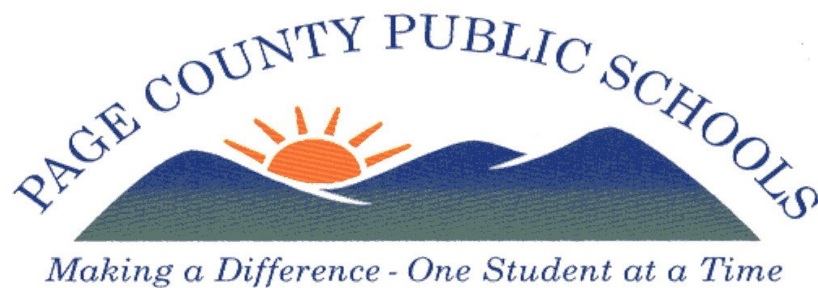


Page County Public Schools

Secondary Program of Studies



2016-17

High School Program of Studies

2017-18

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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.

Course Descriptions

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A Message From the Superintendent . . .

Mrs. Donna Whitley-Smith

This Program of Studies booklet contains valuable information regarding opportunities available to you at Luray High School, Page County High School and Page County Technical Center. Selecting appropriate courses is vital to you for your success in high school as well as for your future endeavors.

Be sure to involve your family in the selection of your course work. Your counselor will also assist you in any way possible to help you achieve your goals, be they a two-year or four-year college, entry into the work force, or enlistment in the military. Through careful planning, you will be able to graduate on time prepared for whatever your future may hold.

Best of luck to you in your secondary experience. Our goal is to help you prepare for your life beyond high school. Use this booklet to plan the course for the future that is right for you.

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

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. Any mid-year changes will be made on a case-by-case basis with every attempt to keep classes balanced and minimize teacher switches. Written notification from a parent must be provided before a student may drop a course. Courses must be dropped by the end of the first grading period 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

Upon written request by the parent/guardian, a course grade may be expunged from the student's permanent record if the course was taken for high school credit prior to grade 9. The expunging of a student's grade will not effect the student's promotion status. This request must be made by the end of the student's 9th grade year.

Promotion/Retention

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 and signature.

Parents of seniors receive a letter from the senior counselor during the first semester that reviews the student's remaining requirements for graduation. Seniors and parents of seniors receive a year to date progress letter at various points throughout the school year for any classes where the student has a low average and is in danger of not graduating. Conferences are requested with parents, students, teachers, administration, and the school counselor for any student in danger of not graduating. Final letters of notification of non-graduation are sent when 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 June 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 36-37). 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 36-37. For more detailed information and valuable resources associated with each cluster, visit 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 = 59 and below

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
- World History I Honors
- World History II Honors
- Geometry Honors
- Algebra II Honors
- Earth Science Honors
- Biology Honors
- Biology II/Anatomy Honors
- Chemistry Honors
- Physics Honors
- Spanish IV Honors
- Spanish V Honors

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:

- English 12 AP and DE I & II
- Public Speaking DE
- World Civilizations II DE
- US History DE
- US Government AP
- Pre-Calculus I & II DE
- Calculus I & II DE
- Probability & Statistics DE
- Biology I & II DE
- Chemistry AP
- Earth Sci. II/Geology I & II DE
- Computer Info. Systems DE
- Computer Science DE
- VA Teachers for Tomorrow DE
- Ag Fabrication DE
- GIS/GPS Geospatial Research DE
- Auto Technology I & II DE
- Electricity I & II DE

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). Courses identified as receiving weighted grades will be considered when determining Honor Roll, selection to National Honor Society, and other academic honors that may become available, as well as determination of class rank.

- 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 School strive to offer as many weighted opportunities for students as possible.
- Additional AP and dual enrollment opportunities are available at the Massanutten Regional Governor's School and online through Virtual Virginia. Information about those offerings can be found on pages 74 and 75.

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.

Standard Diploma

Students entering the 9th grade in 2013-14 will be required to complete at least **one online class** and have earned a **Career & Technical Certification** prior to graduation. These requirements are usually met through the Economics and Personal Finance course.

Your school counselor will work closely with you to ensure you complete these requirements.

For a sample high school standard diploma course of study, see Appendix B. Included in this appendix is a personal course of studies worksheet to help you plan your own program for high school.

Graduation Requirements for the Standard Diploma include:

English.....	4 credits
Mathematics.....	3 credits
Laboratory Science.....	3 credits
History and Social Science.....	3 credits
Health and Physical Education.....	2 credits
Foreign Language, Fine Arts or Career & Technical Ed.....	2 credits
Economics and Personal Finance.....	1 credit
Electives.....	4 credits
Total Units	22 credits

Provisions and Explanations

- Math courses to satisfy these requirements must include at least 2 different courses from among: Algebra I, Geometry, Algebra Functions & Data Analysis, Algebra II, or another math course above the level of Algebra II. Only one math credit can be earned for completing Algebra I (if a student elects to take Algebra I part I and part II) and only 1 math credit can be earned for completing Geometry. See appendix C for sequencing options.
- Science courses to satisfy these requirements must include 3 courses from at least 2 different science areas of: Earth Science, Biology, Chemistry, or Physics.
- Social Studies courses to satisfy this requirement must include VA & US History and VA & US Government and one course in World History or World Geography.
- Elective courses to satisfy this requirement must include at least 2 sequential electives as required by the Standards of Quality.

Verified Credits

A verified credit is earned when a student passes the SOL test associated with the course as well as the course. For a Standard Diploma, a student must pass 6 SOL tests in the following disciplines:

English	2 verified credits	(English 11 Reading, English 11 Writing)
Mathematics	1 verified credit	(Algebra I, Geometry, or Algebra II)
Science	1 verified credit	(Earth Science, Biology, or Chemistry)
Social Studies	1 verified credit	(World Geography, World History I, World History II, or US History)
Student choice	1 verified credit	(Any listed above)
Total needed	6 verified credits	

Advanced Studies Diploma

Graduation Requirements for the Advanced Diploma include:

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

Total Units 26 credits

Provisions and Explanations

- Math courses to satisfy these requirements must include at least 3 different courses from among: Algebra I, Geometry, Algebra II, or another math course above the level of Algebra II. Algebra Functions & Data Analysis may be included in the sequencing. Only one math credit can be earned for completing Algebra I (if a student elects to take Algebra I part I and part II) and only 1 math credit can be earned for completing Geometry. See appendix C for sequencing options.
- Science courses to satisfy these requirements must include courses from 3 different science areas of: Earth Science, Biology, Chemistry, and Physics.
- Social Studies courses to satisfy this requirement must include US History and US Government and 2 courses in World Geography or World History.
- Foreign Language courses to satisfy this requirement must include 3 years of one language or 2 years each of 2 languages.
- Advanced Diploma students are strongly advised to enroll in Honors and/or Advanced Placement level courses in English, math, social studies, and science.

Verified Credits

A verified credit is earned when a student passes the SOL test associated with the course as well as the course. For an Advanced Diploma, a student must pass 9 SOL tests in the following disciplines:

English	2 verified credits	(English 11 Reading, English 11 Writing)
Mathematics	2 verified credits	(Algebra I, Geometry, or Algebra II)
Science	2 verified credits	(Earth Science, Biology, or Chemistry)
Social Studies	2 verified credits	(World Geography, World History I, World History II, or US History)
Student choice	1 verified credit	(Any listed above)
<hr/>		
Total needed	9 verified credits	

Students entering the 9th grade in 2013-14 will be required to complete at least **one online class** prior to graduation.

Your school counselor will work closely with you to ensure you complete these requirements

For a sample high school advanced diploma course of study, see Appendix B. Included in this appendix is a personal course of studies worksheet to help you plan your own program for high school.

Honors & Diploma Seals

Honors

Honor Graduates:

Graduating seniors with a 3.80 cumulative GPA will be named High Honors/Honor Graduates.

Honor Students:

Graduating seniors with a cumulative GPA of 3.30-3.79 will be named Honor Students.

Valedictorian:

Awarded to the graduating senior with the highest cumulative GPA among the senior class as determined at the calculation of the final GPA.

Salutatorian:

Awarded to the graduating senior with the second highest cumulative GPA in the senior class as determined at the calculation of the final GPA.

Diploma Seals

Governor's Seal:

Awarded to students who earn an Advanced diploma with an average grade of "B" or better and successfully complete coursework leading to at least 9 transferrable college credits.

Board of Education Seal:

Students receiving an Advanced or Standard Diploma and graduating with an average grade of "A" or better will receive the Board of Education Seal on the diploma.

Board of Education's Career and Technical Seal:

Awarded to students who earn a Standard or Advanced 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 in a career and technical education concentration or specialization that confers certification for 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.

Board of Education's Seal of Advanced Mathematics and Technology:

Awarded to students who earn either a Standard or Advanced diploma and (i) satisfy all of the mathematics requirements for the Advanced diploma (four units of credit including Algebra II, two verified units of credit) with a "B" average or better; and either (a) pass an examination in a career and technical education field that confers certification from a recognized industry, trade, or professional association; (b) acquire a professional license in a career and technical education field from the Commonwealth of Virginia; or (c) pass an examination approved by the Board that confers college level credit in a technology or computer science area.

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: Recommendation of 8th grade English teacher

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: Recommendation of 9th grade English teacher

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

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:** Recommendation of 10th grade English teacher

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.

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 two English 11 SOLs—a Writing test and a Reading test. Students are required to pass both English 11 SOLs for graduation for either the standard or advanced diploma.

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.

AP English 12 (English Literature and Composition) - 119500AP

Grade Level: 12

Prerequisite: Recommendation of 11th grade English teacher.

English 12 AP is designed to give high school students a collegiate experience in English. The course provides a unique academic challenge and emphasizes independent learning. Students read and analyze poems, plays, novels and essays in a student-centered environment which requires commitment and responsibility. Students are required to work independently and cooperatively, to compose prepared papers as well as journals and impromptu writings, and to create extensive projects. English 12 AP requires strong reading and writing skills. Students will be required to take the English Literature and Composition AP exam in the spring. Primary emphasis is placed on critical reading and writing in preparation for this exam. Extensive outside reading and writing are to be expected. An emphasis is placed on the critical thinking skills (knowledge, comprehension, application, analysis, synthesis, evaluation.) Additionally, students will build a portfolio including a résumé.

Dual Enrollment English I - 115000DE or 116000DE

This course allows the option of Dual Enrollment through LFCC 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.

Dual Enrollment English II - 116001DE and 116002DE

This course allows the option of Dual Enrollment through LFCC originating at 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.

Reading & Composition I - 11810000

Grade Level: 9-10

Prerequisite: None

Students taking this course will review essential writing skills beginning with effective sentence and paragraph structures and concluding with standard essay writing. Basic grammar skills will be taught in conjunction with the writing process. This course is an elective and will not count as one of the four required English courses needed for graduation.

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

Capstone Senior English Seminar (Inactive) - 11760000

Grade Levels: 12

Prerequisite: Recommendation of 11th or 12th grade English teacher.

This course is designed for students who (1) have completed English 11, and (2) who have achieved at least minimum proficiency on both the end-of-course English reading and writing assessments; and (3) are college intending but may not be fully college ready. The course may also support students who meet the same academic requirements but plan to enter the work force (prepared for further work force training) directly after graduation.

The course will augment skills in critical reading; critical thinking; the fundamentals of academic writing and exposition, persuasion, and augmentation. Through the writing process, students will refine topics, develop and support ideas and hypotheses; investigate, evaluate, and incorporate appropriate resources, edit for effective style and usage; and determine appropriate approaches for a variety of contexts, audiences, and purposes. Writing activities will include expository, persuasive, and argumentative texts.

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.

Advanced Composition - 11770000

Grade Level: 11-12

Prerequisite: English 10

Students will develop a writing process that allows him/her to write confidently and successfully. The students will develop writing strategies to address specific writing purposes, such as research, creative, journalistic, and essay. Students will edit their writing as well as the writing of others. Class will be responsible for magazine or newsletter.

Yearbook - Photojournalism—12150000

Grade Levels: 10-12

Prerequisite: Good writing skills needed

Students will learn feature writing, typography, layout design, and basic photography. The students are expected to attend events outside of the classroom. Online software and imaging software will be utilized to produce various projects. Projects will include the production of the school's yearbook and other multimedia and graphic arts publications.

Capstone English

Senior Capstone English is a high-interest program designed to give students an additional boost for competent and successful entry into college and careers. The course will add to students' preparations for critical reading, college and workplace writing, and career-ready communications.

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. Check the listing of available courses on page 74 or speak to your school counselor.

History/Social Science



SOL Testing

There are four SOL testing possibilities in the History/Social Science Department: World Geography, World History I, World History II and US History. Students will need to pass at least one history/social science SOL for a standard diploma, and two for an advanced diploma.

Class Weights:

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

- World History I Honors
- World History II Honors

World History to 1500 AD / World Geography - 22150000

Grade Levels: 9-12

Prerequisite: None

This course begins with an introduction to the Paleolithic era, the Agricultural Revolution, the Ancient River Valley civilizations, and the cultures of Persia, India, and China. It continues with a study of ancient Greece and Rome, the Byzantine Empire, Russia, and the Islamic civilizations. Also included is a study of the ancient Eastern hemisphere cultures, and the Mayan, Aztec, and Incan civilizations. It concludes with a study of the Middle Ages and the Renaissance in Europe. At the conclusion of this course students will take the World History and Geography to 1500 SOL Test. Passing the SOL test and the course earns a verified credit.

World History to 1500 AD / World Geography Honors - 221500HN

Grade Levels: 9-12

Prerequisite: None

Honors World History is academically challenging in that students are required to read primary and secondary sources and write more than is required in other levels of World History I. The curriculum is thematically based on the study ancient world history. Students should expect to read extensively for each class meeting. Students enrolled in this course will take the World History I SOL Tests. An emphasis is placed on the critical thinking skills (knowledge, comprehension, application, analysis, synthesis, evaluation.)

World History from 1500 AD / World Geography - 22160000

Grade Levels: 9-12

Prerequisite: Recommend completion of World History to 1500 AD

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: 9-12

Prerequisite: Recommend completion of World History to 1500 AD

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. Students enrolled in this course will take the World History and Geography from 1500 A.D. SOL Test. Passing of the SOL test and the course will earn the student a verified credit.

Dual Enrolled World Civilizations II - 299700DE

This course allows the option of Dual Enrollment through LFCC originating at LHS and PCHS

Grade Levels: 11-12

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. Students enrolled in this course will take the VA and U.S. History SOL Test. Passing the SOL test and the course earns a verified credit.

Dual Enrolled Virginia and United States History - 236000DE

This course allows the option of Dual Enrollment through LFCC 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.) Passing the SOL test and the course earns a verified credit.

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

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

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.

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.

World Geography - 22100000 (Inactive)**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. At the conclusion of this course students will take the World Geography SOL Test. Passing the SOL test and the course earns a verified credit.

Humanities (Inactive) - 23150000**Grade Levels:** 9-12**Prerequisite:** None

Organized in units, students will study "that what makes us human" throughout historical periods. This survey course introduces the humanities expressed through art forms such as paintings, sculpture, photography, film, and architecture. This course will also introduce the student to the great books of literature. Other units include the survey of music genres and an introduction to the great philosophers.

Contemporary World Religions (Inactive) - 23810000**Grade Level:** 9-12**Prerequisite:** None

This course provides an comparative study of all major religions of the world, as well as lesser-known religions. Attention will be given to the origin, history, and doctrine of the religion in addition to spiritual, moral, geographic, and cultural beliefs. The student will be able to understand the role that different religions have played throughout the course of history. Emphasis will be given to how religion builds the cultural make-up of people throughout the world.

Mathematics



Special Situations

Students are expected to complete Algebra I in one full course. Part courses such as Algebra I part I & part II (and Geometry 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.

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.

Geometry, Part 1 - 31440000**Grade Levels:** 9-11**Prerequisite:** Algebra I

This is the first part of a program in which Geometry is taught over two terms. The course is designed to meet the needs of students who might experience difficulty in a one-term Geometry course. For the Standard and Advanced Studies diplomas, students who take this course must also complete Geometry I Part 2 to earn a mathematics credit towards graduation. For the Advanced Studies Diploma only one Part 1 course may be used to satisfy the mathematics graduation requirements. For the Standard and Advanced Studies diplomas, students who take this course must also complete Algebra I Part 2 to earn a mathematics credit towards graduation.

Geometry, Part 2 - 31450000**Grade Levels:** 10-12**Prerequisite:** Geometry, Part I

This is the second part of a program in which Geometry is taught over two terms. Completion of this course indicates that a student has mastered all Geometry topics and is eligible to take Algebra II. 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 - 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.

Honors Geometry - 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.

SOL Testing

There are three SOL testing possibilities in the Mathematics Department: Algebra I, Algebra II and Geometry. Students will need to pass at least one mathematics SOL for a standard diploma, and two for an advanced diploma.

Class Weights:

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

- Algebra II Hon.
- Geometry Hon.

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

- Probability & Statistics DE
- Pre-Calculus I and II DE
- Calculus I and II AP/DE

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

Geometric Concepts & Reasoning - 32000000**Grade Levels:** 9-12**Prerequisite:** Geometry

This course is designed for students who have not successfully mastered the standards of Geometry. Students will continue to reinforce concepts related to reasoning, lines, transformations, triangles, polygons, circles, and three-dimensional figures. Calculators, graphing utilities, and other appropriate tools will be used to assist in teaching and learning. Students will take the End of Course Geometry SOL at the conclusion of this course.

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.

Honors Algebra II - 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.

Dual Enrolled Pre-Calculus - 316000DE

This course allows the option of Dual Enrollment through LFCC

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.

Dual Enrolled Calculus I - 317500DE

This course allows the option of Dual Enrollment through LFCC

Grade Level: 12

Prerequisite: Students should exhibit above average skills in mathematical analysis and have successfully completed Pre-Calculus

These courses are 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.

Dual Enrolled Calculus II - 317600DE

This course allows the option of Dual Enrollment through LFCC

Grade Level: 12

Prerequisite: Students should exhibit above average skills in mathematical analysis and have successfully completed Pre-Calculus

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

Trigonometry/ Probability and Statistics - 31503190

Grade Level: 11-12

Prerequisite: Algebra II

This course is designed for students who have mastered the concepts outlined in the Algebra II standards. The first semester will cover trigonometric definitions, application, graphing, and solving trigonometric equations and inequalities. Emphasis will be placed on using connections between right triangle ratios, trigonometric functions, and circular functions.

Special Offerings

Additional mathematics courses may be available to students online through the **Virtual Virginia** Web-based system. Check the listing of available courses on page 74 or speak to your school counselor.

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.

Dual Enrolled Probability and Statistics - 319000DE

This course allows the option of Dual Enrollment through LFCC originating at PCHS

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.

AP Statistics - 319200AP

Grade Level: 11-12

Prerequisite: Algebra II

This course is an introductory college-level course in statistics. Students are introduced to concepts and tools for collecting, analyzing, and drawing conclusions from data. Focuses will be on 1.) exploring data: describing patterns and departures from patterns, 2.) sampling and experimentation: planning and conducting a study, 3.) Anticipation patterns: exploring random phenomena using probability and simulation, and 4.) statistical inference: estimation population parameters and testing hypothesis. Students will be expected to take the AP Exam administered by College Board and will receive college credit depending upon their score.

Computer Math (Inactive) - 31840000**Grade Levels:** 10-12**Prerequisite:** Algebra I

This course is intended to provide students with experiences in using computer programming techniques and skills to solve problems that can be set up as mathematical models. Students enrolled in Computer Mathematics are assumed to have studied the concepts and skills in Algebra I and beginning geometry. Strategies include defining the problem; developing, refining, and implementing a plan; and testing and revising the solution. Programming, ranging from simple programs involving only a few lines to complex programs involving subprograms, should permeate the entire course and may include programming a graphing calculator or scripting a problem solution in a database or spreadsheet. Programming concepts, problem-solving strategies, and mathematical applications should be integrated throughout the course.

Capstone Senior Mathematics (Inactive) - 31360000**Grade Levels:** 12**Prerequisite:** Algebra II or Algebra Functions and Data Analysis

The mathematics capstone course is intended for 12th-grade students who have passed Algebra II or Algebra, Functions, and Data Analysis and need additional coursework to adequately prepare them for entry-level, credit-bearing, college courses in mathematics and further career and technical training. This course will focus on concepts outlined in the Virginia College and Career Readiness Mathematics Performance Expectations. Students will solve problems, analyze data, and apply arithmetic and geometric properties to real world situations. This course will be taught using Problem Based Learning where students use essential content mathematical skills to respond to complex questions, problems, and challenges.

Capstone Mathematics

Senior Capstone Mathematics is a high-interest program designed to give students an additional boost for competent and successful entry into college and careers. The course will add to students' preparations for real world situations.

Science



Earth Science 9 - 42100000

Grade Level: 9

Prerequisite: Physical Science 8

The Earth Science standards connect the study of the Earth's composition, structure, processes, and history; its atmosphere, fresh water, and oceans; and its environment in space. The standards emphasize historical contributions in the development of scientific thought about the Earth and space. The standards stress the interpretation of maps, charts, tables, and profiles; the use of technology to collect, analyze, and report data; and the utilization of science skills in systematic investigation. Problem solving and decision-making are an integral part of the standards, especially as they relate to the costs and benefits of utilizing the Earth's resources. Major topics of study include plate tectonics, the rock cycle, Earth history, the oceans, the atmosphere, weather and climate, and the solar system and universe. Students enrolled in this course will be required to take the Earth Science SOL Test. Passing the SOL test and the course earns a verified credit.

SOL Testing

There are three SOL testing possibilities in the Science Department: Earth Science, Biology, and Chemistry. Students will need to pass at least one science SOL for a standard diploma, and two for an advanced diploma.

Earth Science 9 Honors - 421000HN

Grade Level: 10

Prerequisite: Recommendation of Physical Science 8 teacher

This course connects the study of the Earth's composition, structure, processes, and history; its atmosphere, fresh water, and oceans; and its environment in space. Emphasis is given to historical contributions in the development of scientific thought about the Earth and space. The standards stress the interpretation of maps, charts, tables, and profiles; the use of technology to collect, analyze, and report data; and the utilization of science skills in systematic investigation. Problem solving and decision-making are an integral part of the standards. Honors Earth Science classes 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. Major topics of study include plate tectonics, the rock cycle, Earth history, the oceans, the atmosphere, weather and climate, and the solar system and universe. Students enrolled in this course will be required to take the Earth Science SOL test. Passing the SOL test and the course earns a verified credit.

Earth Science II/Astronomy - 42600000

Grade Levels: 11-12

Prerequisite: Earth Science and Algebra I

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.

Dual Enrolled Earth Science II/Geology I - 424000DE

This course allows the option of Dual Enrollment through LFCC originating at PCHS

Grade Levels: 11-12

Prerequisite: Biology and Chemistry recommended

The purpose of this course is to introduce the student to the discipline of geology, the application of chemistry, physics, and biology to the study of the Earth. The structure and properties of the Earth and the internal and external processes responsible for the development and dynamic nature of the Earth are examined. Minerals and rocks that comprise the Earth are studied. The paradigm that binds all geological observations and hypotheses, plate tectonics, is the focal point around which the course is structured.

Dual Enrolled Earth Science II/Geology II- 424002DE

This course allows the option of Dual Enrollment through LFCC originating at PCHS

Grade Levels: 11-12

Prerequisite: Biology and Chemistry recommended

This course is intended for students with little or no prior background in historical geology, whose program of study requires one semester of a science course. This is an introductory course which explores the major concepts in historical geology. Topics covered will include origin of earth, plate tectonics, formation of minerals and rocks, structural geology, geologic time, fossils and the evolution of life, history of earth by geologic eras (Proterozoic, Paleozoic, Mesozoic, and Cenozoic). A combination of conceptual framework, practical applications and problem solving will be utilized in this integrated laboratory and lecture course. The hope is that by the end of the session the student has a good understanding of how the natural world around him/her evolved and how the geology of that natural world impacts everyday life.

Biology - 43100000

Grade Level: 10

Prerequisite: Earth Science 9

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. Students enrolled in this course will be required to take the Biology SOL Test. Passing the SOL test and the course earns a verified credit.

Biology Honors - 431000HN

Grade Level: 10

Prerequisite: Recommendation of Earth Science 9 teacher

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. Students enrolled in this course will be required to take the Biology SOL Test. Passing the SOL test and the course earns a verified credit.

Class Weights:

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

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

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

- Biology I & II DE
- Chemistry AP
- Earth Science II/Geology DE

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

Dual Enrolled Biology I - 431001DE

This course allows the option of Dual Enrollment through LFCC originating at LHS

Grade Level: 11-12

Prerequisite: Biology and Chemistry

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 LFCC 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. Students completing both semesters of dual enrolled biology may earn up to 8 credits at Lord Fairfax Community College.

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.

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.

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. Students enrolled in this course will be required to take the Chemistry SOL Test. Passing the SOL test and the course earns a verified credit.

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. Students need a strong math background. Laboratory exercises are incorporated to reinforce concepts and develop skills including: planning, observation, measurement, problem solving, safety, and use of laboratory equipment. Honors students will prepare lab reports for each lab which will include summary information, data analysis, calculations, and a thorough discussion of conclusions and error analysis. Students enrolled in this course will be required to take the Chemistry SOL Test. Passing the SOL test and the course earns a verified credit.

AP Chemistry - 447000AP

Grade Level: 11-12

Prerequisites: **Biology and Chemistry**, Recommendation from previous math and science teacher.

Advanced Placement Chemistry is an introduction to the principles and applications of chemistry. This class is designed to provide the student with a college level freshman chemistry course and lab. Advanced topics discussed include: measurements, stoichiometry, atoms and molecules, gases, solutions, molecular orbital theory, crystal lattices, equilibrium calculations, electrochemistry, kinetics, and introductions to biochemistry and organic chemistry. Students are expected to have strong math skills, to spend several hours of study time out of class and are expected to stay after school to finish labs. The AP Chemistry 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. Students that complete this course will be expected to take the Chemistry SOL Test (passing the SOL test and the course earns a verified credit) and Advanced Placement Chemistry test, and depending upon their scores, they may receive college credit.

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 is an excellent science elective for students interested in pursuing employment or post-secondary training in technology.

Physics Honors - 45200000

Grade Level: 12

Prerequisites: Chemistry and Pre-Calculus (co-requisites)

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.

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.

Foreign 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 - 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 Francophone 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.

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.

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.

Special Offerings

Additional language courses may be available to students online through the **Virtual Virginia** Web-based system. Check the listing of available courses on page 74 or speak to your school counselor.

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.

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. Students will work using the text Nexos for vocabulary acquisition and grammar study. Students will also use a variety of authentic materials that will enhance their ability to read, write, and speak Spanish. The course seeks to refine language skills that are useful in themselves and that can be applied to various activities and disciplines rather than to the mastery of specific subject matter. Continued training in the four language skills is integral to the course.

Physical Education



Health and Physical Education 9 - 73000000

Grade Level: 9

Prerequisite: Health and Physical Education 8

Physical Education is required of all 9th 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 10th grade students. It is a continuation of development of all 8th and 9th 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:** 10-12**Prerequisites:** Successful completion of Physical Education 8 and 9.

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 10th 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.

Intro to Sports Medicine - 76600000**Grade Level:** 11-12**Prerequisite:** None

This course will allow the students to learn about many taping, wrapping, and bracing skills needed in the field of Sports Medicine, as well as enhance their knowledge about the human anatomy. They will also be able to see and gain knowledge on some of the many possible injuries that could possibly happen when working in Sports Medicine. Optional extra-curricular activities include helping at sporting event as a student athletic trainer under professional supervision.

NOTES

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. *Course prerequisites and testing sequences specified for each pathway are effective with the 9th grade class of 2013-14 .*

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 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>Hospitality & Tourism</p>	<p>Hospitality & Tourism encompasses the management, marketing and operations of restaurants and other foodservices, lodging, attractions, recreation events and travel related services.</p>
 <p>Human Services</p>	<p>Preparing individuals for employment in career pathways that relate to families and human needs.</p>
 <p>Information 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>Law, Public Safety, Corrections & Security</p>	<p>Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.</p>
 <p>Manufacturing</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>Marketing, Sales & Service</p>	<p>Planning, managing, and performing marketing activities to reach organizational objectives.</p>
 <p>Science, Technology, Engineering & 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>Transportation, Distribution & 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					Certification
Animal Systems	Intro to Animal Systems	Small Animal Care	Equine Management	Vet Assist (Proposed)		Beef Quality Assurance
Power Systems	Small Engine Repair	Ag Power Systems	Auto Tech I	Auto Tech II		ASE NATEF
Plant Systems	Intro to Plant Systems	Horticulture	Floriculture			Pesticide Applicators
Natural Resource Systems	Intro to Plant Systems	Natural Resources	Forestry Management			Pesticide Applicators
Power Systems	Ag Fabrication I (Welding)	Ag Fabrication II (Proposed)				Welding



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

Pathway	Course Sequence					Certification
Construction	Technology Foundations	Technology Transfer				NCCT Acad. Core NCCT Elect. I CTECS
Maintenance & Operations	Electricity I	Electricity II				NCCT Acad. Core NCCT Elect. I CTECS
Design/Pre-Construction	Technical Drawing	Architectural Drawing				BrainBench AutoCAD



**Arts, A/V Technology
& Communications**

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

Pathway	Course Sequence					Certification
Printing Technology	Computer App. (Taught at PCMS)	IT Fundamentals				WISE
Printing Technology	Technical Drawing	Architectural Drawing				BrainBench Auto-CAD



**Business, Management
& Administration**

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					Certification
Admin. Support/ Business Info	IT Fundamentals	Computer Info. Systems DE				MOS
Business Information Mgmt	IT Fundamentals	Design & Web	Advanced Design & Web			WISE
Business Finance	Accounting I	Accounting II				WISE
General Management	Computer App. (Taught at PCMS)	Business Law				WISE



**Education &
Training**

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

Pathway	Course Sequence					Certification
Teaching/ Training	Intro to Early Childhood	VA Teachers for Tomorrow I	VA Teachers for Tomorrow II			Parapro
Teaching/ Training	Intro to Early Childhood	Early Childhood I				Parapro



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

Pathway	Course Sequence					Certification
Accounting	Accounting I	Accounting II				WISE
Business Finance	Computer App. (Taught at PCMS)	Business Law				WISE



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					Certification
Public Management	Computer App. (Taught at PCMS)	Business Law				WISE



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

Pathway	Course Sequence					Certification
Therapeutic Diagnostic	Intro to Health	EMT				EMT Basic Firefighter I
Therapeutic Diagnostic	Intro to Health	Nurse Aide I	Nurse Aide II			CNA
Therapeutic Diagnostic	Intro to Health	Practical Nursing I	Practical Nursing II	Practical Nursing III (Adults)		LPN
Therapeutic Diagnostic	Intro to Health	Medical Assistant I	Medical Assistant II			CCMA



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

Pathway	Course Sequence					Certification
Restaurant Food & Beverage	Nutrition & Wellness	Intro to Culinary				Serve Safe
Lodging/ Recreation/Travel	Nutrition & Wellness	Intro to Hospitality				TBA



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

Pathway	Course Sequence					Certification
Personal Care Services	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					Certification
Web & Digital Communications	IT Fundamentals	Design, Multimedia & Web Tech	Advanced Design			MOS
Information Support	IT Fundamentals	Computer Info. Systems DE				MOS
Programming	IT Fundamentals	Computer Sci./Programming				TBA



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					Certification
Legal Services	Computer App. (Taught at PCMS)	Business Law				CTECS



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 control, maintenance and manufacturing/process engineering.*

Pathway	Course Sequence					Certification
Manuf. Process/Production	Technology Foundations	Technology Transfer				



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

Pathway	Course Sequence					Certification
Marketing Management	Computer App. (Taught at PCMS)	Computer Info. Systems DE				CTECS



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					Certification
Engineering & Technology	Technical Drawing	Engineering Drawing				BrainBench AutoCAD
Science & Mathematics	Technology Foundations	Technology Transfer				TBA



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					Certification
Facility & Mobile Equipment Maintenance	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.

Economics and Personal Finance - 61200000

Grade Levels: 11-12

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.

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.

Dual Enrolled Computer Information Systems - 661200DE

This course allows the option of Dual Enrollment through LFCC originating at PCHS

Grade Levels: 10-12**Prerequisite:** Computer Applications (taught at PCMS) or IT Fundamentals

In Computer Information Systems, students apply problem-solving skills to real-life situations through word processing, spreadsheet, database, and multimedia presentation software, and through integrated software activities. Students work individually and in groups to explore computer concepts, operating systems, networks, and telecommunications, and emerging technologies.

Design, Multimedia & Web Technology - 663000DE**Grade Levels:** 10-12**Prerequisites:** Word Processing or Computer Information Systems

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

Advanced Design Multimedia & Web Technology - 66310000**Grade Levels:** 11-12**Prerequisite:** Design, Multimedia & Web Technology

Students develop advanced skills in creating interactive media, Web sites, and publications for print and electronic distribution. Students work with sophisticated hardware and software applying skills learned to real-world projects.

Entrepreneurship Education - 90930000**Grade Levels:** 10-12**Prerequisites:** None

This course introduces students to the exciting world of creating, owning, and launching their own business. Students will learn concepts and techniques for planning an innovative business and living the entrepreneurial lifestyle. Students may participate in internship or job shadowing experiences.

Dual Enrolled Virginia Teachers for Tomorrow I - 906200DE

This course allows the option of Dual Enrollment through Lord Fairfax Community College originating at PCHS

Grade Levels: 10-12

Prerequisite: Introduction to Business

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.

Virginia Teachers for Tomorrow II - 90720000

Grade Levels: 11-12

Prerequisite: VA Teachers for Tomorrow I

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

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.

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.

Dual Enrolled Agricultural Fabrication & Emerging Technologies -

801900DE

This course allows the option of Dual Enrollment through Lord Fairfax Community College originating at PCHS

Grade Levels: 10-12**Prerequisite:** None

Students will receive instruction providing career training in the areas of agricultural fabrication and emerging technologies. The course content will focus on hot and cold metal fabrication and will also include studies of emerging technologies utilized within the field of agriculture.

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:** Foundations of Agriculture, Food, and Natural Resources

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

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, silviculture, 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:** None

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 & Wellness focus on making choices that promote wellness and good health; analyzing relationships between psychological and social needs and food choices; choosing foods that promote wellness; obtaining and storing food for self and family; preparing and serving nutritious meals and snacks; selecting and using equipment for food preparation; and identifying strategies to promote optimal nutrition and wellness of society. Cooperative (on-the-job) education or other work-based learning opportunities under the supervision of the instructor are an option. Critical thinking, practical problem solving, and entrepreneurship opportunities within the area of nutrition and wellness are emphasized. Teachers highlight the basic skills of math, science, and communication when appropriate in content.

Introduction to Early Childhood Education & Services - 82340000

Grade Levels: 9-12

Prerequisite: None

The child care and education competencies focus on the principles of child growth and development of self-concepts and building self-esteem; learning experiences for children; principles of guiding children; healthy and safe environments; career development; and careers related to child care. Teachers highlight basic skills of math, science, and communication when appropriate in the content.

Introduction to Culinary Arts - 82500000

Grade Levels: 10-12

Prerequisite: Nutrition & Wellness recommended

Students focus on identifying and exploring the individual careers within the food service industry. Units of study include food science and technology, dietetics and nutrition services, diverse cuisines and service styles, current trends, food and beverage production and preparation, and food safety and sanitation. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job-training in an approved position with continuing supervision throughout the school year.

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

Prerequisite: Introduction to Early Childhood Education is recommended

Students prepare to be primary providers of home-, family-, or institution-based child care services by focusing their study on the planning, organizing, and conduction 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. Teachers highlight the basic skills of math, science, and communication when appropriate in content. This is a two-credit class.

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.

Architectural Drawing/Design/CAD - 843700DE

This course allows the option of Dual Enrollment through Lord Fairfax Community College originating at PCHS

Grade Levels: 11-12

Prerequisite: Technical Drawing and Design

Students explore architectural design foundations and increase understanding of working drawings, construction techniques, and codes regulating building design. They learn the design process and apply the elements and principles of design to architectural projects. Through producing models and illustrations of all aspects of a building, students create architectural design solutions using CADD (computer aided drafting and design).

Engineering Drawing and Design - 843600DE

This course allows the option of Dual Enrollment through Lord Fairfax Community College originating at PCHS

Grade Levels: 11-12

Prerequisites: Technical Drawing and Design, Geometry recommended

Students explore the engineering design process and use a graphic language for product design, technical illustration, assembly, patent, and structural drawings. They increase their understanding of drawing and the design process and techniques learned in the prerequisite course. Students use computers, calculators, and descriptive geometry and adhere to established standards to solve design problems.

Technology of Robotics Design - Electronics / Industrial Robotics Technology - 85470000

Grade Levels: 9-12

Prerequisite: Technology Transfer

Students engage in the study of computers and microprocessors and their applications to manufacturing, transportation, and communication systems. Topics include computer equipment and operating systems, robotics, programming, control systems, and social/cultural impact of these technologies. Problem-solving activities challenge students to design, program, and interface devices with computer systems. Learning activities include robotics, computer-aided design, computer-aided manufacturing and design, and control of electromechanical devices.

Dual Enrolled Computer Science/Programming - 664000DE

This course allows the option of Dual Enrollment through JMU originating at PCHS

Grade Levels: 10-12

Prerequisites: Successful completion of Algebra II

This course is designed to be a survey course provided to give students a broad understanding of the world of computer science. Students will be given the opportunity to think like a computer scientist without having to take a programming-intensive class. The course is aligned with the AP Computer Science course objectives and seeks to broaden students' interests in the computer field.

Local & Regional 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 there will be a study of the elements and principles of art, which may include projects in the following areas: drawing, painting, printmaking, sculpture, ceramics, graphic design, and textiles. The student will begin to develop an appreciation of art which will include local traditional art, past and pre-sent famous works of art, and art careers as related to their projects.

Art II/Intermediate - 91300000

Grade Levels: 10-12

Prerequisite: Art I

This course provides the students 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 such as pencil, charcoal, color pencils, pen and ink and more. The student will explore past and present artist that produce works of art through drawing.

Art III/Advanced Intermediate - 91400000

Grade Levels: 11-12

Prerequisite: Art II

This course is more advanced than the previous classes with the students executing more complex skills and techniques in various mediums. The projects will be more developed and involved and may include projects in cultural and symbolic art, hand-built or wheel-thrown pottery, and exploring more diverse methods in painting, sculpturing, and drawing. The student will begin to become more independent and creative in his or her work. The study of art history will be a major part of this course.

Art IV/Advanced - 91450000

Grade Level: 12

Prerequisites: Art III

This course is taught concurrently with other art classes as an independent study. It is for senior year only. For approval, a student needs to present a portfolio to the art teacher. This course is an elective that offers the serious art student a fourth year of visual arts opportunities to develop his or her particular skills. Art IV is for the student who plans to study art after high school and needs to develop a more professional portfolio for entrance in to college.

Graphic Arts Design I - 91530000

Grade Level: 11-12

Prerequisites: Art I, Approval of the art teacher

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, Adobe Illustrator, Adobe InDesign, Printshop, and others. 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

Music Foundations - 92140000—(Inactive)

Grade Levels: 9-12

This course is intended for anyone with an interest in music without regard to previous musical experience. The course covers listening skills, basic notation, theory and the historical background of music. Students in the class will learn to intelligently describe and write about music.

Advanced Band - 92340000

Grade Levels: 9-12

Prerequisite: Recommendation from band director

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 Chorus - 92890000

Grade Levels: 9-12

Prerequisite: Recommendation from the director

Advanced Choir is a choral performance ensemble that studies all genres of vocal music, style, and technique. Requirements include: Attendance at performances

Percussion - 9234P000

Grade Levels: 9-12

This class is open to anyone wanting to be a percussionist in the Concert Band. The class will focus on 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. In addition to the above mentioned skills, the percussionists will also learn percussion ensemble pieces and perform as an ensemble at different times during the school year.

Piano - 92550000—(Inactive)

Grade Levels: 9-12

This class will focus on the basic fundamentals of the piano keyboard including reading notes and chords and playing written sheet music and chord charts from lead sheets. A large part of this class will also include learning written music

Music Theory - 92260000 (Inactive)

Grade Levels: 11-12

Prerequisite: Recommendation from the director and one core academic teacher

This course enables highly motivated students to do college level work in the areas of reading and analyzing notated music and aural training. Particular emphasis will be placed upon developing listening skills, sight singing ability and knowledge of rhythm, melody, harmony, form, and other compositional devices. The successful student will be endowed with the skill necessary to function intelligently in any musical situation. The work of the course will emphasize preparation for the advanced placement music theory examination.

Guitar - 92450000 (Inactive)

Grade Levels: 9-12

(Available for LHS Music Department)

This class is open to beginning guitar players. The class will focus on the basics of guitar playing including reading written notation, chords, and tablature. The class will explore the different styles of guitars and the different playing styles associated with the guitar.

Local Electives

Education for Post-Secondary Success - 90780000

Grade Levels: 11-12

This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career-research, job-acquisition, workplace-communication, self-awareness, self-advocacy, customer-service, and life skills. Additionally, students will prepare for placement testing, work on college applications and scholarship applications.

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.

GIS/GPS Geospatial Research Seminar - 984000DE

This course allows the option of Dual Enrollment through JMU

Grade Level: 12

Prerequisite: Faculty Recommendation

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.

Leadership Development - 90970000 (Inactive)

Grade Levels: 10 -12

Prerequisite: Students must have completed a sequential program or get special permission from the principal.

Students will develop competences in personal and group leadership skills. Course content includes units in principles of leadership, parliamentary law, speaking in public, developing effective communication and human relations skills, developing positive public relations, using proper etiquette and group leadership. Principles of organizing and conducting group meetings and activities are also included in the instructional program. Continuing education leadership is emphasized, as well as leadership experiences in cooperation with school and community leaders.

NOTES

Page County Technical Center Course Descriptions



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Auto Service Technology

Auto Service Technology I (ASE) - 850600DE

This course allows the option of Dual Enrollment through Lord Fairfax Community College originating at PCTC

Grade Levels: 10-12

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 and encouraged to take the ASE certification tests for these areas.

Auto Service Technology II (ASE) - 850700DE

This course allows the option of Dual Enrollment through Lord Fairfax 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

Students completing this pathway will be eligible to take the Greenhouse Operators Certification which will meet the Career & Technical Certification requirement for graduation.

Cosmetology

Cosmetology I - 85270000

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 - 85280000

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 Lord Fairfax Community College originating at PCTC

Grade Levels: 10-11

Prerequisites: Technical Math or Algebra preferred and completion of 9th 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

Electricity II - 853400DE

This course allows the option of Dual Enrollment through Lord Fairfax Community College originating at PCTC

Grade Levels: 11-12

Prerequisites: Technical Math or Algebra preferred; completion of 10th 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

Emergency Medical Technician

Emergency Medical Technician - 83330000

This course allows the option of Dual Enrollment through Lord Fairfax Community College originating at PCTC upon attaining a passing score on the EMT Basic exam.

Grade Levels: 12

Prerequisite: Introduction to Health and Medical Sciences

This EMT basics class will prepare students for multiple certifications including EMT, First Aide, and CPR. This class brings an interesting combination of class work and hands-on experience both in a controlled setting while attending ride-alongs with one of the rescue squads in the county. This class will provide a background in emergency medicine as well as an opportunity to give back to the community.

Firefighting

Firefighting - 87050000

Grade Levels: 12

Prerequisite: Introduction to Health and Medical Sciences

Students are introduced to the equipment and procedures necessary to fight live fires, operate in simulated hazardous-materials incidents, and conduct search-and-rescue operations. Students react to multi-faceted situations (e.g., caused by simulated terrorism, accidents, and natural disasters) as part of an emergency-response team. Students become familiar with emerging technologies such as communications software (e.g., dispatch systems, GIS, mapping systems, incident reporting, and simulation programs), multimedia inputs, thermal imaging cameras, and hazardous gas detectors. Students acquire teamwork, critical-thinking, public-speaking, research, report-writing, and incident-management skills. This course challenges students academically, mentally, and physically.

Introduction to Health and Medical Sciences - 83020000

Grade Levels: 10-12

This course introduces the student to a variety of health care careers and develops basic skills required in all health and medical sciences. It is designed to help students understand the key elements of the U.S. health care system and to learn basic health care terminology, anatomy and physiology for each body system, pathologies, diagnostic and clinical procedures, therapeutic interventions, and the fundamentals of traumatic and medical emergency care. Throughout the course, instruction emphasizes safety, cleanliness, asepsis, professionalism, accountability and efficiency within the health care environment. Students also begin gaining job-seeking skills for entry into the health and medical sciences field. In addition, instruction may include the basics of medical laboratory procedures, pharmacology fundamentals, biotechnology concepts, and communication skills essential for providing quality patient care. This course is the prerequisite for all other health occupations classes including Health Assistant I (CNA), LPN, and EMT. This course will be taught in 1 semester at the Page County Technical Center.

Medical Assistant

Medical Assistant I - 83450000

Grade Level: 11-12

Prerequisite: Introduction to Health and Medical Sciences

Students develop basic skills and techniques to assist the physician and/or other medical professionals in patient examinations, basic emergency care, simple laboratory tests, and administrative duties and will gain foundation knowledge in basic anatomy and physiology, medical ethics, and legal responsibilities. Students also explore medical assisting career pathways. On-the-job clinical instruction and/or observation may occur in a health care facility and is coordinated by the Health and Medical Sciences teacher.

Medical Assistant II - 83460000

Grade Level: 12

Prerequisite: Medical Assistant I

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.

Nurse Aide (CNA)

Nurse Aide I - 83600000

Grade Level: 11-12

Prerequisite: Introduction to Health and Medical Sciences

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 or to prepare the student for Nurse Aide II so that all competencies for a certified nursing assistant are met.

Nurse Aide II - 83620000

Grade Level: 11-12

Prerequisite: Nurse Aide I

Nurse Aide II is an occupational preparation course, emphasizing advanced skill training in areas such as catheter care, range of motion, bowel and bladder training, care of the dying, selected procedures for maternal and infant care, and admission and discharge procedures. Students learn diseases and body systems as related to advanced clinical care of the acute medical-surgical patient, the chronically ill, and the elderly. On-the-job instruction in a licensed nursing home is part of the course. Upon completion of the nurse aide program, the student is eligible to take the nurse aide certification exam that leads to employment as a certified nurse aide in hospitals and nursing homes.

Practical Nursing (LPN)

Practical Nursing I Honors - 83578358

Grade Levels: 12 (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% (C) in all areas.

Practical Nursing II Honors - 83578358

Grade Levels: 12 (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% (C) 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 (Adults) - 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% (C) 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).

Pharmacy Technician I (Inactive) - 83050000**Grade Level:** 11-12**Prerequisite:** Introduction to Health and Medical Sciences

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

Pharmacy Technician II (Inactive) - 83060000**Grade Level:** 12**Prerequisite:** Pharmacy Technician I

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.

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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.

Dual Enrollment Course Equivalency Chart

The following high school courses have the corresponding community college equivalencies...

High School Course #	Course Name	LFCC Course #
115000DE or 116000DE	English 11 or English 12	ENG 111/ENG 112
116001DE	English 12 I	ENG 243
116002DE	English 12 II	ENG 244
299600DE	World Civilizations I	HIS 111
299700DE	World Civilizations II	HIS 112
2319APDE	US History AP/DE	HIS 121/HIS 122
319000DE	Probability & Statistics	MTH 240
316000DE	Pre-Calculus I	MTH 163
316200DE	Pre-Calculus II	MTH 164
317700AP	Calculus I AP/DE	MTH 173
317700DE	Calculus II AP/DE	MTH 174
431001DE	Biology I	BIO 101
431002DE	Biology II	BIO 102
424000DE	Earth Science II/Geology I	GOL 105
424001DE	Earth Science II/Geology II	GOL 106
661200DE	Computer Information Sys	ITE 115
906200DE	VA Teachers for Tomorrow	SDV 100
801600DE	Agricultural Fabrication	WEL 120
843600DE	Engineering/CAD	EGR 110
843700DE	Architectural Drawing	AGR 221
85330000	Electricity I	ELE 133
85340000	Electricity II	ELE 134
85060000	Automotive Technology I	AUT 253
85070000	Automotive Technology II	AUT 266, AUT 136
	EMT (upon passing EMT exam)	4 EMS credits
	CNA (upon passing CNA exam)	6 Health Sci. Credits

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

Industry Certifications

Page County Schools offers a wide range of industry certifications. Tests are given at the culmination of a prescribed sequence of courses in a specific Career and Technical Education cluster. Earning a certification in a chosen field allows a student to be more competitive in today's job market and better prepares them for entry into the workforce. Pathways and course sequences leading to these certifications can be found on pages 38-42 of this guide.

- BrainBench Auto-CAD
- ASE
- NATEF
- Greenhouse Operators
- Small Animal Care Examination
- NCCT Academic Core
- NCCT Electricity I
- CTECS
- W.I.S.E.
- ParaPro
- EMT Basic
- Firefighter I
- Certified Nursing Assistant
- Licensed Practical Nurse
- CCMA
- Serve Safe
- Cosmetology State Board
- MOS

Lord Fairfax Community College

Career Studies Certificate

Industrial Maintenance Technician Basic

LFCC offers many Career Studies Certificates to students wishing to graduate with workplace readiness skills. High school DE courses can be used to satisfy many required courses for these certificates even in the elective and trade skills areas.

Below is a sample of courses that can be used to fulfill the requirements for the Career Studies Certificate in Industrial Maintenance Technician Basic.

Students attempting to complete this certificate should meet with an LFCC advisor to ensure they are meeting all necessary and current requirements.

This sample program consists of the following courses*...

High School Dual Enrollment Course	High School Credit	LFCC Course	LFCC Credit
Agricultural Fabrication	1	WEL 120	3
	1	MEC 120	3
Computer Info Systems	1	ITE 115	3
Electricity I	3	ELE 133	3
Electricity II	3	ELE 134	3
Student Success Skills	.5	SDV 100	1
Total:	9	Total:	16

*Other courses offered through the LFCC course catalog may be substituted pending approval

Dual enrollment opportunities at the high school level will prepare students for many varied Career Studies Certificates. Visit the community college websites for more certificates and their required course work. Then use the dual enrollment chart on page 68 to see what courses you might take in high school to satisfy some of the certificate requirements. Again, all students are encouraged to meet with a LFCC prior to attempting to complete a LFCC degree or certificate.

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

A complete listing of dual enrollment courses is available on page 68.

Lord Fairfax Community College



The Governor's Scholar Program

In 2012, the Virginia General Assembly passed a law (HB 1184) that, "requires local school boards and community colleges to develop agreements allowing high school students to complete an associate's degree or a one-year Uniform Certificate of General Studies from a community college concurrent with a high school diploma." The law asks high schools to provide a possible sequence of courses leading to the completion of these programs.

Upon completion of this program, students are invited to the LFCC Student Awards Program where they are presented with a gold medallion and are named **Governor's Scholar Students**. In May, they are invited to attend the Lord Fairfax Community College Commencement Exercises and are recognized for their accomplishments.

Below is a listing of courses that could lead to the completion of the General Education Certificate. Successful students earn 9.5 high school credits and 33 college credits through LFCC. This represents a first-year college curriculum transferrable to Virginia 4-year institutions.

Students attempting to complete this certificate should meet with an LFCC advisor to ensure they are meeting all necessary and current requirements.

A sample program consists of the following courses*...

High School Dual Enrollment Course	High School Credit	LFCC Course	LFCC Credit
English 11 DE	1	English 111/112	6
English 12 DE I	1	ENG 243	3
World Civilizations II	1	HIS 112	3
AP US History I & II	2	HIS 121/122	6
Pre-Calc I & II DE	2	MTH 163/164	6
Geology I & II DE or Biology I & II DE	2	GOL 105/106 or BIO 101/102	8
College Success Skills	.5	SDV 100	1
Total:	9	Total:	33

*Other courses offered through the LFCC course catalog may be substituted pending approval

Visit the community college websites for more certificates and their required course work. Then use the dual enrollment chart on page 68 to see what courses you might take in high school to satisfy some of the certificate requirements. Again, all students are encouraged to meet with a LFCC prior to attempting to complete a LFCC degree or certificate.

A complete listing of dual enrollment courses is available on page 68.

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

Community College Associates/College Transfer Degree

College Transfer Associate of Arts and Sciences Degrees

Lord Fairfax and Blue Ridge Community Colleges both offers several college transfer degrees. These degrees are intended to prepare a student to transfer to a 4-year institution to complete a Bachelor's degree. Articulation agreements exist between community colleges and 4-year institutions guaranteeing admission to students who complete these transfer degrees according to specified standards. A listing of participating colleges and universities can be found on the community college websites.

Through Page County Schools, students are able to utilize dual enrollment offerings to complete over 2 semesters of these transfer degrees. In rare cases, a student can complete the Associates Degree in its entirety before their high school graduation. Advanced planning and coordination with community college advisors is necessary to ensure students meet all requirements for these degrees.

College Transfer Associate Degrees through **Blue Ridge Community College** include...

- College/University Transfer
 - Business Administration Specialization
 - Teacher Education Specialization

College Transfer Associate Degrees through **Lord Fairfax Community College** include...

- Business Administration Education
- General Studies
- Liberal Arts
 - Communication Specialization
 - Fine Arts Specialization
 - Philosophy and Religion Specialization
- Science

Refer to the dual enrollment course chart found on page 68 of this book for a listing of courses available through Page County Public Schools to meet many requirements for these degrees.

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

LFCC ADVISING WORKSHEET

Program: AA&S General Studies

Catalog Year: 2014-2015

Program purpose: Designed for students who plan to transfer to a four-year college or university as more specialized academic interests and aptitudes develop during the program of studies

LFCC Requirement			PCHS Possible Equivalent
Course	Title	Credits	Title
First Semester			
ENG 111	College Composition I	3	English 11 DE or English 12 DE
HIS 112	History Elective	3	World Civilizations II DE
MTH 163	Mathematics	3	Pre-Calculus I DE
SDV 100	College Success Skills	1	College & Career Success Skills DE
ITE 115	Information Literacy	3	Computer Information Systems DE
HIS 121	Approved Transfer Elective	3	US History I DE
Second Semester			
ENG 112	College Composition II	3	English 11 DE or English 12 DE
HIS 122	Social Science Elective	3	US History II DE
MTH 164	Mathematics	3	Pre-Calc II DE
MTH 240	Approved Transfer Elective	3	Prob & Stats DE
	Approved Transfer Elective	3	
Third Semester			
ENG 243	Literature Elective	3	English 12 I DE
	Social Science Elective	3	
MTH 173	Approved Transfer Elective	3	Calculus I DE
PED/HLT	Physical Education or Health	1	
BIO/GOL	Science with Laboratory	4	Biology I DE or Geology I DE
Third Semester			
CST	Communication Elective	3	
BIO/GOL	Science with Laboratory	4	Biology II DE or Geology II DE
	Humanities Elective	3	English 12 II DE
MTH 174	Approved Transfer Elective	3	Calculus II DE
	Approved Transfer Elective	3	
	Total	61	

A complete listing of dual enrollment courses is available on page 68.

Special Notes:

- The above table is an example of a way to utilize high school dual enrollment opportunities to earn an Associate's Degree. ALWAYS meet with a LFCC advisor to help you plan your individual transfer Program of Study.
- Lists of approved electives can be found on in Lord Fairfax Community College's most current Course Catalog.
- Since this degree is for students intending to transfer, students should check with the institution to which they are transferring in order to determine the most appropriate core courses to take at LFCC. Different 4-year institutions and different degree programs will have more specific requirements for History, Math, Science and English courses.



Virtual Virginia

To sign up for a Virtual Virginia course, see your School Counselor.

SPECIAL NOTE: After starting the class, students who drop out of the course will be responsible for the cost.

Class Weights:

Dual-enrollment or Advanced Placement classes carry an extra 1 point. All Virtual Virginia courses listed as AP, carry this extra point weight.

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

Virginia Virtual Advanced Placement School provides a variety of college-level and foreign language courses using distance learning technologies. It was designed to provide educational opportunities to schools that may have too few students to justify hiring a full-time teacher, are unable to find qualified teachers, or for students with scheduling conflicts. Advanced placement courses follow the College Board curriculum. Foreign language courses are open to students from the seventh grade and higher.

Scheduling Flexibility

Virtual AP School courses are offered on a full-year or 4x4 block schedule. Individual classes can be scheduled at any time during the school day. For example, two students can take AP Biology during first period and a third student can be scheduled during fourth period.

Individual Attention

Individual attention is emphasized in all courses and instruction is personalized as much as possible. Online teachers are available to students via telephone, e-mail, and fax for consultations and one-on-one instruction.

Comprehensive

Distance learning instructors are responsible for the total education of students from the initial class introduction to the final exam. Local schools must have a facilitator on hand to proctor tests, ensure students are on task, and forward information to the instructor. Facilitators need not be certified teachers.

Course Catalog

3130	Algebra I	2445 AP	Government and Politics: U.S.
3134	Algebra, Functions, & Data Analysis	7300	Health & PE 9
3137	Algebra & Trigonometry	7301	Health & PE 10
5010	Arabic I-III	2212 AP	Human Geography
9151 AP	Art History	6640	Intro to Game Design & Devel.
4310	Biology	5310	Latin I-IV
4370 AP	Biology	5380 AP	Latin
3177 AP	Calculus AB	2803 AP	Macro Economics
3178 AP	Calculus BC	2802 AP	Micro Economics
4470	Chemistry (Advanced)	4510	Physics (Honors)
4410	Chemistry (Honors)	4570 AP	Physics 1
5810	Chinese I-IV	4574 AP	Physics 2
5860 AP	Chinese Language and Culture	3162	Pre-Calculus/Mathematical Analysis
1171	Creative Writing	2902 AP	Psychology
3185 AP	Computer Science A	2903	Psychology
4210	Earth Science	5510	Spanish (multiple levels)
4260	Earth Science II—Astronomy	5570 AP	Spanish Language
2804	Economics	3192 AP	Statistics
6120	Economics and Personal Finance	5700	Survey of World Lang & Culture
1130-60	English 9-12	2319 AP	U.S. History
1195 AP	English Literature & Composition	2440	VA & US Government
1196 AP	English Language & Composition	2360	VA & US History
4270 AP	Environmental Science	2380 AP	World History
2399 AP	European History	2215	World History
5110	French I& II	1165	World Mythology
5170 AP	French Language		
3143	Geometry		
2450 AP	Government & Politics: Comparative		

Check the Virtual Virginia website for specific details about course offerings and semesters.



Massanutten Regional Governor's School

Academic Program

The Regional Governor's School is a two year program for high achieving students. It is designed for gifted/highly motivated juniors and seniors who have demonstrated an advanced mastery of the traditional high school curriculum. The academics are rigorous and demand the integration of academic disciplines with technology in order to address community-based issues and problems.

Curriculum

Each year of attendance at the Massanutten Regional Governor's School, students will earn 4.5-5 high school credits. Upon completion of the two-year program, students will have earned up to 20 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.

Courses Offered for 2016-17

11th Grade

Earth Science DE (GOL 110)
Intro to Plant Sciences DE (GOL 142)
Probability and Statistics DE (MTH 241/242)
English Language DE/AP (111/112)

12th Grade

Environmental Earth DE (GOL 225)
Agricultural Policy DE (GOL 241)
Calculus I & II DE (MTH 173/174)
English Literature DE/AP (243/244)

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.

Notes

Appendix A

Course Listings

English

11300000	English 9
113000HN	English 9 Honors
11400000	English 10
114000HN	English 10 Honors
11500000	English 11
115000HN	English 11 Honors
11600000	English 12
160000DE	English I DE
160100DE	English II DE
11710000	Creative Writing
12150000	Photojour/Yearbook
11810000	Reading & Comp.
11820000	Reading & Comp II
11770000	Adv Composition
119500AP	English Lit. AP
130000DE	Public Speaking

History

22150000	World Hist to 1500
221500HN	WHist to 1500 Hon
22160000	World Hist fr.1500
221600HN	WHist fr. 1500 Hon
23150000	Humanities
23600000	VA & US History
236000DE	AP/DE US History
24400000	VA & US Govt.
244500AP	AP US Govt/Polit.
25000000	Sociology
290000DE	Psychology
29950000	American Civil War
299600DE	World Civiliz. I
299700DE	World Civiliz. II

Mathematics

31300000	Algebra I
31310000	Algebra I, Part 1
31320000	Algebra I, Part 2
31990000	Algebraic Concepts
31340000	Algebra Functions
31350000	Algebra II
313500HN	Algebra II Honors
31430000	Geometry
31440000	Geometry, Part 1
31450000	Geometry, Part 2
314300HN	Geometry Honors
32000000	Geometric Concepts
31503190	Trig/Prob & Stats
31540000	Discrete Math
316000DE	Pre-Calculus I
316200DE	Pre-Calculus II
317500AP	Calculus I
317600DE	Calculus II
319000DE	Prob & Statistics
319200AP	Statistics AP

Science

42100000	Earth Science
421000HN	Earth Science Hon
424000DE	E.Sci II/Geology I
424002DE	E.Sci II/Geology II
42600000	E.Sci. II/Astronomy
43100000	Biology
431000HN	Biology Honors
431001DE	Biology I DE
431002DE	Biology II DE
430000HN	Biology II/Anatomy
43400000	Biology II/Ecology
437000AP	AP Biology
44100000	Chemistry
441000HN	Chemistry Honors
447000AP	AP Chemistry
45100000	Integrated Physics
452000HN	Physics I

Language

51100000	French I
51200000	French II
51300000	French III
51400000	French IV
55100000	Spanish I
55200000	Spanish II
55300000	Spanish III
554000HN	Spanish IV
555000HN	Spanish V

Physical Education

73000000	Health & PE 9
74050000	Driver Ed & PE 10
70150000	Driver Ed Classrm.
76600000	Sports Medicine
76300000	Advanced Health
76400000	Advanced PE
76500000	Advanced PE II

Business

61156625	Intro to Business
61200000	Econ & Finance
61310000	Business Law
63200000	Accounting
63210000	Adv. Accounting
661200DE	CIS
663000DE	Design & Web
66310000	Adv Design & Web
664000DE	Computer Science
66700000	IT Fundamentals
90930000	Entrepreneur Ed.
906200DE	VA Teach for Tmro
90720000	VA Teach Tmro II

Agriculture Education

80070000	Intro to Plants Sys
80080000	Intro to Animal Sys
80180000	Ag Power Systems

801900DE

80340000	Ag Fabrication
80380000	Horticulture III
80400000	Floriculture
80420000	Nat. Resources
80800000	Forestry & Wildlife
80820000	Equine Mgmt
80830000	Sm. Engine Repair
	Small Animal Care

Family & Consumer Sciences

82290000	Nutr. & Wellness
82340000	Intro Early Child.
82500000	Intro Culinary Arts
82590000	Intro to Hospitality
82850000	Early Childhood I

Technology Education

84030000	Tech Foundations
84050000	Tech Transfer
84350000	Tech Drawing
843600DE	Engineering/CAD
843700DE	Architectural/CAD
84590000	Digital Visualiz.
85470000	Electronics/Robotic

Electives

90780000	Edu. for Post-Sec.
98260000	Teacher Assistant
984000DE	GIS/GPS Seminar

Visual Arts

91200000	Art I
91300000	Art II
91400000	Art III
91450000	Art IV
91530000	Graphic Arts

Music

92330000	Intermediate Band
92340000	Advanced Band
9234P000	Percussion
92890000	Advanced Chorus

PCTC Programs

850600DE	Auto Technology I
850700DE	Auto Technology II
85270000	Cosmetology I
85280000	Cosmetology II
853300DE	Electricity I
853400DE	Electricity II
83330000	Emerg. Med. Tech.
87050000	Firefighting
83020000	Into to Health
83450000	Medical Assist I
83460000	Medical Assist II
83600000	Nurse Aide I
83620000	Nurse Aide II
83578358	Prac. Nursing I/ II
83590000	Prac. Nursing II

Class Weights:

Honors, Dual-enrollment or Advanced Placement classes are weighted courses adding points to a student's final grade. Courses listed with H, AP, or DE in their course numbers, carry this extra weight.

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

Special Offerings:

Some courses unable to be staffed at the high school may be available to students online through the Virtual Virginia web-based system. Check the listing of available courses on page 74 or speak to your school counselor.

Appendix B

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 th Grade	9 th Grade	10 th Grade	11 th grade	12 th Grade
English 8	English 9	English 10	English 11	English 12
Am. Studies	World History I	World History II	U.S. History	Government
Phys. Science	Earth Science	Biology	Chemistry	Physics
Math 8	Algebra I	Geometry	Algebra II	Pre-Calculus
Health & PE 8	Health & PE 9	Health & PE 10	Elective	Elective
Computer App	Spanish I	Spanish II	Spanish III	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 8th grade which will give you more available choices at the high school level.

Appendix B

Sample Standard Diploma

8 th Grade	9 th Grade	10 th Grade	11 th grade	12 th Grade
English 8	English 9	English 10	English 11	English 12
Am. Studies	World History I	Elective	U.S. History	Government
Phys. Science	Earth Science	Biology	Ecology	Elective
Math 8	Algebra I	Geometry	Algebra II	Elective
Health & PE 8	Health & PE 9	Health & PE 10	Elective	Elective
Computer App	Elective	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 8th grade which will give you more available choices at the high school level.

The Standard Diploma requires 22 credits and 6 SOL tests. Included in this appendix is a personal course of studies worksheet to help you plan your own program for high school.

REMEMBER!

Students entering the 9th grade in 2013-14 will be required to complete at least **one online class** and have earned a **Career & Technical certification** prior to graduation.

Check the **Career & Technical Education** section of this book for CTE pathways to certifications.

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 th Grade	9 th Grade	10 th Grade	11 th grade	12 th Grade
	English 9	English 10	English 11	English 12

Personal Course of Studies Worksheet

8 th Grade	9 th Grade	10 th Grade	11 th grade	12 th 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 I & II, Calculus I & II
- Algebra I, Geometry, Algebra II, Statistics DE or AP Statistics
- Algebra I, Geometry, Algebra II, Discrete Mathematics
- Algebra I, Geometry, Algebra II, Trigonometry/Statistics

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

Home of the Bulldogs

Principal: **Clinton W. Runyan**
Assistant Principal: **Leigh Ann Pettit**
Athletic Director: **Don Ehlers**
School Counselor (A-J): **Sarah Lam**
School Counselor (L-Z): **Sherry Grogg-Mathews**

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



Page County Technical Center

Principal: **Roger Mello**
7979 US Hwy 340
Shenandoah, VA 22849
(540) 652-8544



Page County High School



Principal: **David D. Cale**
Assistant Principal: **Michael J. Baczynski**
Athletic Director: **Keith Cubbage**
School Counselor (gr. 11-12): **Meg Farmer**
School Counselor (gr. 9-10): **Jessica Markowitz**



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