

# Page County Public Schools

## Secondary Program of Studies



**2022-2023**

Revised: 3/2022

# High School Program of Studies

2022-2023

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## Overview

### Focus on your future!

The information in this booklet will assist you in planning your high school courses. We strongly encourage you to study this publication prior to registration and to consult your parents, teachers and school counselor in planning your courses before each school year. Your plan should include courses that will meet graduation requirements for Page County Public Schools and prepare you to meet your educational and career goals. Your school counselor can help you determine your interests and provide special information about educational opportunities at various colleges, universities, trade schools, and technical colleges. The counselor can also provide you with information about careers and employment possibilities.

As you study the course offerings in this booklet, keep focused on the future you want to build for yourself. You will want to select a course of study that will prepare you for that future. If you have not yet made decisions about after graduation, plan so that the doors to opportunity will not close for you. Careful planning with your parents, teachers, and school counselor can help you make the most of your high school experience.

## How to use this book...

This Program of Studies booklet is provided to students as a planning tool for creating a personal high school course of study. The courses listed are offered contingent upon the number of student requests and the availability of qualified teachers. Therefore, as you use the worksheets in the back of this booklet to plan out several years of study, remember to check each year with your school counselor to see if the courses you've chosen will be offered that year in your building. Keep in mind that the Program of Studies is revised yearly with new courses offered as they become available.

# Academic Information

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# Scheduling / Promotion & Retention

## School Counseling Overview

The School Counseling Department is dedicated to providing individual, classroom and consultative services to our high school students. School Counseling services are designed to help the individual student achieve educational, vocational, social, and personal goals that are consistent with interests, needs, and abilities. The program is built upon the belief that each student is unique, capable of making a meaningful contribution to our society and deserves every opportunity to attain self-fulfillment.

The counselors attempt to work closely with students, parents, and teachers. Conferences may be arranged at any time upon request. Counselors will schedule at least one beginning school conference and one individual conference with each student during the year. Other conferences are encouraged and may be initiated by the student, teacher, parent, administrator, or support services personnel.

## Changes and Drops

During the school year, if a student is experiencing academic difficulty a change may be deemed necessary by the teacher, student, parent, and administrator. Written notification from a parent must be provided before a student may drop a course. Courses at the high school must be dropped within 5 days of the semester start or the student will be withdrawn with a **WF** for the final grade. Courses at the Page County Technical Center must be dropped within 10 days of the semester start or the student will be withdrawn with a **WF** for the final grade. In unusual circumstances a withdrawal passing **WP** may be allowed.

## Expunging High School Courses Taken Prior to 9th grade

The Standards of Accreditation for Virginia Schools state that parents of students taking a high school credit course in middle school may be allowed to request that the final grade for the class be omitted from their high school transcript. Courses which qualify for this consideration are included in the Page County Public Schools Middle School Program of Studies. The intent of this policy is to encourage students to take challenging courses without penalizing them unfairly for attempting to take these courses earlier than usual in their academic career.

Upon written request by the parent/ guardian, a course grade shall be expunged from the student's permanent record if the course was taken prior to grade 9 for high school credit. This request must be made by June 30th of the student's 8th grade year. The request should be directed to the student's middle school principal. If the choice is made to omit the grade from the high school transcript, the student will not receive credit for the course unless he/she takes the course again at the high school level. The expunging of a student's grade shall not affect the student's promotion status.

## Grade Level Status

Grade levels and homeroom placements are determined by the number of high school credits earned at the end of each year. Grade level status is based on the following:

- Grade 9:** Be successfully promoted from middle school.
- Grade 10:** Earn a minimum of six (6) high school credits.
- Grade 11:** Earn a minimum of twelve (12) high school credits.
- Grade 12:** Earn a minimum of seventeen (17) high school credits.



**Don't  
hesitate!**

If you have a concern about a class, a question about your high school path, or a need for career information, make an appointment with your school counselor today.

### **Notification of Progress/Failure**

Report cards are given to all students at the end of each nine-weeks. All students also receive interim progress reports at the mid-point of each nine-weeks. School counselors, administrators, and teachers hold periodic conferences with students throughout the school year regarding failure in courses. Continued communication between teachers, students, parents, and administrators is encouraged throughout the school year through personal conferences, phone conferences, and written notices. At the beginning of each school year, parents will be provided with their student's online PowerSchool login ID allowing them instant access to current grades and assignments. Parents may request a conference to discuss a student's progress at any time by calling the school counseling office. Final promotion/retention is determined at the end of the school year as final grades are received. During scheduling in the spring, all students are informed of their status and their remaining requirements for graduation. A summary of these requirements is sent home for parent review.

Senior will meet with their counselor during first semester to review the student's remaining graduation requirements. Seniors and parents of seniors will receive a letter notifying them if the student is in danger of failing the course and not graduating. Final notification of non-graduation requirements will be communicated to the student and parent once the final grading information is available.

## **Academic & Career Plan**

### **ACP—Academic & Career Plan**

By the end of their 7th grade year, students will have created an Academic and Career Plan. This plan will outline a student's courses throughout their senior year based on their chosen career goal. Students begin by listing courses they plan to take in the 8th grade and sketching out courses for his/her remaining high school years, projecting even into early post-secondary coursework. An outline is developed to make certain all graduation requirements will be met and to ensure that students are taking the appropriate courses and course paths to meet their post-secondary goals. The ACP is a flexible plan which is revisited throughout high school and updated each year or as student interests change.

Counselors will meet with students during second semester to schedule for the following year. At this time, the student's ACP will be revised to meet changing needs and goals. Each student's course selections should be finalized by August 1. Any request to drop or change a course, if not prior to the closing of school, may not be granted. Requests for specific teachers will not be honored.

### **Career Clusters**

There are 16 nationally recognized career clusters (listed in detail on pages 33-34). These clusters give students a general field of study with multiple pathways and career choices. Programs such as the Virginia Wizard allow students to survey their interests and skills to determine potential career clusters and post-secondary goals. Building an ACP around a career cluster makes education more relevant for students throughout high school and leads to post-secondary success.

The 16 Career Clusters are listed on pages 33-34. For more detailed information and valuable resources associated with each cluster, visit [www.careerclusters.org](http://www.careerclusters.org). You can also work out a sample ACP using the worksheets in Appendix B.

# Grading Policy

## Grading System

The grading scale for Page County Public Schools is as follows:

A = 90-100; B = 80-89; C = 70-79; D = 60-69; F = 50-0

## Weighted Courses

The quality point values for final grades in non-weighted courses are as follows:

A = 4.0; B = 3.0; C = 2.0; D = 1.0; F = 0

Honors courses have an additional one-half (**0.5**) quality point value added to the final grade. These courses include:

- English 9 Honors
- English 10 Honors
- English 11 Honors
- English 12 Honors
- World Geography Honors
- World History II Honors
- Geometry Honors
- Algebra II Honors
- Environmental Science Honors
- Biology Honors
- Biology II/Anatomy Honors
- Chemistry Honors
- Physics Honors
- Spanish IV Honors
- Spanish V Honors
- Practical Nursing

College Board Advanced Placement (AP) courses or Dual-Enrollment (DE) courses have an additional one (**1.0**) quality point added to the final grade. These courses include:

- AP Biology
- AP Calculus
- AP Chemistry
- Biology I & II DE
- Computer Info. Systems DE
- English 11 DE
- English 12 DE
- Pre-Calculus DE
- Probability & Statistics DE
- US History DE
- AP US Government
- AP Virtual Virginia course
- Weighted credits may not be awarded for courses taken during the summer or long-term homebound (over a nine-week period). In order to receive the weighted credits, a student must satisfactorily complete the course (achieving a final academic average of 60 or above).
- AP and Dual Enrollment courses are offered based upon availability of qualified teachers as well as the number of course requests. Luray and Page County High Schools strive to offer as many weighted opportunities for students as possible.
- Students must take the corresponding AP exam for an AP course in order to receive GPA weight and the AP designation on their final transcript.

## Recalculating GPA

Cumulative GPAs are recalculated at the close of each academic semester. They are figured using the final grade of each high school course completed.

Rankings for each grade level are then recalculated based on the new GPAs.

## GPA Calculation

Laurel Ridge Community College courses taken outside of PCPS that are needed to satisfy high school graduation requirements will be counted towards your high school GPA. For students not enrolled in Massanutten Regional Governor's School, four additional Laurel Ridge Community College courses may be counted towards the high school GPA over the course of your high school career. Please plan accordingly for VHSL eligibility require-

# Profile of a Graduate

## Standard Diploma Graduation Requirements:

English.....	4 credits
Mathematics.....	3 credits
Laboratory Science.....	3 credits
History and Social Science.....	3 credits
Health and Physical Education.....	2 credits
Fine Arts or Career & Technical Education.....	2 credit
Economics and Personal Finance.....	1 credit
Electives.....	4 credits
<b>Total Units</b>	<b>22 credits</b>

## Advanced Diploma Graduation Requirements:

English.....	4 credits
Mathematics.....	4 credits
Laboratory Science.....	4 credits
History and Social Science.....	4 credits
Foreign Language.....	3 credits
Health and Physical Education.....	2 credits
Fine Arts or Career & Technical Education.....	1 credit
Economics and Personal Finance.....	1 credit
Electives.....	3 credits
<b>Total Units</b>	<b>26 credits</b>

## Life-Ready Virginia Graduates will be able to:

- Achieve and apply appropriate academic and technical knowledge.
- Demonstrate productive workplace skills, qualities, and behaviors.
- Build connections and value interactions with others as a responsible and responsive citizen.
- Align knowledge, skills and personal interests with career opportunities.

## Verified Credits

A verified credit is earned when a student passes the SOL test associated with the course as well as the course. To earn a diploma, a student must pass 5 SOL tests in the following disciplines:

English	1 verified credit
Mathematics	1 verified credit
Science	1 verified credit
Social Studies	1 verified credit
Writing	1 verified credit
<b>Total needed</b>	<b>5 verified credits</b>

Virginia's Profile of a Graduate program is focused on ensuring all students have the knowledge, skills, attributes, and experiences to be "life-ready."

# Honors & Diploma Seals

## Graduation Honors

**Distinguished Scholar:** Students who earn a cumulative GPA of 4.0 or higher.

**Honor Graduate:** Students who earn a cumulative GPA between 3.80 - 3.99.

**Honor Student:** Students who earn a cumulative GPA between 3.30 - 3.79.

\*Student transcripts will be marked "School does not rank."

## Diploma Seals

According to the *Regulations Establishing Standards for Accrediting Public Schools in Virginia* at [8VAC20-131-50](#) and [8VAC20-131-51](#), students who meet the requirements for graduation and who demonstrate academic excellence may be eligible for one or more of the following diploma seals:

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

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

**The Board of Education's Career and Technical Education Seal** shall be awarded to students who earn a Standard Diploma or an 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 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. The Board shall approve all professional licenses and examinations used to satisfy these requirements.

**The Board of Education's Seal for Science, Technology, Engineering and Mathematics (STEM)** shall be awarded to students who earn either a Standard Diploma or an Advanced Studies Diploma and (i) satisfy all Math and Science requirements for the Advanced Studies diploma with a "B" average or better in all course work; and (ii) successfully complete a 50 hour or more work-based learning opportunity in a STEM area; and (iii) satisfy all requirements for a Career and Technical Education concentration (A concentration is a coherent sequence of two or more state-approved courses as identified in the course listing within the [CTE Administrative Planning Guide](#)); and (iv) pass one of the following: (a) a Board of Education CTE STEM-H credential examination, or (b) an examination approved by the Board that confers a college-level credit in a STEM field.

Honors and Diploma seals will be decided based upon a student's final transcript and final GPA. Recipients will be recognized in the graduation program on graduation day.

# Honors & Diploma Seals

## Diploma Seals

**The Board of Education's Seal for Excellence in Civics Education** shall be awarded to students who earn either a Standard Diploma or an Advanced Studies Diploma and: (i) complete Virginia and United States history and Virginia and United States government courses with a grade of "B" or higher; (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 satisfy the requirements of clause (iii) of this subdivision include: (a) volunteering for a charitable or religious organization that provides services to the poor, sick, or less fortunate; (b) participating in Boy Scouts, Girl Scouts, or similar youth organizations; (c) participating in JROTC; (d) participating in political campaigns or government internships, or Boys State, Girls State, or Model General Assembly; or (e) participating in school-sponsored extracurricular activities that have a civics focus. Any student who enlists in the United States military prior to graduation shall be deemed to have met this community service requirement.

**The Board of Education's Seal of Biliteracy** shall be awarded to students who demonstrate proficiency in English and at least one other language and meet additional criteria established by the Board. For additional information about this seal, please refer to the [Seal of Biliteracy webpage](#).

**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; and (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.

*PLEASE NOTE:* This seal was established by the Board in the revised Standards of Accreditation at [8VAC20-131-51](#) that became effective in the 2018-2019 school year. This seal is available to students who entered the ninth grade for the first time in the 2018-2019 school year and thereafter.

Honors and Diploma seals will be decided based upon a student's final transcript and final GPA. Recipients will be recognized in the graduation program on graduation day.

# Academic Core Course Descriptions

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# English

## **English 9 - 11300000**

**Grade Level:** 9

**Prerequisite:** English 8

Students will explore a comprehensive study of literature with an emphasis on interpretative reading skills related to critical and creative thinking. Composition, speech, and listening skills are correlated with selections. Vocabulary from literary selections and/or workbooks will be studied. Writing skills are reviewed with increased emphasis on the multi-paragraph compositions. Research skills are introduced and used.

## **English 9 Honors - 113000HN**

**Grade Level:** 9

**Prerequisite:** English 8

Honors English is academically challenging in that students are required to read and write quantitatively and qualitatively more than is required in other levels of English 9. Students will study the elements of the short story, poetry, nonfiction, drama, the epic, and the novel. Emphasis will be placed on oral and written communication skills. Because of the extensive reading and writing required, a student's success in this course is linked to his/her sense of responsibility and academic commitment. An emphasis is placed on the critical thinking skills (knowledge, comprehension, application, analysis, synthesis, evaluation.)

## **English 10 - 11400000**

**Grade Level:** 10

**Prerequisite:** English 9

Students will study world literature to analyze different types of literature: poetry, short stories, novels, drama, and nonfiction. Attention will be given to the analysis of consumer information. Students will continue the enhancement of writing skills and will critique the writing of peers as well as analyze professionals. Small group learning activities will aid students in becoming more skilled communicators.

## **English 10 Honors - 114000HN**

**Grade Level:** 10

**Prerequisite:** English 9

Honors English is academically challenging in that students are required to read and write quantitatively and qualitatively more than is required in the other levels of English 10. Students will study literature, writing, and speech as a vehicle to illustrate the human odyssey – one's journey for self and truth. Students are required to complete an extensive project which will be presented in written and oral form. Because of the extensive reading and writing required, a student's success in this course is linked to his or her sense of responsibility and academic commitment. An emphasis is placed on the critical thinking skills (knowledge, comprehension, application, analysis, synthesis, evaluation.)

### **Class Weights:**

Honors classes have an extra 1/2 point of weight added to the final grade. Opportunities for honors classes in English include:

- Eng 9 Honors
- Eng 10 Honors
- Eng 11 Honors
- Eng 12 Honors

**English 11 - 11500000****Grade Level:** 11**Prerequisite:** English 10

In this course, students undertake a chronological study of American literature by utilizing the assigned text and by reading parallel novels. Students will be asked to identify the prevalent themes and characterizations present in American literature which are reflective of our history and culture; furthermore, the student will be able to recognize the contributions of other cultures to the development of American literature. Library research, writing, and grammar skills will continue with an emphasis on the development of expository and persuasive compositions and on writing clear and accurate business and technical correspondence and reports. Vocabulary study continues. Students will also make and analyze a persuasive oral presentation with special attention given to the accuracy of evidence and the effectiveness of delivery. Students enrolled in this course will take the English: Writing and English: Reading/Literature and Research EOC SOL Tests. Passing the SOL tests and the course earns 2 verified credits.

**English 11 Honors - 115000HN****Grade Level:** 11**Prerequisite:** English 10

Honors English is academically challenging in that students are required to read and write quantitatively and qualitatively more than is required in other levels of English 11. The curriculum is thematically based on the study of British and American literature. Students should expect to read extensively for each class meeting. Students enrolled in this course will take the English: Writing and English: Reading/Literature and Research EOC SOL Tests. An emphasis is placed on the critical thinking skills (knowledge, comprehension, application, analysis, synthesis, evaluation.) Passing the SOL tests and the course earns 2 verified credits.

**Dual Enrollment English 11 - 115000DE or 116000DE**

This course allows the option of Dual Enrollment through Laurel Ridge Community College originating at LHS and PCHS

**Grade Levels:** 11-12**Prerequisite:** Recommendation of 10th or 11th grade English teacher.

This course will introduce students to critical thinking and the fundamentals of academic writing. Through the writing process, students will learn to develop and support their ideas, investigate, evaluate and incorporate appropriate resources, edit for effective style and usage, and determine appropriate approaches for a variety of contexts, audiences and purposes. Emphasis will be on critical essays, argumentation and research, and on developing these competencies through the examination of a range of texts about the human experience. Students will be required to locate, evaluate, integrate and document sources.

**English 12 - 11600000****Grade Level:** 12**Prerequisite:** English 11

Students will be exposed to a study of predominately British literature—both fiction and non-fiction—which takes into consideration not only literary elements but also the historical and cultural context of the works. In other words, they will be introduced to defining authors of various historical periods and respond both to develop critical thinking/reading skills and to improve written and oral communication. Since the students are seniors, they are expected to display a foundation of literacy and writing knowledge gained over cumulative years in previous English classes. Students will have opportunities to improve writing style. Vocabulary study continues as well. Besides the production of logically organized and accurate expository papers, students will produce a well-documented major research paper and use their skills to plan and deliver an oral presentation.

**SOL Testing**

The only SOL opportunity in the English Department is after completion of the English 11 course. Students take an English 11 SOL—Reading test. Students are required to pass the English 11 SOL Reading test for graduation for either the standard or advanced diploma.

**Writing Performance Based Assessment**

PCPS students will demonstrate mastery of the content of the associated course on an authentic performance based assessment (PBA). These assessments often include tasks that mirror a “real life” situation. Students enrolled in English 9, English 9 Honors, English 10, English 10 Honors, English 11, English 11 Honors, or English 11 Dual Enrollment complete a writing sample to be included as a part of the body of evidence.

Dual-enrollment or AP classes carry an extra 1 point. English AP courses include:

- Eng 12 AP
- Dual Enrollment English I
- Dual Enrollment English II

See the Academic Information section of this book for a detailed list of Honors, AP, and Dual Enrollment courses.

### Special Offerings

Creative Writing and Advanced Composition are offered conditionally based upon the number of student requests and available qualified teachers. Some courses unable to be staffed at the high school may still be available to students online through the **Virtual Virginia** web-based system.

### **English 12 Honors - 116000HN**

**Grade Level:** 12

**Prerequisite:** English 11

English 12 Honors is academically challenging in that students are required to read and write quantitatively and qualitatively more than is required in English 12. The curriculum is thematically based on the study of British literature—both fiction and nonfiction—which takes into consideration not only literary elements but also the historical and cultural context of the works. Students should expect to read extensively for each class meeting. Students enrolled in this course will be expected to display a high level of achievement in literacy and writing. Besides the production of logically organized and accurate expository papers, students will produce a well-documented major research paper and use their skills to plan and deliver an oral presentation.

### **Dual Enrollment English 12 - 116001DE**

This course allows the option of Dual Enrollment through Laurel Ridge Community College originating at LHS and PCHS

**Grade Levels:** 11-12

**Prerequisite:** Recommendation of 11th grade English teacher.

This course is a follow-up to Dual Enrollment English I, which is the prerequisite. This course is designed to do several things: first to follow up on the general writing principles of the first course—structure, development, sentence integrity, and use of language; and second, to introduce students to the principles of writing about literature, such as test-defensible assertions, use of literary present, development rather than summary. Regular writings are required in several formats: to summarize, to identify, to analyze, to establish and to evaluate. A research paper that meets the local community college requirements is expected.

### **Creative Writing - 11710000**

**Grade Levels:** 11-12

**Prerequisite:** English 10

This course is for the serious student who is interested in writing poetry and prose. Emphasis is placed on allowing students to explore many forms of writing which may include children's literature, personal narratives, observation writing, historical writing, and various forms of poetry. Emphasis is placed on structure and creativity in writing. Many assignments are produced outside class. Students may be encouraged to submit writings to essay contests or publications.

### **Reading & Composition II - 11820000**

**Grade Level:** 11-12

**Prerequisite:** None

Students taking this course will review and develop essential reading and writing skills. Vocabulary acquisition; writing structure, including sentence, paragraph, and essay; as well as basic grammar will be taught through the writing process. Emphasis will be placed on persuasive techniques. This course is an elective and will not count as one of the four required English courses needed for graduation.

# History/Social Science

## **World Geography - 22100000**

**Grade Level:** 9-12

**Prerequisites:** None

The focus of this course is the study of the world's peoples, places, and environments, with an emphasis on world regions. The knowledge, skills, and perspectives of the course are centered on the world's population and cultural characteristics, landforms and climates, economic development, and migration and settlement patterns. Spatial concepts of geography will be used as a framework for studying interactions between humans and their environments. Using geographic resources, students will employ inquiry, research, and technology skills to ask and answer geographic questions. Particular emphasis is placed on students' understanding and applying geographic concepts and skills to their daily lives.

## **World Geography Honors - 221000HN**

**Grade Level:** 9-12

**Prerequisites:** None

Honors World Geography academically challenges students to read primary and secondary sources and write more than is required in other levels of World Geography. The curriculum is thematically based on the study of the world's peoples, places, and environments, with an emphasis on world regions. The knowledge, skills, and perspectives of the course are centered on the world's population and cultural characteristics, landforms and climates, economic development, and migration and settlement patterns. Spatial concepts of geography will be used as a framework for studying interactions between humans and their environments. Using geographic resources, students will employ inquiry, research, and technology skills. Particular emphasis is placed on students' understanding and applying geographic concepts and skills to their daily lives. Students should expect to read extensively for each class meeting. In addition to basic critical thinking skills such as knowledge and comprehension, an emphasis is placed on application, analysis, synthesis, and evaluation skills. Students will be required to answer essay questions on summative assessments that challenge their ability to think on a higher cognitive level.

## **World History from 1500 AD / World Geography - 22160000**

**Grade Levels:** 9-12

**Prerequisite:** Recommend completion of World Geography

These standards enable students to cover history and geography from 1500 A.D. to the present, with emphasis on Western Europe. Geographic influences on history continue to be explored, but increasing attention is given to political boundaries that developed with the evolution of nations. Significant attention will be given to the ways in which scientific and technological revolutions created new economic conditions that in turn produced social and political changes. Noteworthy people and events of the nineteenth and twentieth centuries will be emphasized for their strong connections to contemporary issues. At the conclusion of this course students will take the World History and Geography from 1500 SOL Test. Passing the SOL test and the course earns a verified credit

### **World History from 1500 AD / World Geography Honors - 221600HN**

**Grade Levels:** 10-12

**Prerequisite:** Recommend completion of World Geography

This course offers an intensive study of the history and geography of the world's civilization from roughly 1500 A.D. to the present with particular emphasis on Western Europe. In particular, students will analyze the impact Western European societies have had on the development of societies in North and South America, Africa, and Asia since 1500 A.D. Students will be required to present their understanding of the subject in numerous summarizations, analytical and persuasive arguments, essays, presentations, and critical thinking projects.

### **Dual Enrolled World Civilizations II - 299700DE (Inactive)**

This course allows the option of Dual Enrollment through Laurel Ridge Community College originating at LHS and PCHS

**Grade Levels:** 10-12

**Prerequisite:** None

This course provides an overview of human cultural development from 1600 to the present. Emphasis is given to the growth of nationalism, the development of colonialism, and to global events, problems and conflicts of the present century. Individuals, societies, and historic developments will also be examined.

### **Virginia and United States History - 23600000**

**Grade Level:** 11

**Prerequisite:** None

U.S. History is a chronological study of the history of the United States from the perspective of political, social, cultural, economic, and geographical growth. The focus is on the American character and institutions. The primary role that Virginia plays in the development of the United States is emphasized through study of important events and people of the state.

### **Dual Enrolled Virginia and United States History - 236000DE**

This course allows the option of Dual Enrollment through Laurel Ridge Community College originating at PCHS and LHS

**Grade Levels:** 11

**Prerequisite:** Recommendation of previous social studies teacher

This history course provides students with an intensive study of American History. Special emphasis will be focused on active class participation and critical analysis of major events and documents in American history. Supplemental readings in addition to the basic text are required. An emphasis is placed on the critical thinking skills (knowledge, comprehension, application, analysis, synthesis, evaluation.)

### **Virginia and United States Government - 24400000**

**Grade Level:** 12

**Prerequisite:** None

This course examines the development and operation of the American system of local, state, and national governments. Basic principles of democracy are studied through our constitution and other significant political documents. The course explores a wide range of topics related to historical, contemporary, and future problems and issues in American politics including: the responsibilities of citizenship, political and economic theories, the relationship of individuals and governments to the rule of law, and the role of Virginia and the United States in the global community. News discussions and research projects are an integral part of the course. Students will be expected to participate in community service and local political meetings for successful completion of this course.

## **AP United States Government and Politics - 244500AP**

**Grade Level:** 12

**Prerequisite:** Recommendation of Virginia and United States History teacher.

The AP course in U.S. Government and Politics is designed to give students an analytical perspective on government and politics in the United States and is designed to approximate a college course in American Political Science. Students study the constitutional underpinnings of United States government, the kind of government the Constitution established with particular attention to federalism and the separation of powers. Students will study how people's beliefs about their government evolve and the processes by which they are transmitted. Students will also study the mechanisms that allow citizens to organize and communicate their interests and concerns, particularly political parties and interest groups. In order to meet the requirements of the Commonwealth of Virginia, students will also study state and local government. News discussions and research projects are an integral part of the course. An emphasis is placed on the critical thinking skills (knowledge, comprehension, application, analysis, synthesis, evaluation). Students will be expected to take the AP Exam administered by College Board and will receive college credit depending on their score. Failure to take the corresponding AP exam will result in loss AP designation on student's high school transcript and loss of additional course weight in GPA calculation.

## **Sociology - 25000000**

**Grade Levels:** 11-12

**Prerequisite:** None

This course is designed to help acquaint students with the basic study of sociology. Particular emphasis is given to cultural concepts, the nature of cultural heritage, cultural change, and the effect of culture in shaping personality. Attention is given to the building of human nature, social interaction, status, and social control and change.

## **American Civil War - 29950000**

**Grade Levels:** 11-12

**Prerequisite:** None

Using texts, primary sources, videos, and research, this class will examine the political and economic causes of the Civil War, the political and military battles of the war, and the ten year period following the war known as the Reconstruction.

## **History & Sports - 982600HS**

**Grade Levels:** 11-12

**Prerequisite:** None

In this course students will examine the development of sports through various historical perspectives. There will be an emphasis on helping students gain a better understanding of the inner relationship that sport has on social, economic, cultural, and political forces that are at work in the United States as well as the world. Students will examine the historical context as well as the significance of gender, race, ethnicity and social class through readings, primary sources, audio and visual materials as well as class discussions.

### **Class Weights:**

Dual-enrollment and AP classes carry an extra 1 point of weight added to the final grade. Opportunities for dual-enrollment in History/Social Science include:

- World Civilizations II DE
- US History DE
- US Government AP

### **AP Exams**

AP (Advanced Placement) exams are given at the completion of an AP course. College credit may be awarded depending upon a student's score. All students enrolled in AP courses are expected to take the AP exam unless they are also dual-enrolled. Financial assistance is available to qualifying students.

# Mathematics

## **Algebra I, Part 1** - 31310000

**Grade Levels:** 9-10

Instruction focuses on the development of algebraic concepts with the integration of some statistics. Students communicate mathematical ideas orally and in writing, learn to reason, and develop problem-solving skills. Students receive additional instruction on skills necessary for successful completion of Algebra I. For the Standard and Advanced Studies diplomas, students who take this course must also complete Algebra I Part 2 to earn a mathematics credit.

## **Algebra I, Part 2** - 31320000

**Grade Levels:** 10-11

**Prerequisite:** Algebra I, Part I

Instruction focuses on the development of algebraic and some statistical concepts with the integration of critical thinking and reasoning needed to develop problem-solving skills. Students will receive additional instruction on skills necessary for successful completion of Algebra I. Students enrolled in this course will be required to take the Algebra I SOL test. Passing the SOL test and the course earns a verified credit.

## **Algebra I** - 31300000

**Grade Levels:** 9-12

In this course students will develop a mastery of the structure of the number system, solve linear equations, quadratic equations and inequalities, and solve operations with polynomials, functions, relations, and graphs. The use of graphing calculators will be introduced. Students who pass this course will earn one mathematics credit towards graduation. Students enrolled in this course will be required to take the Algebra I SOL test. Passing the SOL test and the course earns a verified credit.

## **Algebraic Concepts & Reasoning** - 31990000

**Grade Levels:** 9-12

**Prerequisite:** Algebra I

Students will learn concepts and symbols of algebra, the structures that govern the manipulation of the symbols and how those symbols can be used to record ideas and events. Students will explore linear and quadratic patterns and develop the notion of families of functions. Using manipulatives, graphing calculators, computer applications and other available technology will help students develop and attach meaning to these concepts and abstract ideas.

## **Algebra, Functions, and Data Analysis** - 31340000

**Grade Levels:** 9-12

**Prerequisite:** Algebra I

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

### **Special Situations**

Students are expected to complete Algebra I in one full course. Part courses such as Algebra I part I & part II are only available through special permission and/or recommendation of administration, teachers and school counselor. Completion of the Algebra I part I and Algebra I part II sequence will only earn one math credit towards graduation.

**Geometry - 31430000****Grade Levels:** 9-12**Prerequisite:** Algebra I

This course will include the study of both plane and solid geometry. Measurements, constructions, properties of polygons, and the relationship of points, lines, angles, and planes will be the main topics in plane geometry. Lateral area, surface area, and volume will be the main topics of solid geometry. A variety of real-world applications and the use of related technology will be included in the course. Teachers will use a variety of instructional methods which may include lecture, individual practice, hands-on activities, investigations and experiments. Students who pass this course will earn one mathematics credit towards graduation. Students enrolled in this course will be required to take the Geometry SOL test. Passing the SOL test and the course earns a verified credit.

**Geometry Honors - 314300HN****Grade Levels:** 9-12**Prerequisite:** Algebra I

This course is designed for accelerated or gifted mathematics students. This course will move at an accelerated pace and will include the deductive-axiomatic method of proof and inductive/intuitive approaches to geometry. General problem solving techniques, a variety of real-world applications, extensive use of algebraic skills, and the use of related technology will be included in the course. Students who pass this course will earn one mathematics credit towards graduation. An emphasis is placed on the critical thinking skills (knowledge, comprehension, application, analysis, synthesis, evaluation.) Students enrolled in this course will be required to take the Geometry SOL test. Passing the SOL test and the course earns a verified credit.

**Algebra II - 31350000****Grade Levels:** 9-12**Prerequisite:** Algebra I

This course will include an in-depth review of material covered in Algebra I plus new topics. The topics covered are properties of real numbers, solving equations and inequalities, graphs in space, determinants, polynomials, rational expressions, sequences and series, radicals, irrational numbers, complex numbers, quadratic relations and systems, and exponents and logarithms. The use of technology, such as graphing calculators, will be used to explore many of these topics. Students who pass this course will earn one mathematics credit towards graduation. Students enrolled in this course will be required to take the Algebra II SOL test. Passing the SOL test and the course earns a verified credit.

**Algebra II Honors - 313500HN****Grade Levels:** 9-12**Prerequisite:** Algebra I

Honors Algebra II is a course for the accelerated mathematics student. An in-depth study of the structure and concepts of algebra is stressed. Challenging problems which help develop problem-solving skills are emphasized. An emphasis is placed on the critical thinking skills (knowledge, comprehension, application, analysis, synthesis, evaluation.) Students enrolled in this course are required to take the Algebra II SOL Test. Passing the SOL & the course earns a verified credit.

**Discrete Mathematics - 31540000****Grade Levels:** 11-12**Prerequisite:** Algebra II

Discrete mathematics may be described as the study of mathematical properties of sets and systems that have a countable (discrete) number of elements. With the advent of modern technology, discrete (discontinuous) models have become as important as continuous models. In this course, the main focus is problem solving in a discrete setting. Techniques that are not considered in the current traditional courses of algebra, geometry, and calculus will be utilized. As students solve problems, they will analyze and determine whether or not a solution exists (existence problems), investigate how many solutions exist (counting problems), and focus on finding the best solution (optimization problems). Connections will be made to other disciplines. The importance of discrete mathematics has been influenced by computers. Modern technology (graphing calculators and/or computers) will be an integral component of this course.

**Trigonometry - 31500000****Grade Level:** 11-12**Prerequisite:** Algebra II

Trigonometry includes the study of trigonometric definitions, applications, graphing, and solving trigonometric equations and inequalities. Emphasis should also be placed on using connections between right triangle ratios, trigonometric functions, and circular functions. In addition, applications and modeling should be included throughout the course of study. Oral and written communication concerning the language of mathematics, logic of procedure, and interpretation of results should also permeate the course.

**Dual Enrolled Pre-Calculus - 316000DE**

This course allows the option of Dual Enrollment through Laurel Ridge Community College

**Grade Levels:** 11-12**Prerequisites:** Algebra II and Geometry

This course is an extension of Algebra II with an emphasis in introductory calculus topics. All major areas covered in Algebra II are reinforced at a greater depth with additional applications aided by the use of calculators and computers. The course is designed to encompass the topics of equations and inequalities, exponential and logarithmic functions, sequences and series, matrices and determinants, vectors and the complex numbers system. Included are circular functions, right triangle ratios, solutions of trigonometric equations, inverses, identities, the law of sines and cosines, graphs of trigonometric functions, and applications of trigonometric techniques to solve real-world problems. Polar and parametric functions along with other introductory calculus topics will be studied.

**Calculus Honors - 317800HN****Grade Level:** 12**Prerequisite:** Students should exhibit above average skills in mathematical analysis and have successfully completed Pre-Calculus

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 purpose of the courses is to prepare students for advanced placement in college calculus.

**AP Calculus I - 31770000****Grade Level:** 12**Prerequisite:** Students should exhibit above average skills in mathematical analysis and have successfully completed Calculus Honors

AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

**Dual Enrolled Probability and Statistics - 319000DE**

This course allows the option of Dual Enrollment through Laurel Ridge Community College originating at PCHS and LHS

**Grade Level:** 11-12**Prerequisite:** Algebra II

Students enrolled in this course are assumed to have mastered the concepts identified in the Standards of Learning for Algebra II. The purpose of the course is to present basic concepts and techniques for collecting and analyzing data, drawing conclusions, and making predictions.

# Science

## **Environmental Science - 03003000**

**Grade Level:** 9-10

**Prerequisite:** None

This is a one credit High School course designed to endow students with the necessary knowledge and skills that will enable them to apply scientific skills and processes to major environmental science concepts, including the human impact on our planet. The focus of the course is on scientific inquiry, physical Earth Science, the living environment, resource conservation, humans' impact on the environment, and legal and civic responsibility. Student data collection and analysis through laboratory experiences and/or field work augment the course experience. Upon successful completion of this course, students should be able to use the scientific skills and processes and major environmental science concepts to understand interrelationships of the natural world and to analyze environmental issues and their solutions.

## **Environmental Science Honors - 030030HN**

**Grade Level:** 9-10

**Prerequisite:** None

This is a one-credit High School course designed to endow students with the necessary knowledge and skills that will enable them to apply scientific skills and processes to major environmental science concepts, including the human impact on our planet. The focus of the course is on scientific inquiry, physical Earth Science, the living environment, resource conservation, humans' impact on the environment, and legal and civic responsibility. Student data collection and analysis through laboratory experiences and/or fieldwork augment the course experience. Upon successful completion of this course, students should be able to use the scientific skills and processes and major environmental science concepts to understand the interrelationships of the natural world and to analyze environmental issues and their solutions. Honors students will concentrate on scientific literacy and will complete an environmental STEM project as a culminating experience.

## **Astronomy - 42600000**

**Grade Levels:** 11-12

**Prerequisite:** Environmental Science

Astronomy provides students with an in-depth working knowledge of the known universe. Lectures will cover the history and development of astronomy as a science beginning with pre-scientific cultures, the basic laws of planetary motion and the gravitational force. They will also study how information is gained from the light emitted by the various objects in the universe, the stages and mechanisms involved in the birth, life, and death of stars, the classification of galaxies and a description of the Milky Way galaxy. Students will explore the more exciting celestial objects: black holes, neutron stars, quasars, and time dilation. Strong study skills and math skills are required to gain a full understanding of the concepts listed above. Students will be required to make observations at night and early morning hours.

**Biology - 43100000****Grade Level:** 10**Prerequisite:** Environmental Science

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

**Biology Honors - 431000HN****Grade Level:** 10**Prerequisite:** Environmental Science

The basic topics of biology will be covered on an accelerated schedule. Emphasis will be placed on problem solving, library research, investigative research, and laboratory work. A research paper/project is a specific course requirement. The honors Biology class will be expected to work at a higher level and develop more critical thinking skills with an emphasis placed on comprehension, application, analysis, and evaluation.

**Dual Enrolled Biology I - 431001DE**

This course allows the option of Dual Enrollment through Laurel Ridge Community College originating at LHS

**Grade Level:** 11-12**Prerequisite:** Biology

The student will be able to explore fundamental characteristics of living matter from the molecular level to the ecological community with emphasis on general biological principles. The dual enrollment course will allow the student to be introduced to the diversity of living organisms, their structure, function and evolution.

**Dual Enrolled Biology II - 431002DE**

This course allows the option of Dual Enrollment through Laurel Ridge Community College originating at LHS

**Grade Level:** 11-12**Prerequisite:** Dual Enrolled Biology I

This course will focus on diversity of life, anatomy and physiology of organisms, and ecosystem organization and processes in an evolutionary context. Students will explore the core concepts of evolution; structure and function; information flow, storage and exchange; pathways and transformations of energy and matter; and systems biology.

**Biology II/Anatomy & Physiology Honors - 433000HN****Grade Level:** 10-12**Prerequisite:** Biology

This course would benefit those students preparing for a career in health professions. Course topics include an in-depth study of the structure and function of the human body systems; human diseases and disorders; and the health and maintenance of the human body.

**Class Weights:**

Honors classes have an extra 1/2 point of weight added to the final grade. Opportunities for honors classes in Science include:

- Environmental Science Honors
- Biology Honors
- Chemistry Honors
- Bio II/Anatomy Honors
- Physics Honors

Dual-enrollment and AP classes carry an extra 1 point. Science DE courses include:

- Biology I & II DE
- Chemistry AP

See the Academic Information section of this book for a detailed list of Honors, AP, and Dual Enrollment courses.

**Biology II/Ecology - 43400000****Grade Level:** 11**Prerequisite:** Biology

This course will explore the study of interactions between organisms and their environments. Ecology explores the links between the living and non-living parts of the world that surrounds us all. This course will incorporate information from many scientific fields such as chemistry, geology, and many branches of biology with emphasis on human impact.

**Biology II / Genetics - 43500000****Grade Levels:** 11-12**Prerequisite:** Biology I

This course will be an in-depth study of genetics. It will focus on Mendelian genetics, heredity, chromosomes, crossing-over, mutations, mitosis/meiosis, and biotechnology. Students will study current topics concerning genetics including the application of genetics and biotechnology to industry, agriculture, forensics, evolution, and disease. This course will have a lab component.

**Chemistry - 44100000****Grade Level:** 11-12**Prerequisites:** Biology, Geometry, and Algebra II (or co-requisite)

This course introduces basic chemical principles including: atomic structure, chemical formulas and equations, the periodic table, nomenclature, bonding, and properties of matter. Laboratory exercises are incorporated to reinforce concepts and develop skills including: measurement, observation, planning, safety, and problem solving. Students will prepare lab reports for each lab summarizing material from the lab. In this course, students will learn many mathematical aspects of chemistry and need a strong math background.

**Chemistry Honors - 441000HN****Grade Level:** 11-12**Prerequisites:** Biology, Geometry, and Algebra II (or co-requisite), recommendation of previous science teacher

This course introduces basic chemical principles including: atomic structure, chemical formulas and equations, the periodic table, nomenclature, bonding, and properties of matter. Honors level classes will emphasize critical thinking skills, deeper understanding of scientific concepts, and mastery of complex calculations. Laboratory exercises are incorporated to reinforce concepts and develop skills including: planning, observation, measurement, problem solving, safety, and use of laboratory equipment.

**AP Chemistry - 441000AP (Inactive)****Grade Level:** 11-12**Prerequisites:** Honors or General Chemistry

AP Chemistry is a rigorous second year chemistry course that is designed to be the equivalent of a college class. Students who score well on the AP Chemistry Exam at the end of the course can receive college credit. Students may benefit from the course by fulfilling a college science requirement in order to either free time for non-science majors to move on other types of courses or for science majors to move straight into more advanced or second year science courses. The AP Chemistry course will be divided into laboratory investigations, lecture, and test preparation with a heavy emphasis on problem solving and analysis. Students will be expected to be self-motivated learners. A strong math background is recommended.

**Integrated Physics - 45100000****Grade Level:** 11-12**Prerequisites:** Algebra I and Biology

This course incorporates applied physics and math to teach information about the principles of modern technical systems through “hands on” experimentation. This course concentrates on the mechanics of the physical world as well as the practical application of electromagnetics. This is an excellent science elective for students interested in pursuing employment or post-secondary training in technology.

**Physics Honors - 45200000****Grade Level:** 11-12**Prerequisites:** Algebra II

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

## World Language

**French I - 51100000****Grade Levels:** 9-11**Prerequisite:** An interest in the language and culture of France

French I is an introductory course focusing on developing competence in language and understanding of the culture of Francophone countries. Students learn to communicate in real-life contexts about meaningful topics, using as much French as possible in class. Grammar is integrated into instruction according to the vocabulary and structures needed in various situations. Students also learn to compare and contrast American culture with French culture. The prime goal is to begin to use French in and out of the classroom as much as possible.

**French II - 51200000****Grade Levels:** 9-12**Prerequisite:** Satisfactory completion of French I

French II is an intermediate course that continues to expand and build on those skills acquired in French I. This course focuses on more complex aspects of listening, speaking, reading, writing, and culture. Grammar and vocabulary will become more mature through lengthened reading comprehension, conversational activities, and guided writing. Emphasis continues to be placed on using French in the class as well as on the authentic materials to learn about culture.

**French III** - 51300000**Grade Levels:** 10-12**Prerequisite:** Satisfactory completion of French II

French III continues to develop proficiency. Students communicate using more complex structures in French on a variety of topics. Vocabulary continues to be an important part of learning as well as identifying significant details on familiar topics. Students will be required to maintain a journal on French writing topics as well as the reading and analysis of two novels which include “Le Petit Prince” de St. Exupery and “Le Petit Nicolas” of Sempe and Goscinny. Students will also discuss topics related to historical and contemporary events and issues as well as look at poetry and short stories through the ages.

**French IV Honors** - Advanced Level - 51400000**Grade Levels:** 11-12**Prerequisite:** Satisfactory completion of French III

French IV is a final course that continues to develop proficiency. Students in French IV will access information in other subject areas and to compare and contrast cultural elements of the Franco-phone countries with the United States. Students will also get an overview of milestone events of the past, both distant and recent, which will provide them with a better understanding of the culture they have been exposed to in their previous French classes. Literature will be analyzed and appreciated in its historical context. Students in French IV will be required to maintain a journal and will also be reading a collection of French poems articles and short stories as well as the novels “La Chanson de Roland” by unknown author, “Candid ou L’optimisme by Voltaire, and “Le Compte de Monte Cristo” by Alexandre Dumas. The main objective is to gain fluency in understanding native speakers and expressing oneself on a higher level. This level is conducted in French. Activities will prepare the students for the AP Exam or the SAT II test.

**Spanish I** - 55100000**Grade Levels:** 9-12**Prerequisite:** An interest in the language and culture of Spanish-speaking countries

Students learn sounds, stress patterns, and intonation of the language. Basic grammar structures and vocabulary are learned through practice in learning, speaking, reading, and writing with emphasis on using language to communicate orally. Students express themselves both orally and in writing by recombining the vocabulary and language structures creatively. Students comprehend and read simple questions and statements about daily activities and interests. Students also learn about the geography, customs, and culture of the Spanish-speaking countries.

**Spanish II - 55200000****Grade Levels:** 9-12**Prerequisite:** Satisfactory completion of Spanish I

Students continue to develop their skills in listening, speaking, reading, and writing with an emphasis on oral communication. They participate in simple conversations about familiar topics using the vocabulary and grammatical patterns they learn. Spanish II content explores the basic grammar that composes the language. Students read familiar material and write short, guided compositions on topics within their vocabulary and grammatical control. They expand their knowledge of cultural perspectives and practices.

**Spanish III - 55300000****Grade Levels:** 10-12**Prerequisite:** Satisfactory completion of Spanish II

This course is designed for students who know how to read and write at a more advanced level. Students will be able to write letters, compositions, and reports, and interpret and/or analyze more complex and longer narratives. In addition, students will give reports on a variety of topics. Cultural perspectives and practices are shared and a deeper understanding is developed through the context of selected readings.

**Spanish IV Honors - 554000HN****Grade Levels:** 11-12**Prerequisite:** Satisfactory completion of Spanish III

Spanish IV is the equivalent of a college-level course in Spanish conversation and composition for students who have completed three years of high school Spanish. Activities will be devoted to refining the students' listening/speaking skills, reading comprehension, grammar, and composition. Objectives for the course include, (1) more intensive comprehension of formal and informal spoken Spanish; (2) continued acquisition of vocabulary and more complex aspects of grammar; (3) refining the ability to express ideas orally with accuracy; and (4) refining the ability to speak and write in Spanish.

Throughout the course, students will complete formal written assignments, such as essays and taped formal oral presentations on a regular basis. Students will work to improve their listening comprehension using a variety of taped materials including teacher presentations and taped materials. Course content is not limited to any specific body of material but shall reflect the interests of the students and teacher in a variety of areas. Course materials will include a college-level text, as well as authentic materials from the world-wide web and Spanish language television and radio. A variety of readings from Spanish and Hispanic literature will also be incorporated into the course. The course will be taught primarily in Spanish, although English may be used for more complex grammar explanations.

**Spanish V Honors - 555000HN****Grade Levels:** 11-12**Prerequisite:** Satisfactory Completion of Spanish IV

Spanish V is the equivalent of an intermediate, college-level course. It includes aural/oral skills, reading comprehension, grammar, and comprehension. Objectives for the course include: (1) continued, more intensive comprehension of formal and informal spoken Spanish; (2) continued acquisition of vocabulary and more complex aspects, of grammar; (3) refinement of the ability to speak and write in Spanish; and (4) refinement of the ability to express ideas orally with accuracy and fluency.

Foreign language is required for an Advanced Diploma. This requirement can be satisfied in two ways: (a) by taking 3 years of a particular language, or (b) by taking 2 years each of 2 different languages.

# Physical Education

## **Health and Physical Education 9 - 73000000**

**Grade Level:** 9

**Prerequisite:** None

Physical Education is required of all 9<sup>th</sup> grade students. It is a continuation of development of skills in flag football, soccer, speed ball, volleyball, basketball, games and relays, softball, track and field, individual and dual sports, floor hockey, lacrosse, and fitness. Tennis is also added. A greater emphasis is put on skills and rules. Full participation and proper dress is required. Evaluation of students is made by teacher-made tests, participation and dress, and physical fitness testing. Health education is offered in conjunction with Physical Education 9. It includes instruction in first aid and safety, disease prevention, consumer health, and environmental health. A family life unit is offered.

## **Driver Education, Health and Physical Education 10 - 74050000**

**Grade Level:** 10

**Prerequisite:** Successful completion of Physical Education 9

Physical Education 10 is required of all 10<sup>th</sup> grade students. It is a continuation of development of all 8<sup>th</sup> and 9<sup>th</sup> grade activities with emphasis being put on finer techniques and skills. Golf and archery are added. Full participation and proper dress is required. Evaluation of the student is made by teacher-made tests, participation and dress, and physical fitness testing. Mental Health, Driver Education, and Traffic Safety are offered in conjunction with Physical Education 10. Driver Education includes the classroom portion, concentrating on defensive driving techniques, alcohol education, signs and signals, driving laws, and economic aspects of owning and buying an automobile. A family life unit is offered.

## **Advanced Physical Education - 76400000**

**Grade Levels:** 11-12

**Prerequisites:** Successful completion of Physical Education 9 and 10.

This course is an elective and does not satisfy the Physical Education requirements for graduation. Students should display a proven interest with a willingness to participate in prior physical education classes. In addition to weight training, this is a course designed for the serious Physical Education student interested in learning the mechanics of athletics and specific sports training. Content of this course will be first aid, prevention and care of athletic injuries, dietary study, physical training for the muscular and cardiovascular systems, drug abuse related to athletics, and sport specific skill training.

### **Behind-the-Wheel Driving - 70150000**

**Grade Levels:** 10-12

**Prerequisite:** According to the VA Division of Motor Vehicles, the following are mandatory:

1. The student must be 15 years and 6 months of age, and
2. The student must be no less than 10<sup>th</sup> grade to receive the behind-the-wheel phase.
3. The student must obtain a learner's permit prior to behind-the-wheel training.

Behind-the-wheel teaches the skills of defensive driving. Lessons are organized so that all phases of driving which will occur in our area can be coped with. Lessons consist of: elementary procedures, sign reading, handling the car on grades and inclines, manipulation of car in turns, etc., parking, highway driving, in-town driving, off-road recovery, general knowledge of controls and gauges, etc.

# Career & Technical Education Course Descriptions

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Career pathways are specific areas of concentration listed under each of the 16 Career Clusters. A list of these 16 clusters are found on the next 2 pages of this book. Page County Schools strives to offer as many opportunities as possible to for students along each pathway.

The Virginia Department of Education defines “sequential electives” as any series of courses that are used to fulfil the elective requirements for a standard diploma in which the content increases or expands in scope and sequence as students move through the various levels of the courses. The course sequence will need to be approved by school officials in order to ensure compliance with the VDOE regulations.



# Career Clusters

A Career Cluster is a grouping of occupations and broad industries based on commonalities. The sixteen career clusters provide an organizing tool for schools, small learning communities and academies. Visit [www.careerclusters.org](http://www.careerclusters.org) for more information.

	<p>The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.</p>
	<p>Careers in designing, planning, managing, building and maintaining the built environment.</p>
	<p>Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.</p>
	<p>Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.</p>
	<p>Planning, managing and providing education and training services, and related learning support services.</p>
	<p>Planning, services for financial and investment planning, banking, insurance, and business financial management.</p>
	<p>Executing governmental functions to include Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; and Management and Administration at the local, state, and federal levels.</p>
	<p>Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.</p>

# Career Clusters

 <p><b>H</b>ospitality &amp; Tourism</p>	<p>Hospitality &amp; Tourism encompasses the management, marketing and operations of restaurants and other food services, lodging, attractions, recreation events and travel related services.</p>
 <p><b>H</b>uman Services</p>	<p>Preparing individuals for employment in career pathways that relate to families and human needs.</p>
 <p><b>I</b>nformation Technology</p>	<p>Building Linkages in IT Occupations Framework: For Entry Level, Technical, and Professional Careers Related to the Design, Development, Support and Management of Hardware, Software, Multimedia, and Systems Integration Services.</p>
 <p><b>L</b>aw, Public Safety, Corrections &amp; Security</p>	<p>Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.</p>
 <p><b>M</b>anufacturing</p>	<p>Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.</p>
 <p><b>M</b>arketing, Sales &amp; Service</p>	<p>Planning, managing, and performing marketing activities to reach organizational objectives.</p>
 <p><b>S</b>cience, Technology, Engineering &amp; Mathematics</p>	<p>Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.</p>
 <p><b>T</b>ransportation, Distribution &amp; Logistics</p>	<p>Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.</p>

The 16 Career Clusters are part of the plan of study for students beginning in middle school. Your school counselor will meet with you to identify your interests and develop your individual plan.

# Career & Technology Pathways



*The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.*

Pathway	Course Sequence					Credential
<b>Animal Systems</b>	Intro to Animal Systems	Small Animal Care	Livestock Prod. Management			
<b>Power Systems</b>	Small Engine Repair	Ag Power Systems				NOCTI Small Engine
<b>Plant Systems</b>	Intro to Plant Systems	Horticulture	Floriculture	Livestock Prod. Management		
<b>Natural Resource Systems</b>	Intro to Plant Systems	Natural Resources	Forestry Management			Private Applicator Cert. Exam



*Careers in designing, planning, managing, building and maintaining the built environment.*

Pathway	Course Sequence					Credential
<b>Construction</b>	Technology Foundations	Technology Transfer				NOCTI Mechanical Drafting
<b>Maintenance &amp; Operations</b>	Electricity I	Electricity II				OHS 10/ NCCER
<b>Design/Pre-Construction</b>	Technical Drawing	Architectural Drawing				



*Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.*

Pathway	Course Sequence					Credential
<b>Printing Technology</b>	Digital Applications	IT Fundamentals				MOS Office Suite
<b>Printing Technology</b>	Technical Drawing	Architectural Drawing				



*Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.*

Pathway	Course Sequence					Credential
<b>Admin. Support/ Business Info</b>	IT Fundamentals / Digital App.	Intro. To Digital and Information and Computer Applications DE				MOS Office Suite
<b>Business Finance</b>	Accounting I	Accounting II				NOCTI Accounting
<b>General Management</b>	Digital App.	Business Law	Business Management			NRF Customer Service I



*Planning, managing and providing education and training services, and related learning support services.*

Pathway	Course Sequence					Credential
<b>Teaching/ Training</b>	Intro to Early Childhood	VA Teachers for Tomorrow I	VA Teachers for Tomorrow II			NOCTI Early Childhood
<b>Teaching/ Training</b>	Intro to Early Childhood	Early Childhood I				NOCTI Early Childhood



## Finance

Planning, services for financial and investment planning, banking, insurance, and business financial management.

Pathway	Course Sequence				Credential
<b>Accounting</b>	Accounting I	Accounting II			NOCTI Accounting
<b>Business Finance</b>	Digital Applications	Business Law			NRF Customer Service



## Government & Public Administration

Executing governmental functions to include Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; and Management and Administration at the local, state, and federal levels.

Pathway	Course Sequence				Credential
<b>Public Management</b>	Digital Applications	Business Law			NRF Customer Service



## Health Science

Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

Pathway	Course Sequence				Credential
<b>Therapeutic Diagnostic</b>	Nurse Aide 1	Nurse Aide 2			National Nurse Aide Assess. Program
<b>Therapeutic Diagnostic</b>	Clinical Medical Assistant 1	Clinical Medical Assistant 2			NHA

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



## Hospitality & Tourism

Pathway	Course Sequence				Credential
<b>Restaurant Food &amp; Beverage</b>	Nutrition & Wellness	Intro to Culinary			AHLEI Restaurant Server
<b>Lodging/ Recreation/Travel</b>	Nutrition & Wellness	Intro to Hospitality			Certified Guest Service Prof.



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

Pathway	Course Sequence					Credential
<b>Personal Care Services</b>	Cosmetology I	Cosmetology II				Cosmetology State Board



**Information Technology** *Building Linkages in IT Occupations Framework: For Entry Level, Technical, and Professional Careers Related to the Design, Development, Support and Management of Hardware, Software, Multimedia, and Systems Integration Services.*

Pathway	Course Sequence					Credential
<b>Web &amp; Digital Communications</b>	IT Fundamentals / Digital App.	Design, Multimedia & Web Tech	Advanced Design			MOS Office Suite
<b>Information Support</b>	IT Fundamentals / Digital App.	Intro.to Digital and Information Literacy and Computer Applications DE				MOS Office Suite
<b>Programming</b>	IT Fundamentals	Computer Sci./ Programming				



**Law, Public Safety, Corrections & Security** *Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.*

Pathway	Course Sequence					Credential
<b>Legal Services</b>	Digital App.	Business Law				NRF Customer Service



**Manufacturing** *Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and*

Pathway	Course Sequence					Credential
<b>Manuf. Process/ Production</b>	Technology Foundations	Technology Transfer	Technology Design			NOCTI Mechanical Drafting
<b>Welding</b>	Welding I	Welding II				OHSA 10 / Welding Exam



Planning, managing, and performing marketing activities to reach organizational objectives.

Pathway	Course Sequence					Credential
<b>Marketing Management</b>	Digital Applications	Computer Info. Systems DE				MOS Office Suite



Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.

Pathway	Course Sequence					Credential
<b>Engineering &amp; Technology</b>	Technical Drawing	Engineering Drawing				
<b>Science &amp; Mathematics</b>	Technology Foundations	Technology Transfer				NOCTI Mechanical Drafting



Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

Pathway	Course Sequence					Credential
<b>Facility &amp; Mobile Equipment Maintenance</b>	Auto Tech I	Auto Tech II				ASE NATEF

# Business

## **IT Fundamentals - 66700000**

**Grade Level:** 9

**Prerequisite:** None

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

## **Business Law - 61310000**

**Grade Levels:** 11-12

**Prerequisite:** None

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

## **Accounting - 63200000**

**Grade Levels:** 10-12

**Prerequisite:** None

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

## **Advanced Accounting - 63210000**

**Grade Levels:** 11-12

**Prerequisite:** Accounting

Students gain knowledge of advanced accounting principles, procedures, and techniques used to solve business problems and to make financial decisions. Students use accounting and spreadsheet software to analyze, synthesize, evaluate, and interpret business financial data. Students work in a technology-integrated environment using authentic workplace industry scenarios that reflect current industry trends and standards.

**Programming - 66400000****Grade Levels:** 10-12**Prerequisite:** IT Fundamentals

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

**Dual Enrolled Introduction to Digital and Information Literacy and Computer Application - 66120000 / 661200DE**

This course allows the option of Dual Enrollment through Laurel Ridge Community College

**Grade Levels:** 10-12**Prerequisite:** Digital Applications or IT Fundamentals

Develops understanding of digital and information literacy. Introduces basic computer concepts in hardware, software, cyber, cloud, database, and operating systems. Includes hands-on experience developing word processing, spreadsheets and presentation documents. Evaluates the reality of sources. Covers creating a simple web page. Examines topics such as social, legal, and ethical issues.

**Virginia Teachers for Tomorrow I - 90620000****Grade Levels:** 10-12**Prerequisite:** None

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

# Agriculture Education

## **Introduction to Animal Systems - 80080000**

**Grade Levels:** 9-10

**Prerequisites:** 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 applicable 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 Experience opportunities.

## **Livestock Production Management - 80120000**

**Grade Levels:** 10-12

**Prerequisites:** Introduction to Animal Systems

Course includes instruction in agricultural mechanics, with emphasis placed on the application of mechanical skills to farm power and machinery, as well as on soil and water management, supervised farming programs, and leadership training.

## **Introduction to Plant Systems - 80070000**

**Grade Levels:** 9-10

**Prerequisites:** 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 applicable 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.

## **Agricultural Power Systems - 80180000**

**Grade Levels:** 10-12

**Prerequisite:** Small Engine Repair

Instruction in agricultural power systems will focus on increasing the depth of study in power and technical systems. Areas of these systems to be addressed are engines, powertrains, hydraulics, electrical, and fuels. Instruction will also be provided in precision measurement, leadership, and career skills.

## **Horticulture Sciences - 80340000**

**Grade Levels:** 10-12

**Prerequisite:** Introduction to Plant Systems

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

**Floriculture - 80380000****Grade Levels:** 10-12**Prerequisite:** Introduction to Plant Systems

Students learn the basics of the horticulture plant production industry. Instruction includes the science of plant production as well as marketing and business management. Plant material identification and floral design round out this course to prepare the student for an entry-level position in the floriculture industry. Participation in FFA activities provides leadership development opportunities.

**Introduction to Natural Resources - 80400000****Grade Levels:** 10-12**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.

**Forestry Management - 80420000****Grade Levels:** 10-12**Prerequisite:** Introduction to Plant Systems

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

**Equine Management - 80800000****Grade Levels:** 10-12**Prerequisite:** Introduction to Animal Systems

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

**Small Engine Repair - 80820000****Grade Levels:** 9-12**Prerequisite:** None

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.

### **Small Animal Care and Management - 80830000**

**Grade Levels:** 10-12

**Prerequisite:** Introduction to Animal Systems

Students learn how to care for and manage small animals, focusing on instructional areas in animal health, nutrition, management, reproduction, and evaluation. Course content also includes instruction in the tools, equipment, and facilities for small animal care, and provides activities to foster leadership development. FFA and SAE activities are encouraged.

## **Family & Consumer Sciences**

### **Nutrition & Wellness - 82290000**

**Grade Levels:** 9-12

**Prerequisite:** None

Students enrolled in Nutrition and Wellness focus on understanding wellness, investigating principles of nutrition, using science and technology in food management, ensuring food safety, planning menus and preparing food, and exploring careers in the field of nutrition and wellness. Critical thinking and practical problem solving are emphasized.

### **Introduction to Early Childhood Education & Services - 82340000**

**Grade Levels:** 9-12

**Prerequisite:** None

Students focus on careers related to the early childhood field through hands-on exploration, projects, and cooperative learning experiences, including an overview of principles of child growth and development; appreciation of diversity; engaging learning experiences for children; principles of appropriate and effective guidance; healthy and safe environments; and development of self-concepts and building self-efficacy.

### **Introduction to Culinary Arts - 82500000**

**Grade Levels:** 10-12

**Prerequisite:** Nutrition & Wellness or Recommendation of FACS teacher

The Introduction to Culinary Arts curriculum provides students with opportunities to explore career options and entrepreneurial opportunities within the food service industry. Students investigate food safety and sanitation, explore culinary preparation foundations, practice basic culinary skills, explore diverse cuisines and service styles, investigate nutrition and menu development, and examine the economics of food. The curriculum places a strong emphasis on science and mathematics knowledge and skills.

### **Introduction to Hospitality - 82590000**

**Grade Levels:** 9-12

**Prerequisite:** Nutrition & Wellness recommended

Students will focus on developing professional skills and using emerging technologies to prepare for employment in this global industry rich in diverse career opportunities. The program includes instruction in the industries of lodging, food and beverage, travel and tourism, and recreation and fitness.

**Early Childhood Education I - 82850000****Grade Levels:** 11-12**Prerequisite:** Introduction to Early Childhood Education recommended

Students prepare to be primary providers of home-, family-, or institution-based child care services by focusing on the planning, organizing, and conducting of meaningful play and learning activities; child monitoring and supervision; record keeping; and referral procedures. Critical thinking, practical problem solving and entrepreneurship opportunities within the field of early childhood education are emphasized. Practical experiences (e.g., on-site lab, local daycare centers, elementary schools, other institutions) under the supervision of the instructor are required. Students also prepare for continuing education leading to careers in early childhood fields (e.g., medical, social services, and education).

**Independent Living—82190000****Grade Levels:** 9-12**Prerequisite:** None

Students in Independent Living build life skills focusing on establishing positive relationships, balancing work and family life, investigating careers, making responsible consumer choices, applying nutrition and wellness knowledge, and studying child development and parenting.

# Technology Education

## **Technology Foundations** - 84030000

**Grade Levels:** 9-11

**Prerequisite:** None

Students acquire a foundation in technological design, material processes, problem solving, and energy resources. Laboratory activities engage students in creating new ideas and innovations, building systems, and analyzing technological products. Students will work individually and in small groups to design, build, and test technological products such as robots, computers, consumer products, alternative energy vehicles, and model homes. Students will also develop transferable thinking and problem solving skills that they will use for life and work.

## **Technology Transfer** - 84050000

**Grade Levels:** 9-12

**Prerequisite:** Technology Foundations

Students will work with various computers, materials and systems to improve their skills and knowledge. Groups of students will work together on projects that combine systems such as production, energy, communication, transportation, and other technologies. These activities are transferred to other courses in the school because the students use math, science and communications to design, build and control a computer device, an energy efficient vehicle. Thematic activities engage students in community problems where they transfer technological methods to address recycling, space exploration, housing, and career development.

## **Technical Drawing and Design** - 84350000

**Grade Levels:** 10-11

**Prerequisites:** None

In this foundation course, students learn the basic language of technical design, while they design, sketch, and make technical drawings, illustrations, models, or prototypes of real design problems. Students develop spatial ability as they apply mathematical concepts to visual representations. The course is especially recommended for future engineering and architecture students.

## **Manufacturing Systems I** - 84250000

**Grade Levels:** 9-12

**Prerequisites:** None

This course provides an orientation to careers in various fields of manufacturing. Emphasis will be placed on manufacturing systems, safety, materials, production, business concepts, and the manufacturing process. Students participate in individual and team activities to create products that demonstrate critical elements of manufacturing.

## **Manufacturing Systems II** - 84270000

**Grade Levels:** 9-12

**Prerequisites:** None

Students develop an in-depth understanding of automation and its applications in manufacturing. Activities center on flexible manufacturing processes and computer integrated manufacturing (CIM). Students work in teams to solve complex interdisciplinary problems that stem from the major systems in automated manufacturing.

# Fine Arts & Local Elective Course Descriptions

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# Visual Arts

## **Art I/Art Foundations - 91200000**

**Grade Levels:** 9-12

**Prerequisites:** None

This is an introductory art course that serves as a prerequisite to other art courses. In this course, the student will develop an appreciation of art and art history, which will include traditional art, past and present famous works of art, and art careers. Art Foundations will be centered on the elements and principles of art. Projects will offer a variety of mediums and may include drawing, painting, printmaking, ceramics, calligraphy, and mixed media.

## **Art II/Intermediate - 91300000**

**Grade Levels:** 10-12

**Prerequisite:** Art I

This intermediate is primarily based on the fundamentals of drawing. Students will continue exploration of past and present artists throughout history. Students will produce works of art through drawing. This course provides the student with the opportunity to do an in-depth study of drawing, including illustration and general drawing skills. The student will use various art media for drawing including but not limited to pencil, charcoal, colored pencils, conte, pen and ink and more.

## **Art III/Advanced Intermediate - 91400000**

**Grade Levels:** 11-12

**Prerequisite:** Art II

This course is more advanced, with the student executing more complex skills and techniques in various mediums. The projects will be more developed and involved. The projects may include but will not be limited to projects in ceramics, painting, and drawing. The student will begin to become more independent and creative in his or her style of work, cultivating his or her skills, and begin working towards developing a portfolio. Students will be expected to present their work to the art teacher at the completion of this course to be considered for Art IV.

## **Art IV/Advanced - 91450000**

**Grade Level:** 12

**Prerequisites:** Art III

This course is taught as an independent student and is reserved for senior year only. Students considering this course will need to arrange a conference with the art teacher and present a portfolio of his or her works. This course is for students who plan to study art after high school. Students will develop a more professional portfolio for entrance into a collegiate art program.

**Graphic Design - 91530000****Grade Levels:** 11-12**Prerequisite:** Art I

The student will become familiar with the elements of graphic design, including proximity, alignment, repetition, and contrast, to produce freehand and computer graphic designs. Various computer programs will be used and may include Adobe Photoshop and Illustrator and other computer programs. The students will become familiar with various types and fonts and how to use them effectively in graphic design. A range of graphic design careers will be researched and emulated.

## Music Education

**Beginning Band - 92320SS1 / 92320SS2****Grade Levels:** 9-12**Prerequisite:** None

Beginning Band is designed to develop skills in reading and understanding music notation and to explore the expression and organization of musical ideas. Students make connections between the elements of music as they relate to other fields of knowledge. Students examine the cultural perspectives of music in society.

**Intermediate Band - 92330SS1 / 92330SS2****Grade Levels:** 9-12**Prerequisite:** Director Recommendation

Intermediate Band is designed for students who are new to high school instrumental music from middle school instrumental music or for those who have completed high school Beginning Band. They will develop and improve their skills in reading and understanding more complex music notation. They continue to develop their skills by notating and composing music, as well as using intermediate music theory. As students perform and sight read intermediate instrumental works, they expand their performance abilities, creativity, learn about collaboration and teamwork. Students explore and perform music in a variety of music styles. Students will make connections between music, its historical context, and careers in music. Students are provided with opportunities to participate in local, district, regional, and state events. This class does require students to perform in events that fall outside the school day.

**Advanced Band - 92340SS1 / 92340SS2****Grade Levels:** 9-12**Prerequisite:** Director Recommendation

Advanced Band is designed to meet the needs of the advanced instrumentalist who is highly motivated to become challenged technically and musically on his/her instrument. Students will continue to develop theoretical knowledge, instrumental technique, and musically, while rehearsing and performing various styles of music at difficulty levels appropriate for the group.

**Advanced Band Honors- 923400HN/ 923400HN****Grade Levels:** 9-12**Prerequisite:** Director Recommendation

Advanced Band Honors enables students to build upon the skills and knowledge acquired in Intermediate and Advanced Band. It is designed for the advanced band member who is highly motivated to be challenged musically and as an independent musician. This student wishes to commit additional time to their musical studies both in and outside of the classroom. Students will continue to develop theoretical knowledge, instrumental technique, and musically, while rehearsing and performing various styles of music at difficulty levels appropriate for the group. As students perform instrumental works and sight-read more complex music, they expand their performance abilities and creativity. Through the collaborative environment of the advanced instrumental setting, students demonstrate teamwork and display leadership skills. Students will make connections between music, its historical context, careers in music and music fundamentals. Students are expected to audition and participate in local, district, regional, and state events. Students are also expected to complete an Honors Point Log and to complete a major music project during the semester. This class does require students to perform in events that fall outside the school day.

**Beginning Percussion - 92320PS1 / 92320PS2****Grade Levels:** 9-12**Prerequisite:** None

The class will focus on the fundamentals of all areas of percussion technique and music reading. In addition, the percussionists will also learn percussion ensemble pieces and perform as an ensemble at different times during the school year.

**Intermediate Percussion- 92330PS1 / 92330PS2****Grade Levels:** 9-12**Prerequisite:** Director Recommendation

Intermediate Band is designed for students who are new to high school instrumental music from middle school instrumental music or for those who have completed high school Beginning Band. They will develop and improve their skills in reading and understanding more complex music notation. They continue to develop their skills by notating and composing music, as well as using intermediate music theory. As students perform and sight read intermediate instrumental works, they expand their performance abilities, creativity, learn about collaboration and teamwork. Students explore and perform music in a variety of music styles. Students will make connections between music, its historical context, and careers in music. Students are provided with opportunities to participate in local, district, regional, and state events. This class does require students to perform in events that fall outside the school day.

**Advanced Percussion - 92340PS1 / 92340PS2****Grade Levels:** 9-12**Prerequisite:** Recommendation from band director

This class is open to anyone wanting to be a percussionist in the Concert Band. The class will continue to develop the fundamentals of all areas of percussion technique and music reading. The class will practice separately from the band but will be considered part of the Concert Band and will join with them for concerts, parades and Marching Band.

**Beginning Chorus - 926000S1 / 926000S2****Grade Levels:** 9-12**Prerequisite:** None

Beginning Chorus enable students to obtain musical knowledge and skills in the choral setting. Students begin to develop choral skills, including singing in unison and two-part harmony with emphasis on vocal production and technique. They learn to read, write, and compose music, using basic music theory. Students explore and perform music in a variety of music styles. They develop an understanding of expected concert etiquette.

**Intermediate Chorus - 928500S1 / 928500S2****Grade Levels:** 9-12**Prerequisite:** Director Recommendation

Intermediate Chorus enables students to obtain a more advanced musical knowledge and skills in the choral setting. This course is designed for students who have participated in middle school chorus or beginning chorus at the high school level. Students continue to develop choral skills, including singing in three and four-part harmony with emphasis on vocal production, technique, and independence. They continue to develop their skills through notating and composing music, using intermediate music theory. Students explore and perform music in a variety of music styles. As students perform choral works and sight-read two part music, they expand their performance abilities, creativity, learn about collaboration and teamwork. Students will make connections between music, its historical context, careers in music and music fundamentals. Students are provided with opportunities to participate in local, district, regional, and state events. This class does require students to perform in events that fall outside the school day.

**Advanced Chorus - 928900S1 / 928900S2****Grade Levels:** 9-12**Prerequisite:** Director Recommendation

Advanced Choir enables students to build upon the skills and knowledge acquired at the intermediate level. As students perform choral works and sight-read music, they expand their performance abilities and creativity. Through the collaborative environment of the choral setting, students demonstrate teamwork and display leadership skills. They develop an understanding of and appreciation for vocal/choral music and its relationship to other disciplines. Students are provided with opportunities to participate in local, district, regional, and state events. Requirements include: Attendance at performances

**Advanced Chorus Honors - 928900HN / 928900HN****Grade Levels:** 9-12**Prerequisite:** Director Recommendation

Advanced Choir enables students to build upon the skills and knowledge acquired in Intermediate Chorus. It is designed for the advanced choir member who is highly motivated to be challenged musically and as an independent musician. This student wishes to commit additional time to their musical studies both in and outside of the classroom. Students will continue to develop theoretical knowledge, vocal technique, and musically, while rehearsing and performing various styles of music at difficulty levels appropriate for the group. As students perform choral works and sight-read more complex music, they expand their performance abilities and creativity. Through the collaborative environment of the advanced choral setting, students demonstrate teamwork and display leadership skills. Students will make connections between music, its historical context, careers in music and music fundamentals. Students are expected to audition and participate in local, district, regional, and state events. Students are also expected to complete an Honors Point Log and to complete a major music project during the semester. This class does require students to perform in events that fall outside the school day.

## Performing Arts

**Theatre I - 14100000**

**Grade Levels:** 9-12

**Prerequisite:** None

The standards for Theatre Arts I enable students to participate in the creative processes of creating, refining, producing, and performing theatre. Students will analyze, interpret, and evaluate dramatic literature and theatrical works. The course emphasizes foundational concepts, ensemble work, and skill development and provides theatrical opportunities for students to determine areas of personal interest

## Required Electives

**Economics and Personal Finance - 61200000**

**Grade Levels:** 10-12

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

**Computer Science Foundations - 10020000**

**Grade Levels:** 9

**Prerequisite:** None

The Computer Science Foundations standards outline the content for a one-year course with an emphasis on computer programming within the context of broader concepts of computer science. The standards build on the concepts of computer science developed in prior grade levels. The standards provide a transition from block-based programming to a text-based programming language and familiarize the student with developing and executing computer programs. Teachers select programming languages and environments, problems, challenges, and activities that are appropriate for their students to successfully meet the objectives of the standards. Programmable computing tools will be used to facilitate design, analysis, and implementation of computer programs. Students for exploring and creating computer programs, facilitating reasoning and problem solving, and verifying solutions should use these tools.

## Local Electives

### **Teacher Assistant - 98260000**

**Grade Levels:** 11-12

This local elective course is designed for students who have a desire to assist other students in a tutorial capacity and contribute service to the school. Students work under the supervision of a teacher or teachers in various content areas. Students should be in good academic standing to enroll in this class. The course may be of particular interest to students who plan to pursue a career in the field of education. Students who choose this elective do not receive high school credit.

### **Public Speaking - 151500PS**

**Grade Levels:** 11-12

Public speaking is a course in which students will read and view notable speeches from historical and literary figures; critique/evaluate self, peers, and professionals in various speaking situations; evaluate and improve listening skills; analyze audience, occasion, and purpose in preparing a speech; learn effective speaking techniques including articulation and enunciation; become familiar with the First Amendment of the U.S. Constitution; learn to use appropriate and effective nonverbal communication skills; raise one's awareness of culture and ethics in regard to public speaking; cite/credit sources and avoid plagiarism; learn basic acting and dramatic reading techniques; learn effective methods for speech delivery and organization; become comfortable and relaxed in a public speaking situation; create and utilize various types of visual aids; apply skills to real world speaking situations; and develop a unique speaking style and voice.

### **Internship - 9826INTP / 9826INED / 9826INAT**

**Grade Levels:** 11-12

Internship is designed to provide the student with the ability to participate in a work-based learning experience. Internship experiences, typically with a company, non-profit, governmental or community-based organization. This course is offered as pass/fail. Successful students will earn one credit with no quality points for GPA.

### **Publication Production/Yearbook - 11104000**

**Grade Level:** 9 - 12

**Prerequisite:** None

Yearbook is a challenging course in which students have the unique opportunity to write a book, prepare a publication for printing, run a business, and record history. This course is designed to provide students the opportunity to work with advanced technology, strengthen their analytical and problem-solving skills, improve their communication skills, and manage tremendous responsibility. The students will be using PC computers and Adobe® InDesign software. Yearbook students practice the fundamentals of journalistic writing, photojournalism, graphic design, and budget management. Students will also develop their ability to work as a team as they produce the yearbook and in some years a school newspaper.

**GIS/GPS Geospatial Research Seminar - 984000DE (Inactive)**

This course allows the option of Dual Enrollment through JMU

**Grade Level:** 12

**Prerequisite:** None

This seminar is open to seniors who wish to take a different approach to their year by becoming involved in a community-based research project that involves spatial reasoning and decision-making. All participants will be required to give a final presentation of their project to local community leaders, the faculty of their home school and JMU (this class is a partnership with JMU). The projects will be focused on using geospatial technologies to explore the local problem, thus potentially bringing business and government entities into the project as partners, and giving participants' skills in this important technological area.

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# Automotive Technology

## **Automotive Technology I (ASE) - 850600DE**

This course allows the option of Dual Enrollment through Laurel Ridge Community College originating at PCTC

**Grade Levels:** 11-12

**Prerequisite:** Good Math Background, Good Attendance

Auto Service Technology I is a course designed to provide preparation into the field of Auto Mechanics. Your first year is spent learning and practicing shop safety, maintenance, and upkeep of the following automotive systems:

- Engine Repair and Performance
- Electricity and Electronics
- Engine Performance
- Heating and Air Conditioning

Upon completion students will be equipped to take the ASE certification tests.

## **Automotive Technology II (ASE) - 850700DE**

This course allows the option of Dual Enrollment through Laurel Ridge Community College originating at PCTC

**Grade Levels:** 11-12

**Prerequisite:** Auto Technology I

Auto Service Technology II is designed to proceed from where Auto Service Technology I concluded in the ASE certifications. Course of study in Auto Service Technology II includes learning and practicing diagnosis; and servicing of the following automotive systems:

- Brakes
- Steering, Suspension, and Wheel Alignment
- Automatic Transmissions and Transaxles
- Manual Transmissions and Transaxles

# Cosmetology

## **Cosmetology I - 87450000**

**Grade Level:** 11

**Prerequisites:** Art, Technical Math/Algebra, Biology and Chemistry are recommended.  
Excellent attendance is required.

This course provides training in all phases of the profession, plus skill and theory preparation for the state board examination. Completion of this two year program will allow the graduates to enter the cosmetology industry competent in all basic tasks of the Cosmetology profession after licensure is issued from the State Board of Cosmetology.

During the first year, students are introduced to all the basics, but not limited to sanitation and sterilization, shampooing and rinsing, braiding, hair coloring, hair cutting, hair styling, texture services, chemical relaxing, wig services, color analysis, facials, makeup application, perform manicures, and pedicures.

Excellent attendance is a requirement for the two year program. Excessive absences do not allow the student to complete the lab competencies and hours required by the Virginia State Board of Cosmetology.

## **Cosmetology II - 87460000**

**Grade Level:** 12

**Prerequisite:** Cosmetology I

In the second year, students are provided advanced study of experiences received during the first year with further emphasis on development, perfection, and speed in the various hairstyling application skills. Other areas focused upon are professional ethics, salon management, preparation for the state examination, and completion of required competencies and hours. At this level, the students are preparing for both practical and theory portions of the Board exam. A student must successfully pass the Virginia State Board of Cosmetology examination to receive a license and practice the profession. Passing grade at the State Board Exam is 75. A student must first obtain a minimum grade of "C" to be eligible to take the State Board Examination.

# Electricity

## **Electricity I - 853300DE**

This course allows the option of Dual Enrollment through Laurel Ridge Community College originating at PCTC

**Grade Levels:** 11-12

**Prerequisites:** Technical Math or Algebra preferred and completion of 9<sup>th</sup> grade English

The Electricity I course will give students the basic understanding of the principles and theory of electricity. All competencies are set and approved by the State Department of Education. This will include both theory and hands-on practice. This course includes the following subjects:

- Core Curriculum
- Basic Technical Math
- Advanced Technical Math
- Concepts of Technology
- Industrial Electronics Survey
- Industrial Safety & First Aid
- OSHA 10 Certification

In addition to the above curriculum, students will also be eligible for the Manufacturing Specialist Certification through Laurel Ridge Community College.

## **Electricity II - 853400DE**

This course allows the option of Dual Enrollment through Laurel Ridge Community College originating at PCTC

**Grade Levels:** 11-12

**Prerequisites:** Technical Math or Algebra preferred; completion of 10<sup>th</sup> grade English; and completion of Electricity I

The Electricity II course gives students a broad understanding of the trade through instruction in the use of materials, tools, and techniques used in the installation, maintenance, and repair of electrical equipment and systems. All competencies are set and approved by the State Department of Education. Completion of Electricity I and II will allow a student to do on-the-job-training. The following skills are covered in Electricity II:

- Basic Motor Controls
- Blueprint Reading & Estimating
- Residential Wiring
- Human Relations Skills for Technical Occupations
- Communication Skills for Technical Occupations
- Technical Computer Literacy
- Electricity I A.C./D.C. Theory

In addition to the above curriculum, students will also be eligible for the Manufacturing Technician Certification—Level 1, through Laurel Ridge Community College.

# Clinical Medical Assistant

**Clinical Medical Assistant I/II-** 83450000/83460000

**Grade Level:** 11-12

**Prerequisite:** Introduction to Health and Medical Sciences (unless granted exception)

Students further develop medical-assisting skills and techniques learned in Medical Assistant I. They also learn management of patient records, cardiopulmonary resuscitation, care and use of equipment, collection and analysis of laboratory specimens, special diagnostic testing, basic diseases and disorders, basic knowledge of treatment and medication, and job preparedness skills. Advanced on-the-job clinical experience in a health care facility is a part of the course. Successful completion of the program may lead to employment in physicians' offices or clinics. Male and female students who successfully complete this program will be qualified to take the CCMA exam and upon passing the CCMA exam, be recognized as a Certified Clinical Medical Assistant (CMA).

# Medical Terminology

**Medical Terminology** - 83840000

**Grade Level:** 11-12

**Prerequisite:** None

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

# Pharmacy Technician

**Pharmacy Technician I** - 83050000 (Inactive)

**Grade Level:** 11-12

**Prerequisite:** Algebra II

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

## Nurse Aide (CNA)

**Nurse Aide I/II - 83600000/83620000**

**Grade Level:** 11-12

**Prerequisite:** Introduction to Health and Medical Sciences (unless granted exception)

Nurse Aide I, offered as an occupational preparation course beginning at the 11th-grade level, emphasizes the study of nursing occupations as related to the health care system. Students study normal growth and development, simple body structure and function, and medical terminology and are introduced to microbes and disease. They receive elementary skill training in patient-nursing assistant relationships; taking and recording of vital signs; cardiopulmonary resuscitation; and bathing, feeding, dressing, and transporting of patients in hospitals and nursing homes. Limited on-the-job instruction in nursing homes and hospitals is part of the course. This course can be used as an introduction to practical nursing. Male and female students who successfully complete this program will be qualified to take the NNAAP exam and upon passing the NNAAP, be recognized as a Certified Nurse Aide (CNA).

# Practical Nursing (LPN)

## **Practical Nursing I Honors - 83578358**

**Grade Levels:** 12 (1<sup>st</sup> semester)

**Prerequisites:** High School senior in good standing.

Nursing I focuses on the attainment of competency in basic nursing skills. Instruction includes a historical overview of nursing as well as current trends in health care. Other units of study include anatomy and physiology, nutrition, and nursing arts. As competence is achieved, students will refine technologies at a local acute care hospital. Successful completion of this course requires a grade of 80% (B) in all areas.

## **Practical Nursing II Honors - 83578358**

**Grade Levels:** 12 (2<sup>nd</sup> semester)

**Prerequisites:** Practical Nursing I

During Practical Nursing II, studies will entail pharmacology, Med-Math for Nurses and Med Surg. Nursing I. Successful completion of this course will be achieved with an 80% (B) average in the curriculum. Male and female students that complete Practical Nursing I & II will earn 3 high school credits toward graduation, and will participate in a lamp ceremony prior to beginning the second clinical year.

## **Practical Nursing III (Post Grad) - 83590000**

**Grade Level: Post-Graduate** (36 weeks, full-time)

**Prerequisite:** Practical Nursing II

Practical Nursing III is an 18-month, State Board of Nursing approved program. Focuses are on direct patient care. The student will have supervised clinical experiences in the clinical labs.

Instruction includes:

- Psychiatry/Mental Health Nursing
- Pediatrics
- Maternal Newborn Nursing
- Medical/Surgical Nursing II
- Geriatric Nursing

Successful completion of the second year requires a grade of 80% (B) in all units of the program. Male and female students who successfully complete this program will participate in a graduation ceremony and will be qualified to take the NCLEX and upon passing the NCLEX, be recognized as Licensed Practical Nurses (LPN).

# Welding

## **Welding I** - 86720000

**Grade Levels:** 11-12

**Prerequisite:** None

Welding is required by a wide variety of industries, anywhere fusible materials and high heat are needed to manufacture, repair, or alter tools and products. Professional welders are in high demand and can earn accordingly. Students in Welding I are taught to use manual welding, cutting, and electric arc welding processes to fabricate and weld metal parts according to diagrams, blueprints, and specifications. Students will also receive all safety-related practices and techniques, including the OSHA 10 card.

## **Welding II** - 86730000

**Grade Levels:** 11-12

**Prerequisite:** Welding I

This course teaches advanced welding students to fine-tune their craft and to perform V-groove welds in all positions, using multiple welding processes. Students prepare to pass relevant industry certifications. Welding is required by a wide variety of industries, anywhere fusible materials and high heat are needed to manufacture, repair, or alter products. Professional welders are in high-demand and can earn accordingly.

## **Welding III** - 86740000

**Grade Levels:** 12

**Prerequisite:** Welding I & II

This welding capstone course teaches the industry's emerging technologies and how to demonstrate gas tungsten arc welding (GTAW) and shielded metal arc welding (SMAW) pipe tests. Students are prepared to earn relevant industry credentials toward employment in production or manufacturing facilities.

# Advanced Learning & College Opportunities

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Page County Schools strives to offer students as many career-advancing opportunities as possible to ensure success after graduation. Students can choose from industry certifications, community college degrees and certificates, college-bound dual enrollment opportunities, and rigorous curricular programs to advance them towards their chosen careers and advance them in their fields of study.

# Transfer Virginia

Transfer Virginia is an initiative to provide transparency and access throughout the college transfer process. Through the Transfer Virginia portal, we strive to provide you consistent and current information from all partner institutions. You can research, plan and organize your transfer journey using the information and resources available within this portal from Virginia's institutions. The information in this portal is updated twice a year.

<https://www.transfervirginia.org/>

## VCCS Passport

### Laurel Ridge Community College

The Passport is a college program in which all courses are transferable and satisfy lower-division general education requirements at any Virginia public institution of higher education.

(Total of 16 credits)

- ENG 111 (3 credits) - English 11 DE or English 12 DE (Offered at LHS & PCHS)
- BIO 101 (4 credits) - Biology I DE (Offered at LHS & PCHS)
- Choose 1:

MTH 245 (3 credits) - Probability & Statistics DE (Offered at LHS & PCHS)

**OR**

MTH 167 (5 credits) - Pre-Calculus DE (Offered at LHS & PCHS)

- HIS 121 (3 credits) - US History DE (Offered at LHS & PCHS)
- PLS 135 (3 credits) - \*\*Must take directly through Laurel Ridge Community College, will count for the high school US Government requirement (Or student can choose another course with Laurel Ridge)

**ALWAYS** meet with a Laurel Ridge Community College college advisor when attempting to complete a degree or certificate from Laurel Ridge Community College.

# Laurel Ridge Community College

## Universal Certificate in General Studies

(Minimum of 31 credits)

- ENG 111/ENG 112 (6 credits)- English 11 DE (Offered at LHS & PCHS)
- ENG 246 (3 credits) - English 12 DE (Offered at LHS & PCHS)
- 3 credit Laurel Ridge course (Choose 1 Humanities & Arts from: ART 101, ART 102, CST 151, HUM 201, HUM 202, HUM 216, HUM 256, HUM 259)
- PLS 135 (3 credits) Taken through Laurel Ridge; will count for the high school US Government requirement (Or student can choose another Laurel Ridge course: ECO 150, ECO 201, ECO 202, GEO 210, GEO 220, PLS 241, PSY 200, SOC 200, SOC 268)
- BIO 101/BIO 102 (8 credits) - Biology I DE (Offered at LHS & PCHS)

Choose 1:

- MTH 245 (3 credits) - Probability & Statistics DE (Offered at LHS & PCHS)

OR

- MTH 167 (5 credits) - PreCalculus DE (Offered at LHS & PCHS)
- HIS 121/HIS 122 (6 credits) - US History DE (Offered at LHS & PCHS)

**ALWAYS** meet with a college advisor when attempting to complete a degree or certificate from community college.



# Massanutten Regional Governor's School

## Vision Statement

The vision of Massanutten Regional Governor's School is to promote a sense of personal responsibility for our environment and to prepare our students to pursue leadership roles in a constantly changing world.

## Academic Program

The learning environment of Massanutten Regional Governor's School is designed to accelerate, enrich, and enhance the educational opportunities of students. They will:

1. Deliver a rigorous academic program that challenges students to pursue their interests in mathematics, science, and technology to their fullest potential.
2. Provide opportunities for students to learn the fundamentals of scientific method, action research, oral and written communication.
3. Foster an environment that promotes independent learning and personal responsibility .
4. Extend to students the opportunity to engage in real-world applications.
5. Incorporate technology so students can improve their technical skills and become confident in its usage.
6. Provide an integrated and collaborative learning environment among the faculty and students.
7. Ensure positive public relations.

## Curriculum

Each year of attendance at the Massanutten Regional Governor's School, students will earn 4 high school credits. Upon completion of the two-year program, students will have earned up to 40 college credits. At least 75% of the instruction in the courses will be interdisciplinary and over half of the lessons will be structured on the principles of problem-based learning. Teachers at the Governor's school work closely together by integrating themes, teaching overlapping skills, and creating common projects. The use of technology as a problem-solving tool is a main feature of the curriculum, including data and information retrieval, data representation, and data analysis.

## Anticipated Courses Offerings for 2022-2023

### 11th Grade

DE Environmental Science I (GOL 105)  
DE Agro-Ecology I (GOL 142)  
DE Statistics (MTH 245/246)  
DE English Language (111/113)  
Research / Mentorship

### 12th Grade

DE Environmental Science II (GOL 110)  
DE Agro-Ecology II (GOL 241)  
DE Calculus (MTH 263/264)  
DE English Literature (246) & DE  
Humanities (246)  
Research / Mentorship

## Applications

The application process for the Governor's school begins in the fall of a student's 10th grade year. Interested students can get more information or pick up an application from their School Counseling Office.

# Appendix A

## Sample Advanced Diploma

Diploma requirements do change from year to year! Carefully check the details for each diploma specified in the [Academic Information](#) section of this book before you begin planning your course of study to ensure you include all necessary requirements for graduation.

8 <sup>th</sup> Grade	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> grade	12 <sup>th</sup> Grade
English 8	English 9	English 10	English 11	English 12
Am. Studies	World Geography	World History II	U.S. History	Government
Phys. Science	Environmental Science	Biology	Chemistry	Physics
Math 8	Algebra I	Geometry	Algebra II	Pre-Calculus
Health & PE 8	Health & PE 9	Health & PE 10	Economics and Personal Finance	Elective
Computer App	Spanish I	Spanish II	Spanish III	Elective
Elective	Computer Science Foundations	Elective	Elective	Elective
Elective	Elective	Elective	Elective	Elective

**HINT:** Check the Luray and Page County Middle School Programs of Studies for high school credit courses you can take in the 8<sup>th</sup> grade which will give you more available choices at the high school level.

# Appendix A

## Sample Standard Diploma

8 <sup>th</sup> Grade	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> grade	12 <sup>th</sup> Grade
English 8	English 9	English 10	English 11	English 12
Am. Studies	World History I	Elective	U.S. History	Government
Phys. Science	Environmental Science	Biology	Ecology	Elective
Math 8	Algebra I	Geometry	Algebra II	Elective
Health & PE 8	Health & PE 9	Health & PE 10	Economics and Personal Finance	Elective
Computer App	Computer Science Foundations	Elective	Elective	Elective
Elective*	Elective	Elective	Elective	Elective
Elective	Elective	Elective	Elective	Elective

**HINT:** Check the Luray and Page County Middle School Programs of Studies for high school credit courses you can take in the 8<sup>th</sup> grade which will give you more available choices at the high school level.

## My High School Course of Study

Use this worksheet to plan your courses for high school. Begin by listing any high school courses you took in the 8th grade. Refer to the requirements outlined in the Academic Information section of this book to ensure you include everything you need for graduation in your plan. Even if you are not thinking about college at this point, experiment with ways to attain an Advanced Diploma. Aim high and keep your options open! You never know what you can achieve until you try!

### Personal Course of Studies Worksheet

8 <sup>th</sup> Grade	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> grade	12 <sup>th</sup> Grade
	English 9	English 10	English 11	English 12

### Personal Course of Studies Worksheet

8 <sup>th</sup> Grade	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> grade	12 <sup>th</sup> Grade
	English 9	English 10	English 11	English 12

## Appendix C

# Math Sequencing

### Standard Diploma Math Options:

- Algebra I, Geometry, Algebra II
- Algebra I, Geometry, Algebra Functions & Data Analysis

### Advanced Diploma Math Options:

- Algebra I, Geometry, Algebra Functions & Data Analysis, Algebra II
- Algebra I, Geometry, Algebra II, Pre-Calculus DE, Calculus
- Algebra I, Geometry, Algebra II, Statistics DE
- Algebra I, Geometry, Algebra II, Discrete Mathematics
- Algebra I, Geometry, Algebra II, Trigonometry

**Note:** This list may not be comprehensive due to new or reduced course offerings, or availability of courses. Contact your school counselor for complete, up-to-date information and assistance with math sequencing options.

## **Luray High School**

Principal: **Nicky Clark**

Assistant Principal: **Tara Meadows**

Athletic Director: **Don Ehlers**

School Counselor (A-K): **Sarah Lam**

School Counselor (L-Z): **Sherry Grogg-Mathews**

243 Bulldog Drive  
Luray, VA 22835  
(540) 743-3800



## **Page County Technical Center**

Principal: **Leigh Ann Pettit**

40 Eagle Way

Luray, VA 22835

(540) 778-7282



## **Page County High School**

Principal: **David D. Cale**

Assistant Principal: **Shannon Hawkins**

Athletic Director: **Bill Simmons**

School Counselor (A-K): **Lindsey Croft**

School Counselor (L-Z): **Deb Lucas**

184 Panther Drive  
Shenandoah, VA 22849  
(540) 652-8712

