction to Marketing is the basic elective course offered in the three-year marketing education program. Students achieve a basic understanding of marketing and its importance, and develop fundamental social, economic, mathematical, marketing, job search, and occupational decision-making competencies necessary for successful initial employment in retail, wholesale, or service businesses.

## ENTREPRENEURSHIP (9093)

Grades: 9-10

Required Prerequisite: None

This course is designed for students who wish to concentrate on strategies for career development through ownership/management of their own businesses. The Real Entrepreneurship program curriculum will be used to teach the course competencies. This course will offer curriculum in business concepts, market research, financial feasibility and business plans for students to start their own businesses.



# **Optional -- Cooperative** instruction combines classroom instruction and a minimum of 396 hours of supervised on-the-job training with continuing supervision throughout the year. Credit for co-op (on-the-job training) may be awarded only after successful completion of classroom instruction.

\*\*Denotes dual enrollment course.

## MARKETING (CO-OP #) (8120)

Grades: 11-12

Required Prerequisite: 8110



Students learn the functions involved in the marketing of goods and services and achieve the competencies necessary for successful marketing employment. The development of social and economic competencies in conjunction with marketing competencies in the areas of personal selling, advertising, visual merchandising, physical distribution, purchasing, market planning, product/service technology, and marketing mathematics enable students to become well-rounded marketing employees who contribute to the success of marketing businesses.

## ADVANCED MARKETING (CO-OP #) (8130) \*\*

Dual Enrollment 3 Semester Hours

College Credit

Grade: 12

Required Prerequisite: 8120 or 8175

Students gain (a) in-depth knowledge of the marketing functions and the supervisory and management responsibilities for those functions and (b) competencies important for successful supervisory management employment and advancement to other management position. Students develop economic and advanced marketing competencies in professional selling, marketing planning, marketing mathematics, purchasing, physical distribution, advertising, and visual merchandising, as well as social competencies related to the supervision of marketing employees.

## SPORTS & ENTERTAINMENT MARKETING (CO-OP #) (8175)

Grades: 11-12

Required Prerequisite: 8110



Course is designed to teach students about sports and entertainment marketing, while allowing them opportunities to examine careers in this broad field. The course includes the nature of the work, training, education, potential earnings and employment outlook. Basic and advanced marketing principles within the sports and entertainment industry will be covered. Related topics include public relations, promotion, media writing, selling, contract negotiations and licensing.



# TECHNOLOGY EDUCATION & ENGINEERING

The technology education program for the high school provides challenging experiences for the learner. Program content stems from the study of a variety of technologies and challenges the student's ability to apply scientific principles, engineering concepts, and technological systems.

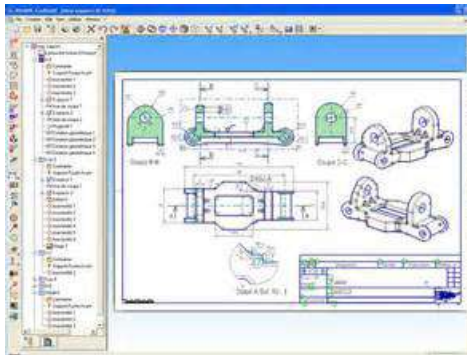
## Goal: Application of Technology to Life and Work

The goal of the high school technology program is to assist students in applying technology to their needs and in making intelligent judgments about problems associated with technology.

The high school student of technology shall evaluate technology's capabilities, uses, and impact on individuals, the environment, and society; apply design concepts to solve problems and extend human potential; employ the resources of technology to analyze the behavior of technological systems; apply scientific principles, engineering concepts, and technological systems in the processes of problem solving, creating, and designing; and develop personal interests and abilities related to careers in technology and engineering.

## Learner Benefits

To be a program completer in technology education, a student must complete at least two (2) courses.



## MATERIALS AND PROCESSES TECHNOLOGY (8433)

Suggested Grade Level(s): 9-11

Prerequisite: None

Students focus on industrial/technical materials and processes as they fabricate usable products and conduct experiments. Learning experiences include career analysis as well as the use of tools and equipment related to analysis, testing, and processing of metals, plastics, woods, ceramics, and composite materials. This course is recommended for students interested in technical careers and others wishing to improve their consumer knowledge and technological literacy.

## MANUFACTURING SYSTEMS I (8425)

Suggested Grade Level(s): 10-12

Prerequisite: 8433

This course provides an orientation to careers in various fields of manufacturing. Emphasis will be placed on the major systems in automated manufacturing, including design, electrical, mechanical, manufacturing processes, material handling, and quality control. Students participate in teams to produce manufacturing projects that demonstrate critical elements of manufacturing.

## TECHNICAL DRAWING AND DESIGN (8435) \*\*

Suggested Grade Level(s): 10-11

Dual Enrollment 4 Semester Hours

College Credit

Required Prerequisite: Algebra I and Geometry Recommended and Teacher Recommendation

In this foundation course, students learn the basic language of technical design, and they design, sketch, and make technical drawings, models, or prototypes of real design problems. The course is especially recommended for future engineering and architecture students.

## ENGINEERING DRAWING AND DESIGN (8436) \*\*

Suggested Grade Level(s): 10-12

Dual Enrollment 3 Semester Hours

College Credit



Required Prerequisite: Geometry and 8435  
Students increase their understanding of drawing techniques learned in the prerequisite course. Students use computers, calculators, and descriptive geometry and adhere to established standards to solve design problems. They apply the design process, analyze design solutions, reverse engineer products, create 3-D solid models using CADD, construct physical models, and create multimedia presentations of finished designs. Throughout the course, they hold seminars, meet engineers, and tour technical design firms in order to learn about the benefits of the course on their future study and career. Completion of this course may contribute to a student's preparation for industry certification examination.

## ARCHITECTURAL DRAWING AND DESIGN (8437)

Suggested Grade Level(s): 10 - 12

Required Prerequisite: 8435

Students learn the principles of architecture and increase understanding of working drawings and construction techniques learned in the prerequisite course. Experiences include residential and commercial building designs, rendering, model making, structural details, surveying, and community planning. Students use computer-aided drawing and design (CAD) equipment and established standards or codes to prepare models for presentation. The course provides information helpful for the homeowner and is especially beneficial to the future architect, interior designer, or homebuilder.



\* Denotes classes with special grade point value.

\*\* Dual Enrollment



# PITTSYLVANIA CAREER & TECHNICAL CENTER (PCTC) COURSES

## Internship/Work Study Programs

The High School Internship/Work Study programs are designed to link high school students with business and industry within an organized education and work setting. High school students who wish to pursue a career in the skilled trades while working toward a goal of completing high school requirements are eligible to become part-time interns or work study students if they qualify for the Internship/Work Study programs during the 2nd Semester of their senior year.

Student Internship/Work Study program is an option for students at Pittsylvania Career and Technical Center that blends school and a work-site experience. It integrates high level academics, structured technical training, and on-the-job experience. The student Internship/Work Study program connects the student with business and industry to begin career training before high school graduation. This partnership between parents/guardians, and employers can serve as a transition through a secondary/post-secondary educational experience to work. Students will be covered by a written agreement with the employer that is approved by the school and the students' parents or guardians.

A partnership of participants, including the student, the parent or guardian, the school, and the employer is built around the training agreement. The training agreement will include activities stipulated by the CTE state program guides, as well as activities and courses needed to complete high school. Services such as placement, career and technical employment readiness preparation and supervision will be available to the student throughout the internship/work study programs.

## Agriculture Education

### HORTICULTURE SCIENCE

**Horticulture Sciences (8034)**  
**Greenhouse Plant Production and Management (8035)**  
**Landscaping (8036)**

Grade 11 or 12  
 One Year Program  
 3 Credits

Through laboratory activities, students apply scientific principles to the field of horticulture, including the areas of floriculture, landscape design, greenhouse operation, nursery plant production, and turf management. They practice safety, develop leadership traits, use plant-growing media, and identify, propagate, and grow horticultural plants in the greenhouse and land laboratory. Students are taught the operating procedures for a greenhouse. Units of instruction include developing plant production facilities, science application in plant production, and identification of plants. Business management, leadership development, and marketing skills are emphasized to prepare students for careers in the greenhouse plant production and management industry. Landscaping offers skilled workers satisfying career opportunities in varying working environments. The expanding and evolving green industry keeps skilled workers in high-demand occupations with educational and leadership opportunities. This course focuses

on preparing students for entry-level employment and advancement in landscape design, landscape construction, and landscape maintenance.



### **SMALL ANIMAL CARE I (8083)** **SMALL ANIMAL CARE II (8084)**

Grades 11 or 12, Credits - 2 Units  
 One Year Program  
 Required Prerequisite: Biology & 8008



Students learn how to care 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 business management and leadership development. FFA activities are included.



### VETERINARY SCIENCE (8088)

Grades 11 or 12, Credit - 1 Unit  
 Required Prerequisite:  
 Biology & 8008

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 background in math and science and a knowledge of small animal care.

## Education

The Pittsylvania County Schools education program is designed to provide opportunities for students to investigate and prepare for careers in teaching. The educational pathway should include predominantly college preparatory classes and noted childhood education courses. Teaching and education has been identified as one of the five "Hottest" career tracks. The demand for qualified teachers is increasing. Students completing the educational pathway can anticipate numerous employment opportunities after completion of their post-secondary educational program.

### **Suggested Electives**

Child Development & Parenting (8232)  
 Independent Living (8219)  
 Psychology (29000)  
 AP Psychology (29016)

### **TEACHERS FOR TOMORROW I & II (9062/9072) \*/\*\***



Grades: 11 or 12  
 Credit - 3 units and Dual Enrollment  
 (6 Semester Hour College Credit)  
 One Year Program

Prerequisites: See suggested electives.

Students shall have and maintain a minimum 2.7 GPA that is derived from predominantly college preparatory classes, shall demonstrate an interest in teaching and education, and shall submit three (3) written teacher recommendations for admission into program with PCTC application. In addition, students will complete an application and essay.

The Teachers for Tomorrow course is an advanced level class designed to introduce students to a career in teaching and 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 the students. In addition to the fundamental curriculum components, all students are required to complete an internship outside the Teachers for Tomorrow classroom.



## Family & Consumer Sciences

### CULINARY ARTS I & II \*\*

#### CONCENTRATED COURSE

8275 - Semester I

8276 - Semester II

Dual Enrollment 3 Semester Hours

College Credit

Grades 11 or 12, Credit - 3 Units

One Year Program

Prerequisites: None



Students prepare for managerial, production, and service skills used in government, commercial, or independently owned institutional food establishments and related food industry occupations. Their study includes planning, selecting, storing, purchasing, preparing, and serving food and food products; basic nutrition, sanitation, and food safety; the use and care of commercial equipment; serving techniques; and the operation of institutional food establishments. Teachers highlight the basic skills of math, science, and communication when appropriate in content. In Culinary Arts II, students extend and expand skills learned in Culinary Arts I, preparing for occupations such as chef/cook, baker/pastry helper, pastry decorator, hospitality worker, dietetic aide/assistant, food demonstrator, mixologist, and entrepreneur.

## Health & Medical Sciences

*Health and Medical Sciences introduces secondary students to nursing, medical, and allied health occupations, prepares students with basic skills for employment in nursing homes, clinics, medical facilities, hospitals, homes, and certain public health settings, facilitates entry into advanced health occupations programs that require post-high school education leading to state licensure, certification, registration, or national credentialing, and enables students to become more knowledgeable consumers of health services.*

*The occupational preparation programs prepare students for entry-level positions in a particular health field or for advanced training in health occupations at the technical and professional levels.*

### NURSING ASSISTANT \*/\*\*

#### CONCENTRATED COURSE

83606 - First Semester

83626 - Second Semester

Dual Enrollment 9 Semester Hours

College Credit

Grades 11 or 12

Credit - 3 units

One Year Program

Required Prerequisites: Successful completion of biology. Anatomy and physiology recommended.

Jump start your career in the Healthcare fields by taking this class. You can explore a variety of health careers including: nursing, physical therapy, sports medicine, radiology, and occupational therapy as you practice your skills and observe in several area medical facilities. Course covers body systems and basic health needs. Students also learn basic personal care skills, vital signs, infection control, medical terminology, patient assessment, CPR, First Aid, simple lab techniques, safety, postmortem care, and therapeutic communication with patients and families. Students are eligible to take the C.N.A. examination upon successful completion of this course of study seeking a CNA license. CPR/AED Certifications will be earned.



### EMERGENCY MEDICAL TECHNICIAN \*\*

#### CONCENTRATED COURSE

8333 - First Semester

8334 - Second Semester

Dual Enrollment 9 Semester Hours

College Credit

Grades 11 or 12, Credit - 3 Units

One Year Program

Required Prerequisites: Students MUST be 16 years old by the first day of the school year. Successful completion of biology. Anatomy and physiology recommended.

An excellent course for students interested in any healthcare of emergency services career, including: physician, physician assistant, nursing, nurse practitioner, physical therapy, radiology, respiratory therapy, emergency medical services (EMT and paramedic), fire suppression and law enforcement. Course includes supervised observation and patient care experiences with Emergency Medical Services departments. Course provides instruction in: detailed anatomy, physiology, and pathophysiology of disease and injury; medical terminology; and therapeutic patient communication skills. Students will learn the following: roles and responsibilities of healthcare providers; medical-legal implications of patient care; patient examination techniques and how to obtain a comprehensive medical history; CPR and use of an Automated External Defibrillator (AED); airway and breathing management; oxygen administration; management of bleeding, wound care and bandaging; splinting; medication administration; emergency childbirth; and other first aid skills. Instruction emphasizes proper patient care and use of common emergency equip-

ment. Successful completion of the program allows the student to take national and state EMT certification examinations.



## Advanced Manufacturing

### PRECISION MACHINING TECHNOLOGY I (85396) \*/\*\*

Grade 11

Dual Enrollment 19 Semester Hours

College Credit

Credit - 3 Units

Required Prerequisites: 8435, 8436 & 6612  
Students learn the basics of industrial safety and environmental protection; planning, management, and performance of machining jobs; quality control; general maintenance; engineering drawings and sketches; and application of measurements, metalworking theory, properties of materials, and principles of CNC.

### PRECISION MACHINING TECHNOLOGY II (85406) \*/\*\*

Grade 12

Dual Enrollment 18 Semester Hours

College Credit

Credit - 3 Units

Required Prerequisites: 8539

Students apply industrial safety and environmental protection; planning, management, and performance of machining jobs; quality control; process improvement; general maintenance; engineering drawings and sketches; and application of measurements, metalworking theory, properties of materials, and principles of CNC.



**Skills USA** is an integral part of the instruction in all Trade and Industrial Education programs. Skills USA activities provide opportunities for students to develop occupational skills and knowledge and encourage them to become better citizens. This part of the instructional program stresses personal leadership development and motivates students to excel in their chosen occupation.



### Health Occupations Students of America (HOSA)

Virginia HOSA is a student organization for students who are preparing for health care careers. The mission of HOSA is to enhance the delivery of compassionate, quality health care by providing opportunities for knowledge, skill and leadership development of all health occupations education students, therefore, helping the students to meet the needs of the health care industry.

**EMT students may join Skills USA.**



# Trade & Industrial Education

Trade and Industrial (T&I) programs in Pittsylvania County Schools are offered at the Pittsylvania Career and Technical Education Center. Students interested in enrolling in a specific program submit an application during their sophomore year. Students are interviewed and selected for each highly specialized area. Trade and Industrial Education programs prepare students with occupational skills, knowledge, attitudes, and work habits to become employed and progress satisfactorily in the trade and industrial field as skilled or semi-skilled craftspersons. Students receive comprehensive instruction through the use of facilities and equipment that simulate industry in every detail. In their second year, select students may further develop their occupational skills by participating in the internship/work study program.

Students enrolling in Trade and Industrial Education programs must commit to both years/levels of a program. To be a Trade and Industrial Education program completer, a student must successfully complete both years of a program.

## AUTO BODY TECHNOLOGY

Prerequisites: Recommended Agriculture or Technology  
One Year Program  
Credit - 3 Units  
Grades 11 or 12



**AUTO BODY TECHNOLOGY I: 8676**

**AUTO BODY TECHNOLOGY II: 8677**



Auto Body Repair provides training in the use of the equipment and materials of the auto body mechanic trade. The student studies the construction of the automobile body and techniques of auto body repairing, rebuilding and refinishing. Repairing, straightening, aligning, metal finishing, and painting of automobile bodies and frames are typical skills learned. Auto Body Repair is a one year program. Three units of credit toward graduation are earned. Instructor is ASE certified. NATEF Accredited Program.



## AUTOMOTIVE TECHNOLOGY \*\*

Prerequisites: Recommended Agriculture or Technology Education

### FIRST YEAR: 8506

Grade 11 - Credit - 3 Units  
Dual Enrollment 10 Semester  
Hours College Credit



### SECOND YEAR: 8507

Grade 12 - Credit - 3 Units  
Dual Enrollment 7 Semester  
Hours College Credit



This course provides instruction in the maintenance, servicing, and repair of all the systems of an automobile which keep it running efficiently and safely. The student will gain knowledge of the operation of the internal combustion engine and how to maintain it in proper order by servicing, trouble-shooting and repair, and overhaul. The program will enable the student to develop skill in the upkeep and repair of these components and systems: carburetor and alignment, steering, cooling and drive train. Service equipment and hand tools will be taught. Special attention will be given to shop safety. Auto Technology is a two year program. Three units of credit toward graduation are earned each year. Instructor is ASE certified. NATEF Accredited Program.

## CYBERSECURITY SYSTEMS TECHNOLOGY \*\*

One Year Program  
Credit - 3 Units, Dual Enrollment 8  
Semester Hours College Credit  
Grades 11 or 12

### CYBERSECURITY FUNDAMENTALS (6302)

Cybersecurity affects every individual, organization, and nation. This course focuses on the evolving and all-pervasive technological environment with an emphasis on securing personal, organizational, and national information. Students will be introduced to the principles of cybersecurity, explore emerging technologies, examine threats and protective measures, and investigate the diverse high-skill, high-wage, and high-demand career opportunities in the field of cybersecurity.

### CYBERSECURITY SYSTEMS TECHNOLOGY (8628)

Students enter the world of computer technology and gain practical experience in assembling a computer system, installing an operating system, troubleshooting computers and peripherals, and using system tools and diagnostic software. They develop skills in computer networking and resource sharing. In addition, students explore the relationships between internal and external computer components. Emphasis is placed on customer service skills and career exploration. Upon successful completion of the course, students may qualify to take the hardware portion of the CompTIA A+ certification exam (CompTIA A+ 220-901 exam).



## CYBERSECURITY SYSTEMS TECHNOLOGY, ADVANCED (8629)



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



course, students may qualify to take second portion of the CompTIA A+ certification exam (CompTIA A+ 220-902 exam).

## COMPUTER NETWORK HARDWARE OPERATIONS \*\*

Prerequisites: Cybersecurity Systems Technology  
One Year Program  
Credit - 3 Units, Dual Enrollment  
8 Semester Hours College Credit  
Grades 11 or 12



### COMPUTER NETWORK HARDWARE OPERATIONS I & II (8542 & 8543) - Semester I

### COMPUTER NETWORK HARDWARE OPERATIONS III & IV (8544 & 8545) - Semester II

This course teaches students the skills needed to obtain entry-level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, computer technicians, cable installers, and help-desk technicians. It provides a hands-on introduction to networking and the Internet, using tools and hardware commonly found in home and small business environments. Labs include PC installation, Internet connectivity, wireless connectivity, file and print sharing, and the installation of game consoles, scanners, and cameras.

Students are also provided a basic overview of routing and remote access, addressing, and security. This course familiarizes students with servers that provide e-mail services, Web space, and authenticated access. Students learn about the soft skills required for help desk and customer service positions, and the final chapter helps them prepare for the CCENT certification exam.





**COSMETOLOGY \*\*****COSMETOLOGY I: 8527****COSMETOLOGY II: 8528**

Grade 11, Credit - 3 Units

Dual Enrollment 12 Semester Hours

College Credit

Prerequisite: Recommended Geometry

**COSMETOLOGY III: 8529**

Grade 12, Credit - 3 Units

Dual Enrollment 17 Semester Hours

College Credit

In Cosmetology the students learn hair cutting, styling, manicures, pedicures, facials, and make-up. Students are prepared through classroom and lab instruction to take the State Board Exam. Cosmetology is a two year program designed to train students to become licensed Cosmetologists upon graduation. Must complete 2-year program and pass Virginia Board of Cosmetology licensing exam to become licensed cosmetologist.

**CRIMINAL JUSTICE \*\***

One Year Program

Grades 11 or 12, Credit: 3 Units

Dual Enrollment 6 Semester Hours

College Credit for each pathway

**CRIMINAL JUSTICE I: 8702**

Semester I

**CRIMINAL JUSTICE II: 8703**

Semester II

The Criminal Justice program will offer two pathways from which students may choose one.

**Law Enforcement Specialization**

Students learn the overall criminal justice system including the theory, principles and techniques of working in law enforcement, correctional or course services career. Students will have a foundation to continue their training or education in the criminal justice field.

**Crisis Intervention Specialization**

Students learn the overall criminal justice system including the theory, principles, and techniques of working in law enforcement or human services career (counseling, substance abuse, domestic violence shelter, social services agency, etc.). Students will have a foundation to continue their training or education in the criminal justice field or human services field.



\*\* Denotes Dual Enrollment

**ELECTRICITY I & II \*\*****ELECTRICITY I (8533)****ELECTRICITY II (8534)**

Grades 11 or 12

One Year Program

Credit - 3 Units

Dual Enrollment 13 Semester Hours

College Credit

Students develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems. They also study electrical theory and mathematical problems related to electricity, navigate the National Electrical Code Book, select and install conductors, examine lighting, communication, and power systems and work with conduit and raceways, panelboards, switchboards, grounding systems, and generators. Students learn the principles of electricity covering fundamentals, devices, and components in both DC and AC circuits. Students learn troubleshooting and servicing electrical controls, electric motors, motor controls, motor starters, relays, overloads, instruments, and control circuits. Completion of this program may prepare students for a number of certification exams, helpful for employment in a variety of Electrical occupations.

**HEATING, VENTILATION, AIR CONDITIONING & REFRIGERATION (HVAC) I & II \*\*****HVAC I (8503)****HVAC II (8504)**

Grades 11 or 12

One Year Program

Credit - 3 Units

Dual Enrollment 11 Semester Hours

College Credit

In this program, students are taught to professionally install, repair, and maintain the operating conditions of heating, air-conditioning, and refrigeration systems. Students work with piping and tubing, work with sheet metal (measuring, gauging, cutting, bending, and layout) study the principles of heat and electricity, install duct systems, and comply with EPA regulations. Students also explore emerging technologies, EPA regulations and conservation techniques, and R-410A systems. Completion of this program may prepare students for a number of certification exams, helpful for employment in a variety of HVACR occupations.

**INDUSTRIAL TECHNICIAN MECHANICAL \*\*****INDUSTRIAL MAINTENANCE TECHNOLOGY I (8575)****INDUSTRIAL MAINTENANCE TECHNOLOGY II (8576)**

Grades 11 or 12

One Year Program

Credit - 3 Units

Dual Enrollment 15 Semester Hours

College Credit



Industrial maintenance technicians repair and maintain commercial or industrial equipment in buildings. Students are taught safety and precision measurement skills and gain hands-on, practical experience in mechanical fundamentals, technical drawing, welding, hydraulics, pneumatics, pump systems, HVAC, electricity, machine alignment, and quality control. Students learn the fundamentals of industrial pipe fitting installation, components, and layout. Completion of this program may prepare students for a number of certification exams, helpful for employment in a variety of Industrial Technician occupations.

**WELDING \*\***

Prerequisites: 8435, 8436, 6612

**WELDING I: 8672**

Grade 11, Credit - 3 Units

Dual Enrollment 3 Semester Hours

College Credit

**WELDING II: 8673**

Grade 12, Credit - 3 Units

Dual Enrollment 4 Semester Hours

College Credit

Welding provides students with instruction in basic welding and other related skills necessary to prepare them for an entry level welding job. Included in this instruction are: welding safety, metallurgy, related math, blue print reading, weld testing, oxygen/fuel cutting and welding, plasma cutting, shielded metal arc welding (STICK), gas metal arc welding (MIG), gas tungsten arc welding (TIG), pipe welding. Upon completion of instruction in these skill areas, students develop these skills by working on live work projects in a shop situation. Personal safety equipment is required.





# PITTSYLVANIA COUNTY SCHOOLS

P. O. Box 232, 39 Bank Street, S.E., Chatham, Virginia 24531  
Phone (434) 432-2761, 630-1817 or 793-1624 — FAX (434) 432-9560  
www.pcs.k12.va.us



## SCHOOL BOARD

### Callands-Gretna District

Calvin D. Doss – Chairman - 656-3206

### Banister District

Raymond Ramsey - 251-7157

### Chatham-Blairs District

J. Samuel Burton - 724-4245

### Dan River District

Cassandra Crump - 822-8866

### Staunton River District

Don C. Moon – 324-4115

### Tunstall District

George Henderson – Vice-Chairman - 770-8933

### Westover District

Todd Sanders - 822-0211

## ADMINISTRATION

Dr. Mark R. Jones  
Division Superintendent

Dr. Jeffrey B. Early  
Assistant Superintendent for Operations  
Steven D. Mayhew  
Assistant Superintendent for Administration

B. Teresa Petty  
Assistant Superintendent for Instruction  
Robin Haymore  
Associate Superintendent for Support Services

### SUPERVISORY STAFF:

M. Elizabeth Craig	Director of Middle & Secondary Education/Science
Brenda Dawson	Director of Assessment and Accountability/English
Jenny Eaton	Director of Title I & Instructional Support Programs/Social Science
Michael Hutson	Director of Maintenance and Facilities
Angela Rigney	Director of Career & Technical Education/Adult Ed.
Kenyon Scott	Director of Transportation
M. Todd Sease	Director of Elementary Education/Mathematics
Tracey Worley	Director of Finance
Jeff Buchanan	Special Education Supervisor/ Victory Academy
Cedric J. Hairston	Supervisor of Specialty Curricula Areas
Kara Scott	Supervisor of School Nutrition

### PRINCIPALS:

Felita Atkins	Brosville Elementary School	685-7787
Wanda Carter	Chatham Elementary School	432-5441
Randy Foster	Chatham High School	432-8305
Julia Boles	Chatham Middle School	432-2169
Annastasia Broomell	Dan River High School	822-7081
Emily Reynolds	Dan River Middle School	822-6027
Paula Cocke	Gretna Elementary School	630-1808
Carter Lowry	Gretna Middle School	630-6122
Stacey Oakes	Gretna High School	630-1800
Kathryn Lowry	John L. Hurt, Jr. Elementary School	630-1812
Bobby Shields	Kentuck Elementary School	822-5944
Pamela Fields	Mt. Airy Elementary School	630-1816
Jessica Dalton	Pittsylvania Career and Technical Center	432-9416
Leslie Hackworth	Southside Elementary School	836-0006
Deborah Powell	STEM Academy / Alternative School	432-8185
Kimberly Haymore	Stony Mill Elementary School	685-7545
Brian Boles	Tunstall High School	724-7111
Kirsten Hawker	Tunstall Middle School	724-7086
Patty Hawkins	Twin Springs Elementary School	724-2666
Amy Emond	Union Hall Elementary School	724-7010

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