WP Colonials

William Penn High School
Course Descriptions

This document contains course descriptions for each of our degree programs within our three colleges: STEM, Business, & Humanities

Updated: January 2016

Colonial School District
Every Student College and Career Ready

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williampennhighschool

Course Descriptions Table of Contents

Core classes (English, Mathematics, Science & Social Studies) are separated into College sections to further meet the needs of each student's degree program requirements. Core classes also have the following levels of service: Advanced Placement, Honors, College Prep, Special Education, ESL.

List of Degree Programs within each College

STEM COLLEGE ACADEMY	BUSINESS COLLEGE ACADEMY	HUMANITIES COLLEGE ACADEMY
Allied Health Services Agriculture Architecture Computer Science Construction Engineering Manufacturing Mathematics Science	Air Force Jr ROTC Business Administration Culinary Arts Financial Services Marketing	Behavioral Sciences Communications Education International Studies Legal Studies Visual & Performing Arts

List of Advanced Placement Courses

A.P. Calculus AB
A.P. Calculus BC
A.P. Statistics
A.P. Chemistry
A.P. Physics 1
A.P Physics 2
A.P. Biology
A.P. Computer Science
A.P. Psychology
A.P. Human Geography
A.P. U.S. History
A.P. World History
A.P. Art Studio
A.P. English Language
A.P. English Literature
A.P. Microeconomics
A.P. Macro economics
A.P. Environmental Science

ENGLISH LANGUAGE ARTS

English I	Primarily for 9th graders, English I is a complementary study of literature, writing, grammar and reading. The literature chosen comes from a variety of sources and our textbook, McDougal Littell Literature. Students will study various genres of literature. They will engage in close readings of short stories, plays, poems, and essays which are worthy of scrutiny and critical response, both written and oral. Students are expected to read with perception, share ideas during class discussions and formal presentations, and to write clearly and correctly.
English II	Primarily for 10th graders, English II is a complementary study of literature, reading, writing, and grammar. The literature chosen comes from a variety of sources and our textbook, McDougal Littell Literature; it will include various lengths of fiction including poetry and short stories. Students will read and analyze various non-fiction texts that connect to their course of study including documentary film. Students are expected to read closely and actively, share ideas during class discussions and formal presentations, and to write clearly and correctly. Additionally, students will compose finished pieces of writing of various lengths and genre.
English III	Primarily for 11th graders, English 3 is designed around the Common Core English standards. In order to master the standards students will be reading various texts, including short stories, novels, and non-fiction articles. Students will use critical thinking, collaboration, and writing to interact with the texts to ensure each student is college and career ready. Students will participate in various projects which will incorporate reading, writing, speaking, and listening standards.
English III Honors	English III Honors is designed around the Common Core English standards. In order to master the standards, students will be reading various texts, including short stories, plays, and non-fiction articles. Critical thinking, collaboration, and extensive writing will be used throughout the year to interact with the texts to ensure each student is college and career ready. Honors English III focuses on the advanced study of traditional and contemporary literature and non-fiction/informational reading materials. This course provides additional depth of study in the development of advanced writing, analysis, and literary criticism skills beyond that required within the English III curriculum. Students are expected to develop advanced speaking, listening, and vocabulary skills.
English III Humanities Dual Credit for English III and US History	Humanities is a fast paced course designed to enhance student understanding and appreciation for trends in American history told through the narrative experience, and is open for 11th grade students in good standing in all colleges. Humanities is a team-taught, two credit course, digital course that blends both ELA and US History using Schoology and Google Classroom. The course spans 100 years of American history, beginning after the Civil War and ending with the Civil Rights Movement. Students will read Narrative of the Life of Frederick Douglass, The Great Gatsby, Of Mice and Men, We Were Here, A Lesson Before Dying, and A Raisin in the Sun. Students will also participate in 3 rounds of choice novels for literature circles. Additionally, students will compose 12-15 finished pieces of writing with a focus on narrative, argumentative, response to literature, and expository writing.

Honors English IV (British Literature)	Designed to cover a close examination of British literature and various authors who have shared and/or opposing viewpoints. Works are studied in their historical, cultural and literary contexts, with emphasis on theme, tone, structure, diction, style, point of view, and methods of character development as outlined in the Common Core State Standards CCSS. Students produce short compositions and extended writings that demonstrate sophisticated analytical, creative and high-order thinking skills. Since this course was designed for students with post-secondary plans, the course materials will challenge students' ability to read, analyze, interpret, and evaluation information. Students will be expected to work effectively, both independently and collaboratively to complete group tasks/assignments using online platforms such as Schoology and Google Drive. Students will complete a year-long project that involves conducting research, writing a formal proposal, delivering a presentation and executing an action plan designed to answer the call to give back to the community.
CP English IV (British Literature)	Designed to help students develop 21st century skills through rigorous and meaningful application of Project Based Learning (PBL). Skills such as collaboration, communication, critical thinking and authentic products and presentations enable students to develop vital workplace skills and lifelong habits of learning necessary to succeed in higher education. Students will explore expressive, expository, argumentative and literary contexts with a focus on British Literature. The writing emphasis in English IV is on argumentation whereby students will express thoughtful reactions to a variety of texts, interpret and qualify texts in various historical and cultural contexts, and conduct inquiry based research. Students will complete the Senior Legacy Project, designed to answer the call to give back to the community through research, writing and delivery of a formal proposal to effect change and the execution of the proposed action plan.
CP English IV (Contemporary Literature)	Designed to help students create connections between texts, self, and society using contemporary literature and young adult literature. This class will use modern texts to make real world associations to culture and community. The aim of this course is to aid students in the transition from between being high school seniors to becoming productive, thoughtful citizens. Some themes include: diversity, acceptance, personal challenges, and overcoming obstacles. Students will: • apply reading strategies needed to break down, comprehend, analyze, and interpret texts. • compose well-structured essays and text responses. • access, retrieve, evaluate, and cite information and sources. • Students are expected to: • demonstrate ethical and compassionate understanding and conduct by working respectfully and effectively with people from diverse backgrounds. • communicate clearly, effectively, and respectfully both orally and in writing. • demonstrate effective problem solving and reasoning skills. • apply appropriate information literacy skills. • use appropriate technology. The overarching goal of this course to understand the self and others, apply knowledge to real world situations, and use information and empathy to make decisions that promote success and growth both within and outside the self (home, school, workplace, community, and beyond).

AP English Language	Throughout the school year, the students will write for a variety of purposes, producing expository, analytical, and argumentative compositions that introduce a complex central idea and develop it with appropriate evidence drawn from primary and/or secondary sources, cogent explanations, and clear transitions. While engaged in this process, the students will demonstrate an understanding and mastery of standard written English as well as stylistic maturity in their own writings. They will also demonstrate an understanding of the conventions of citing primary and secondary sources. The students will move effectively through the stages of the writing process, with careful attention to inquiry and research, drafting, editing, and review. Writing thoughtfully about their own process of composition will include revising a work to make it suitable for various audiences, analyzing images as text, as well as evaluating and incorporating reference documents into researched papers.
AP English Literature	The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works.
Beginning English	ELL Beginner English is a course designed to help newly entering and beginner English Language Learners. The class helps students develop basic interpersonal communication skills in the language domains, reading, writing, listening, and speaking. Students will primarily be taught essential grammar and vocabulary, along with phonics and other literacy skills.
ESL English (9 – 12)	English for ELLs is a study of literature, reading, writing, grammar, listening and speaking skills especially designed for intermediate to advanced English Language Learners. The literature chosen will be scaffolded to aid student comprehension, and includes various lengths of non-fiction, short stories, poetry and plays. As a class designed for Advanced English Language Learners, this course will help develop students' English language fluency in vocabulary, reading, grammar, writing, listening and speaking.
Analytical Writing (Research Capstone for Behavioral Sciences & Legal Studies	This is a research capstone course open to seniors in the Legal Studies and Behavioral Science majors. This course helps motivated students develop sophisticated research and analytical experience, written and oral communication skills and professional networking opportunities using a project-based learning format. Each marking, period students will develop and present a major research project based on the course topics: Psychology/Human Behavior, Constitutional Law, Sociology and Criminal Justice. This is a self-directed class where the teacher serves as a research advisor to the students' through the completion of their projects.

Creative Writing I	Creative Writing I is an opportunity for students to explore poetic devices, figurative language, specific poetic forms and types utilizing the writing process from brainstorming to publication. Students will follow the writing process in a variety of themes and formats. Students are expected to share their writing orally with the class.
Creative Writing II	This course continues to develop skills learned in Creative Writing I. Students will use writing techniques introduced in CWI and also explore new techniques in order to fine-tune their individual writing styles. This course focuses on writing more advanced forms of poetry as well as plays and short stories. This course relies on students doing much individual writing both in class and outside of class. Students will also share their work with classmates for evaluation.
Journalism	This course is an introductory study of journalistic media, writing, and career opportunities. Students will be taught basic skills in the following areas: reading, writing, ethics, photojournalism and interviewing. Students will have the opportunity to contribute to the school's online newspaper: The Penn Post
Journalism II	This course continues to develop skills explored in Journalism I. They will get to publish articles and photographs to the school's newspaper. Students will also have the opportunity to hold leadership positions as section editors for the school's online newspaper: The Penn Post.

MATHEMATICS

Integrated Math I	This first-year math course is primarily offered to students in our ninth grade. This course uses the *Core-Plus Mathematics—Course 1* textbook as a primary resource for instruction and assessment of state standards in mathematics to prepares students for college-level or career mathematics. Students will explore problems related to linear and exponential models, algebra, probability, and geometric reasoning are presented in a problem-solving, investigative context with extensive use of technology. The emphasis of the course is on mathematical modeling, reasoning, connections, constructing support, developing strategies for extended thinking and the effective communication of mathematical ideas.
Integrated Math II	Our second year of mathematics, primarily offered to students in our tenth grade, is **Integrated Math II**. This class is a continuation of our first-year integrated mathematics course, and provides an instructional bridge to our third year of math instruction in Integrated Math III. This course uses the *Core-Plus Mathematics—Course 2* textbook as a primary resource for instruction and assessment of state standards in mathematics. Students in Integrated Math II (IM II) will be reasoning abstractly and quantitatively as they persevere to find solutions for problems in statistics and probability, algebra, geometry, and discrete mathematics. Mathematical activities include developing students' strategic use of technology and mathematical tools with precision as they find relevant solutions to these complex problems and simulations. Students will be expected to construct and present viable arguments for their procedures and solutions, as well as analyzing and critiquing the mathematical work of their peers.
Integrated Math III	The Integrated Math III course is a non-traditional approach to teaching mathematics, in a manner in which students encounter mathematical ideas through discovery and acquire depth and understanding of concepts. It uses multi-dimensional assessment of student understanding and progress to guide instruction dynamically. The course covers the following topics: circles, reasoning and proof, linear programming, similarity and congruence, and circular, polynomial, rational, and inverse functions. The course uses student-centered explorations of mathematics so that they develop skills in modeling with mathematics, using appropriate technology and tools strategically, attending to precision and abstract reasoning, and quantification. Students will become proficient in constructing viable mathematical arguments, and looking for and expressing regularities in systems.
Honors Pre-Calculus	This course is designed as a Pre-AP Calculus course for high achieving students. The course covers the following topics: Functions and Graphs; Polynomial and Rational Functions; Exponential and Logarithmic Functions; Trigonometric Functions (Graphs, Identities, Proofs, Applications and Equations); Linear Systems and Matrices; Sequences, Series, and Probability; Analytical Geometry; and, Limits with an Introduction to Calculus.
Pre-Calculus	This course is designed to prepare juniors for Calculus, and seniors for college level mathematics. The course covers the following topics: Functions and Graphs; Polynomial and Rational Functions; Exponential and Logarithmic Functions; Trigonometric Functions (Graphs, Identities, Proofs, Applications and Equations); Sequences, Series, and Probability. As time permits, additional topics covered will include: Linear Systems and Matrices; Analytical Geometry, and Limits with an Introduction to Calculus.

Calculus	This is a course is designed to prepare students who will pursue majors in STEM or business fields in college. It focuses on limits, continuity, differentiation, and integration of single-variable functions. The course includes an in-depth study of important theorems and concepts in calculus, such as The Fundamental Theorem of Calculus, The Mean Value Theorem, and Riemann Sums. The course explores numerous applications in STEM and business fields.
AP Calculus AB	AP CALCULUS AB is a course in single-variable calculus which is equivalent to a one semester college course in Calculus I that includes the study of · Functions, parametric representation of functions; · Limits and continuity, The Intermediate Value Theorem, and The Extreme Value Theorem; · Differentiation techniques, including implicit differentiation, logarithmic differentiation, and the derivative of inverse functions; · Applications of the derivative, L'Hôpital's Rule, motion in two-dimensions; · Rolle's Theorem: its geometrical interpretation, and its applications; · The Mean Value Theorem: its geometrical interpretation, and its applications; · Techniques and applications of the definite integral and the Fundamental Theorem of Calculus; · Applications of definite integrals to volumes of solids of revolution, arc length and surfaces of revolution, work and energy; · Riemann sums and their applications in computational techniques; · Basic differential equations and their interpretations and applications, · Differentials and their applications; · Applications of calculus concepts and techniques in physics, chemistry, biology, computer science, and business.
Statistics	Statistics prepares students to be successful in college programs. It covers many of the topic that will be taught in a college level statistics class. In this course, students develop strategies for collecting, organizing, analyzing, and drawing conclusions from data. Students design, administer, and tabulate results from surveys and experiments. Probability and simulations aid students in constructing models for *chance* behavior. Sampling distributions provide the logical structure for confidence intervals and hypothesis tests. Students use a TI-83/84 graphing calculator or the TI Nspire, Excel, and Web-based java applets to investigate statistical concepts. To develop effective statistical communication skills, students are required to prepare frequent written and oral analyses of real data.
AP Statistics	AP Statistics is the high school equivalent of a one semester, introductory college statistics course. In this course, students develop strategies for collecting, organizing, analyzing, and drawing conclusions from data. Students design, administer, and tabulate results from surveys and experiments. Probability and simulations aid students in constructing models for chance behavior. Sampling distributions provide the logical structure for confidence intervals and hypothesis tests. Students use a TI-83/84 graphing calculator, Fathom statistical software, and Web-based java applets to investigate statistical concepts. To develop effective statistical communication skills, students are required to prepare frequent written and oral analyses of real data. In AP Statistics, students are expected to learn *Skills* To produce convincing oral and written statistical arguments, using appropriate terminology, in a variety of applied settings.

	When and how to use technology to aid them in solving statistical problems *Knowledge* Essential techniques for producing data (surveys, experiments, observational studies), analyzing data (graphical & numerical summaries), modeling data (probability, random variables, sampling distributions), and drawing conclusions from data (inference procedures – confidence intervals and significance tests) *Habits of mind* To become critical consumers of published statistical results by heightening their awareness of ways in which statistics can be improperly used to mislead, confuse, or distort the truth.
Finance Math	Finance Math starts with strong focus in Algebra, and then moves into real world financial situations, such as installment buying, compound and simple interest, income tax, credit cards, and business finances based in the real world as they relate to the common core standards.
Statistics and Probability	Probability and Statistics is centered around the mathematics of uncertainty and risk involving situations of expected and unexpected outcomes in the real world as they relate to the common core standards.

SOCIAL STUDIES

Civics	Students study the assumptions upon which governments are founded, and the organizations and strategies governments employ to achieve their goals. With specific respect to the United States, students learn the underlying principles of representative democracy, the constitutional separation of powers, and the rule of law. They need to comprehend that an essential premise of representative democracy is the willingness of citizens to place a high premium on their own personal responsibility for participation in social decision-making.
Geography	The context for this course is contemporary and practical, drawing from problems encountered and solutions reached in local communities. The course is divided into four main sections, each based on one of the overarching Geography Standards. In this course, students apply the knowledge, skills and perspectives of geography. They research problems, analyze data, and suggest solutions using a GIS-based approach.
AP Human Geography	The purpose of the AP Human Geography course is to introduce students to the study of the human behaviors, patterns, and processes that have shaped the Earth. Students employ spatial analysis to examine human activities and the relationship they have with the landscape. They also learn about the methods and tools geographers use in their science and practice. The aim of an AP course is to provide the student with a unique learning experience of world affairs, while also introducing students to the rigor and expectations of an AP and introductory-level college course.
Economics	Economics studies how people, acting as individuals or in groups, decide to use scarce resources to satisfy wants. This fundamental economic concept of scarcity is at the core of the discipline. There are never enough natural resources, human resources, or capital resources (man-made goods such as tools, equipment, machinery, factories) to produce everything society wants. Therefore, choices must be made on what to produce, how to produce, and for whom to produce. Choices must also be made at a personal level. An understanding of economic principles helps people to consider not only the short-term effects of a decision, but also its long-term effects and possible unintended consequences; to see the connections between personal self-interest and societal goals; to understand how individual and social choices are made in the context of an economy; and to analyze the impact of public policies and events upon such social goals as freedom, efficiency, and equity. Because of increasing interdependence and globalization, everyone in the United States needs to be aware of the issues in the global economy, their role in that system, and be able to respond to changes so that they can effectively maintain or raise their standard of living.
AP Economics	The purpose of this AP course in both microeconomics and macroeconomics is to give students a thorough understanding of the principles of economics that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination, and also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts.

US History	US History is a full year course that surveys the major political, economic and social events of US History from the 1850's until modern day. Throughout the course, students will gather and examine historical data, use chronological concepts to analyze the data and finally interpret this data to understand past and perhaps future historical situations, decisions and events. The first half of the course takes a chronological examination into the Civil War and Reconstruction, Westward Migration, the rise of industrialization and urbanization, overseas expansion, World War I and the Great Depression. The second half of the course addresses World War II and the emergence of a postwar society characterized by the Cold War, expansion of civil liberties, conflict in Korea and Vietnam, economic uncertainty, and increasing technological change.
AP US History	The AP U.S. History course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in U.S. History. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students should learn to assess historical materials—their relevance to a given interpretive problem, reliability, and importance—and to weigh the evidence and interpretations presented in historical scholarship. An AP U.S. History course should thus develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format.
Sociology	In the half-credit elective sociology course students will explore the concepts and theories necessary for a systematic understanding of our social worlds. Topics may include considering sociology as science, the nature of culture, the impacts of socialization, the core principles of Religion and the theories behind social deviance and discrimination.
Criminal Justice I	Criminal Justice I is the first semester dedicated to the in depth study of the Criminal Justice System. Students in this course will acquire a precursory knowledge of the criminal justice system that will enable them to make responsible, informed, and well-reasoned decisions about legal actions with social and economic implications related to law. The course provides a foundation in terminology, concepts and practical applications the Criminal Justice system. Students will take a more in depth perspective of key areas in the Bill of Rights and how those rights are addressed in the Criminal Justice process. Additional topics that will be addressed include juvenile justice, an introduction into the American Legal System, and how the criminal process is addressed at various levels.
Criminal Justice II	Criminal Justice II is the second semester dedicated to the in depth study of the Criminal Justice System. The purpose of Criminal Justice II is to investigate deeper the institutions, jurisdictions, professions and careers present in the Criminal Justice field. The students will develop and expand their base of knowledge on Criminal Justice through a series of exercises and activities using comparative and analytical research methods. This course will also integrate the main disciplines of Social Studies (geography, history, civics and economics) by applying the content topics in a relevant manner. The course will focus on topics such as different levels of law enforcement, the prison system and models of punishment, criminology and theories, the role of attorneys and the judiciary, prison models, and in post incarceration management (probation).

Forensics Course linked to Genetics	This course will provide an overview to the concepts of criminal forensics studies and evidence concepts as it applies to the Criminal Justice system. The *science concepts* will evaluate the applications of biology, chemistry and physics in the area of forensics in criminal justice. The *evidence concepts* portion of the course will evaluate the legal concepts and crime scene management issues pertaining to criminal justice. The course will focus on specific areas of physical anthropology, trace evidence and applied areas of psychology as it pertains to the Criminal Justice system.
Psychology	Psychology is a half-credit elective course offered to introduce students to basic psychological concepts. Psychology is the study of behavior and mind. In this course students will cover a variety of concepts designed to help prepare them for AP Psychology or Freshman Psychology in College. Students will learn the history, approaches to and future of Psychology. This course will cover a variety of introductory topics, aimed at helping students to understand why they are who they are.
AP Psychology	The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in the science and practice. This course covers more and goes into greater depth than the psychology elective course.
Military History	Military history is a semester course designed to introduce students to diverse military tactics employed from Classical Greece to the current war in Afghanistan. Students will analyze the evolution of weaponry and its impact on the battlefield. Within the larger framework of the course students will gain a greater understanding of the social economic and political issues that caused conflict. Students will study the evolution of warfare through the centuries to analyze the motivations, strategies, and innovations of civilizations to conduct war. This course will provide students in their junior year of the JR ROTC major with the background required to truly appreciate the history and future of the armed forces around the world. Upon completion of the course students will be prepared to continue their Military education in both the high school and college ROTC programs.
World History	World History is a full year course that addresses the end of the agricultural period through today (roughly 1750-the present). The course focuses on the history of major world civilizations and the growth of the modern global community. The emerging role of the United States as a global power also is addressed throughout the course. The course addresses a variety of topics such as the effects of Nationalism, Imperialism and Democracy on the history of the world; the political, economic, and cultural impact of conflict; and the rise of new independent states across the globe and the challenges faced in that process. The course ends with an overview of the world today and a look at the complex issues that societies address in the 21st century.

AP World History	The AP World History course provides a clear framework of six chronological periods viewed through the lens of related key concepts and course themes, accompanied by a set of skills that clearly define what it means to think historically. The course's organization around a limited number of key concepts instead of a perceived list of facts, events, and dates makes teaching each historical period more manageable. The three to four key concepts per period define what is most essential to know about each period based upon the most current historical research in world history. This approach enables students to spend less time on factual recall, more time on learning essential concepts, and helps them develop historical thinking skills necessary to explore the broad trends and global processes involved in their study of AP World History.
Applied Legal Studies	The Applied Legal Studies course will be a full credit course concentrating on key elements of the US Constitution as they apply in both the Criminal and Civil court systems. Applied Legal Studies is a survey course with specific targeted areas for in-depth research and discussion as students continue to pursue their interests in the broad topic of law. Students will discuss criminal law related landmark cases and the role Constitutional ideal plays in the appeals process of landmark cases. The course will focus on civil litigation with a concentration on 7th Amendments issues involving torts. Content focused on specific concentration in areas of law and the impact of major legal statutory changes. Also, unique court systems in the US (Tax Court and Military Court) and how those systems reflect US Constitutional propriety will be addressed.
World Religions	This course will introduce students to the beliefs and practices of the world's living religious traditions. Being a citizen in the 21st century requires that we learn about and respect the beliefs and practices of those religious traditions that have passed the test of time and continue to guide their followers. The course introduces students to major families of the world's religions and looks in depth at many representative ways of faith from both the Eastern & Western world.
World Cultures	In this introductory course in the College of Humanities, students develop an understanding of the world community by examining their connections to the past in order to prepare for the future as participating members of a global society. Students will use knowledge of social sciences and humanities to apply problem solving strategies for use in academic, civic, social and employment settings. We will examine specific societies in depth to look at how social, economic, political, and religious organizations work together in cultural systems.
World Views	The Contemporary World Views course is designed to allow students to explore the current issues surrounding cultural, economic, and political forces that shape modern-phenomena. This course will serve as a capstone to the International Studies major at William Penn High School. Students will study the impact of globalization, human resources, global conflicts, international organizations, and human rights. During the course, students will explore various topics that draw on the knowledge developed in earlier Social Studies courses.

SCIENCE

Science I	Students are exposed to science concepts that fall into three major units: Physics, Earth & Space, and Chemistry. Students engage in a hands-on approach through inquiry based learning and lab activities. Literacy strategies are incorporated to support cross-curricular learning. This freshman level course builds the foundation for upper- level science courses
Biology	Biology is the study of life. This course introduces students to the complexities life involves. Major units include the cell, genetics, and evolution addressing science standards 1, 6, and 7. Students will conduct inquiry based investigations using real world situations where they will apply biological principles to solve problems. Through cooperative learning, literacy strategies, data analysis, and use of technology, students will develop a skill set that will foster success in the STEM college. Those skills include quantitative data analysis using scientific tools and the ability to explain structure and function relationships within living systems.
AP Biology	AP Biology is a college level course that covers a wide variety of life science topics. Major units include cell biology, Genetics, Ecology and Evolution, and all curricula is governed by the College Board AP Biology standards and learning objectives. This course is taught through reading, lecture, lab experience, and problem solving, research, and project/model construction. Students have the opportunity to demonstrate course mastery by taking the AP Biology exam given by the College Board. Achieving a satisfactory or higher score on the AP Biology exam may enable students to bypass entry level Biology courses in some colleges thereby earning them college credit.
Science III	Science III is a semester science course intended for juniors and seniors. This conceptually based course covers very important physics concepts that relate to your everyday lives. Students will explore electricity and magnetism with many fun activities and hands on experiences. Students will review energy as it leads into the understanding of motion and Newton's Laws. The concept of universal gravitation and planetary motion will be explored as students move into a better understanding of our place in the Universe.
Physics	This course introduces the student to the major topics in mechanics including motion, Newton's Laws, Momentum, Gravity and Energy as well as selected topics in waves, sound, light and electromagnetism. Topics are explored at the conceptual level with the emphasis on developing an understanding of the essential concepts. Students are encouraged to look at their world from a physics perspective and to come to appreciate the many ways in which physics plays an essential role.
AP Physics	AP Physics 1 is a rigorous, algebra-based course on the Physics topics generally referred to as classical mechanics. Topics include vectors, Newton's Laws, kinematics, work, energy, momentum, rotational dynamics and electric circuits.
AP Physics II	AP Physics 2 is a rigorous, algebra-based course on the Physics topics generally covered in the second semester of college physics. Topics include fluids, thermodynamics, electricity, magnetism, induction, optics and atomic/nuclear physics.
AP Physics C (Mechanics)	This course covers the same topics as AP Physics 1, but uses the power of calculus to develop the ideas and to derive the equations. Students must have either taken calculus or take it concurrently with this course.

Paramedical Science	This Emergency Medical Science (EMS) course is an Allied Health Science elective. It is intended for Juniors and Seniors within the Allied Health Major, however, the class is open to anyone. Students will learn to help sustain life, reduce pain and minimize injury during medical and traumatic emergencies until more advanced medical help arrives. Students will earn American Red Cross Certifications in Adult & Pediatric CPR, AED and First Aid. This course teaches beneficial life skills as well as skills that will be necessary for anyone working within the health and medical professions.
Anatomy & Physiology	The goal of Anatomy and Physiology is to have students become familiar with the structure and function of the human body. The course begins with the basic essentials for all living things, and then proceeds into the organization of the human body. The course concludes with a study of systems of the body. The course will strengthen the students' knowledge base in chemistry and biology.
Chemistry	**Chemistry** is the study of matter and its properties, transformations, and interactions. Topics include the structure of the atom, electron clouds, periodic properties, chemical bonding, water & solutions, chemical reactions, stoichiometry, intro to reaction rates & equilibrium, gases, nuclear chemistry, and intro to thermochemistry. Interactive and lab-oriented, Chemistry meets or exceeds the state recommended curriculum. Chemistry is offered at the College Prep and Honors level.
AP Chemistry	**AP Chemistry** is an equivalent of a first-year college general chemistry. Subject matter includes the structure of matter, states of matter, solutions, periodicity, chemical bonding, chemical reactions, stoichiometry, kinetics, equilibriums, thermodynamics, & electrochemistry. Includes a strong laboratory component as specified by the College Board. Students are expected to take the AP examination in May. Successful completion of the AP exam earns six to eight credits at most colleges. Strong math skills, good study habits, and a vivid imagination are needed for AP Chemistry. **Recommended prerequisites:** A or B in Chemistry or Honors Chemistry, Integrated Math II or higher **Co-requisite:** Pre-calculus or higher
Environmental Science	Environmental Science is a semester science elective intended for juniors and seniors. This course will cover the study of ecosystems (organisms and their environment). Areas of emphasis include basic ecosystem ecology, biodiversity, energy & matter, population ecology, species interactions and human impacts on ecosystems. Students will work collaboratively with a partner or group most of the time. By the end of the course, students should have a solid understanding of how the natural world around them functions and the role of humans in the ecosystem.
AP Environmental Science	AP Environmental Science is a college-level course intended for juniors and seniors that is designed to integrate principles of biology and chemistry to study ecosystems (organisms and their environment). Areas of emphasis include ecosystem ecology, biodiversity, energy & matter, population ecology, and species interactions. Special emphasis is placed on human interaction with - and influence on - natural environments. This course is taught through reading, lecture, lab experience, and problem solving, research, and project/model construction. Students have the opportunity to demonstrate course mastery by taking the AP Environmental Science exam given by the College Board. Recommended pre-requisites: A or B in Biology, Integrated Math II or higher. Co-requisite: Chemistry

WORLD LANGUAGES

Spanish I	Spanish I- for **NON Native Speakers**: This course introduces students to the pronunciation, vocabulary, and basic grammatical structures needed to communicate basic needs in Spanish. The course develops elementary listening, speaking, reading, and writing skills, Students will be exposed to various cultural aspects of the Spanish speaking world through a variety of means such as simple readings, video clips, and PowerPoint presentations. Use of the target language is emphasized with a goal toward total immersion.
Spanish I Conversational	Spanish I Conversational- NON Native Speakers: This is a beginning course in Spanish which emphasizes oral communication in a variety of topics at a basic level. It covers only the grammar and structures absolutely necessary for speaking. The course is intended for students with no previous knowledge of the Spanish language and the intention of specifically fulfilling the state mandated two year graduation requirement.
Spanish II	Spanish II- for **NON Native Speakers**: This course reinforces the reading, writing, speaking, and listening skills introduced in Level I. Students will learn to express themselves beyond basic needs. Communication skills will be emphasized and there will be increased emphasis on grammatical correctness as the year progresses. A variety of learning activities will reinforce and expand the students' understanding of the cultural aspects of the language. Use of the target language is increased with a goal toward total immersion.
Spanish II Conversational	Spanish II Conversational: for NON Native Speakers This is a continuation from Spanish I Conversational course which emphasizes oral communication in a variety of topics at a the next appropriate level. It covers more of the grammar and structures absolutely necessary for speaking in the target language. The course is intended for students with no previous knowledge of the Spanish language and the intention of specifically fulfilling the state mandated two year graduation requirement.
Spanish III	Spanish III- for **NON Native Speakers**: **Intermediate to advanced study of fundamental grammar and vocabulary with a focus on culture and on communication in multiple contexts.** This course further refines the content and skills taught in Level II. More advanced vocabulary, grammar, and sentence structure is introduced. Communication skills will be refined and students will acquire the ability to use the target language in a variety of settings. Authentic materials are utilized to further students' comprehension of the target cultures. At this level, most instruction is done in the target language.

Spanish IV	Spanish IV- for **NON Native Speakers**: **Advanced study of grammar, vocabulary and cultural products and practices, with an emphasis on communication in multiple contexts.** This course reinforces and expands upon the advanced language and structures taught in Level III. Students will use the target language to express themselves in speaking and writing. A more advanced understanding of the target culture is achieved through use of more complex authentic material and literature. Instruction is done in the target language.
French I	French I- for **NON Native Speakers**: This course introduces students to the pronunciation, vocabulary, and basic grammatical structures needed to communicate basic needs in French. The course develops elementary listening, speaking, reading, and writing skills, Students will be exposed to various cultural aspects of the French speaking world through a variety of means such as simple readings, video clips, and PowerPoint presentations. Use of the target language is emphasized with a goal toward total immersion.
French II	French II- for **NON Native Speakers**: This course reinforces the reading, writing, speaking, and listening skills introduced in Level I. Students will learn to express themselves beyond basic needs. Communication skills will be emphasized and there will be increased emphasis on grammatical correctness as the year progresses. A variety of learning activities will reinforce and expand the students' understanding of the cultural aspects of the language. Use of the target language is increased with a goal toward total immersion.
French III	French III- for **NON Native Speakers**: **Intermediate to advanced study of fundamental grammar and vocabulary with a focus on culture and on communication in multiple contexts.** This course further refines the content and skills taught in Level II. More advanced vocabulary, grammar, and sentence structure is introduced. Communication skills will be refined and students will acquire the ability to use the target language in a variety of settings. Authentic materials are utilized to further students' comprehension of the target cultures. At this level, most instruction is done in the target language.
French IV	French IV- for **NON Native Speakers**: **Advanced study of grammar, vocabulary and cultural products and practices, with an emphasis on communication in multiple contexts.** This course reinforces and expands upon the advanced language and structures taught in Level III. Students will use the target language to express themselves in speaking and writing. A more advanced understanding of the target culture is achieved through use of more complex authentic material and literature. Instruction is done in the target language.

EDUCATION

Human Development	Humanities	The first level of the Early Childhood Pathway and Education degree program, students learn ways to promote human growth and development across the life span. They study the individual difference within the social and cultural context of the family, explore the concept of development in the four domains (physical, emotional, intellectual, and social), and learn ways in which to communicate with others within the family and the community.
Child Development	Humanities	The second level of the Early Childhood Pathway and Education degree program introduces the students to the importance of studying children while emphasizing the skills needed to be both an effective caregiver and early childhood educator. The course includes development of the child from conception through school-age developmental domains (emotional, social, intellectual, moral, & physical), child development theories, development of self-care habits, understanding moral decisions, and learning the individual needs of the child are addressed as well as the exceptional child and their needs.
Exploring Early Childhood	Humanities	The third level of the Early Childhood Pathway prepares the students to plan, design, and implement educational programs that focus on a safe and healthy learning environment conducive in meeting the individual needs of the child as well as handling children that are exceptional. In addition, they will learn to teach lessons in each developmental domain, and educational areas in an actual childcare/preschool setting. Partnerships will include working with the school district's Pre-K program.
Peers	Humanities	In the *Peers* program, students work with fellow students who have severe learning and physical disabilities. Students assist these children with school work, vocational activities, recreational, and leisure activities. Peers are expected to assist these students in the transition from one room to another.
Leach Peers	Humanities	Similar to the WPHS Peers program, students work with the district's most severe learning and physically disabled students. Students work with the school's staff to assist in educational activities.
Educational Studies	Humanities	Educational Studies is the first of four courses required in the Education Major. Students explore the relationship between education and society. Topics include the purpose and goals of education in society, events that shaped our educational system, and education as it compares across the nation and world. Using these topics as a backdrop, students will investigate contemporary issues for a safe and equal learning environment through media, texts and discourse.

Teaching as a Profession	Humanities	As the second of four courses in the Education Major, Teaching as a Profession is the companion course of Ed Studies. Students examine the teacher's role in education. Rather than considering education in an overall sense, topics are viewed through a teacher's lens. In particular, students learn what it means to teach and what effective teaching and teachers look like. Further, major issues in education such as curriculum reform and the challenges that teachers face in creating a safe and equal learning environment are investigated.
Foundations of Literacy	Humanities	The third course in the Education major, Foundations of Literacy explores literacy – reading, writing, listening, and speaking – in K-12 education. This course is designed to cultivate an understanding of cultures of literacy and literacy skills with a focus on special populations such as multilingual/multicultural, low socioeconomic status, and special needs. Students examine theories and practices that concern the development of reading and writing as well as language acquisition. Projects that connect literacy to school contexts across the curriculum and the impact of information technology are included.
Curriculum and Instruction	Humanities	Curriculum and Instruction, the fourth and final course in the Education major, analyzes teaching and learning in the context of classroom practice. Topics include types of learners and styles of learning; various types of learning environments; teaching methods and tools; instructional material and design; and student assessment practices. In addition, students are exposed to a variety of teaching resources that are available in schools and have opportunities to develop whole group and small group instructional strategies as well as plan and implement instruction. Field-based experiences and participation in selected teaching activities are some of the capstone activities that students take part in during this course.

AIR FORCE JR ROTC

ROTC Leadership I	A Journey Into Aviation History is an aviation history course focusing on the development of flight throughout the centuries. It starts with ancient civilizations, then progresses through time to modern day. The emphasis is on civilian and military contributions to aviation; the development, modernization, and transformation of the Air Force; and a brief astronomical and space exploration history. It will be paired with a "blended" Leadership education curriculum comprising heritage, communications, life beyond high school, and management; and, is an integral part of each year's instruction. Each year's activities are comprised of Academics and Leadership. Additionally, many after-school activities provide the proving ground for newly learned leadership skills. Both academic courses are teamed with a wellness program encouraging cadets to choose healthy lifestyle choices and incorporate regular exercise into their daily life.
ROTC Leadership II	Provides an introduction to the atmosphere and weather elements; the effects of flight on the human body; and basic aeronautics and navigation. The first unit, The Aerospace Environment, discusses the atmosphere, weather elements, weather forecasting, and aviation weather. The second unit, Human Requirements of flight, includes accumulated knowledge about physiology of flight, protective clothing and equipment in the upper atmosphere, and other limiting factors of flight. The third unit, Principles of Aircraft Flight, discusses the scientific principles of powered flight; the operating principles of reciprocating engines, jet engines, the rocket engine; and the operating principles of advance propulsion. The fourth unit, Principles of Navigation, provides basic principles of navigation elements, map elements, navigation instruments, and navigation aids. Leadership education introduces the cadets to Air Force Junior Reserve Officer Training Corps (AFJROTC) program. It provides information about military traditions, citizenship, the U.S. government, attitude, discipline, respect, and how to exercise self-control. Both academic courses are teamed with a wellness program encouraging cadets to choose healthy lifestyle choices and incorporate regular exercise into their daily life.
ROTC Leadership III	This is a customized course about the world's cultures. It introduces students to the world's cultures through the study of world affairs, regional studies, and cultural awareness. The course delves into history, geography, religions, languages, culture, political systems, economics, social issues, environmental concerns, and human rights. It looks at major events and significant figures that have shaped each region. It will be paired with a "blended" Leadership education curriculum comprising heritage, communications, life beyond high school, and management; and, is an integral part of each year's instruction. Each year's activities are comprised of Academics and Leadership. Additionally, many after-school activities provide the proving ground for newly learned leadership skills. Both academic courses are teamed with a wellness program encouraging cadets to choose healthy lifestyle choices and incorporate regular exercise into their daily life.

ROTC Leadership IV	This is a science course that includes the latest information available in space science and space exploration. The course begins with the study of the space environment from the earliest days of interest in astronomy and early ideas of the heavens, through the Renaissance, and on into modern astronomy. It provides an in-depth study of the Earth, Sun, stars, Moon, and solar system, including the terrestrial and the outer planets. It discusses issues critical to travel in the upper atmosphere such as orbits and trajectories unmanned satellites, and space probes. It will be paired with a "blended" Leadership education curriculum comprising heritage, communications, life beyond high school, and management; and, is an integral part of each year's instruction. Each year's activities are comprised of Academics and Leadership. Additionally, many after-school activities provide the proving ground for newly learned leadership skills. Both academic courses are teamed with a wellness program encouraging cadets to choose healthy lifestyle choices and incorporate regular exercise into their daily life.
Honors Flight Instruction	The material covered is an advanced, more in-depth study of the previous aerospace topics. This course is the foundation for students interested in receiving a private pilot's license. When the course is completed the students should be prepared to take and pass the Federal Aviation Administration (FAA) written examination. The *Private Pilot Manual* is the primary source for initial study and review. The text contains complete and concise explanations of the fundamental concepts and ideas that every private pilot needs to know. The subjects are organized in a logical manner to build upon previously introduced topics. It will be paired with a "blended" Leadership education curriculum comprising heritage, communications, life beyond high school, and management; and, is an integral part of each year's instruction. Each year's activities are comprised of Academics and Leadership. Additionally, many after-school activities provide the proving ground for newly learned leadership skills. Both academic courses are teamed with a wellness program encouraging cadets to choose healthy lifestyle choices and incorporate regular exercise into their daily life.

BUSINESS, FINANCE & MARKETING

Business Essentials	The entry level course to all Business, Finance, and Marketing classes, Business Essentials provides students with an introductory look at the world of business. It is designed to expose students to careers in Business Administration Management, Finance, and Information Technology. Through the use of computer-based projects, students receive hands-on experience in such topics as banking, accounting, human resources, administrative support and computer/technical support.
Accounting II	This course introduces accounting principles, theory, and procedures for proprietorships, partnerships, and corporations. The accounting cycle will be completed using double-entry accounting. Students explore the economic impact facing the financial success of a business; evaluate business practices used to make decisions that affect financial growth; and prepare journals, ledgers, worksheets and financial statements. Simulations packets will be incorporated in the course.
Accounting III	This advanced level accounting course expands the principles, theory, and procedures introduced in Accounting II. Advanced applications and decision-making based on financial reports are emphasized in this course. Accounting simulations packets are incorporated in the course. Use of computer technology provides students opportunities to apply accounting theory to computerized information systems in this course. Students acquire an understanding of payroll systems, inventory, specialized journals, subsidiary ledgers, income tax reporting, and budgeting.
Accounting IV	This course prepares students to become QuickBooks certified. It also introduces students to advanced accounting principles that will prepare them for postsecondary studies in business and accounting. Students learn about financial statements for various forms of business ownership and how those statements are interpreted in making business decisions. This course expands students' knowledge of sources of financing and further develops accounting methods for assets. In addition, students will have an opportunity to keep the financial records of a small business as part of William Penn High School's business services. Prerequisite: C or better in Accounting III.
Business & Corporate Management II	This course exposes students to the opportunities and challenges managers face in today's business organizations. Student knowledge is expanded on the concepts and principles of business as it relates to the functions of marketing, management, production, and finance. Emphasis is placed on business functions such as: laws governing businesses, management and financial responsibilities, global economies, operations, marketing, customer relations and human resources management. Students develop skills in effective management through teamwork, communication, information management, and creative thinking.

Business & Corporate Management III	This course focuses on solutions to the challenges managers face in today's business environment. Students use the decision-making process to solve management, finance, marketing, and human resources dilemmas. Business decisions will be based on: (a) a manager's ability to plan, organize, implement, and control; (b) accounting practices; (c) vendor and supplier relationships; (d) competition, pricing and promotion; and (e) hiring process, compensation plans, and the development of employment structures that promote job satisfaction and longevity. Students focus on employment opportunities in the management field. Students demonstrate proficiency by designing, creating and presenting a business plan to a panel of business leaders.
Marketing Communication II	Marketing II is a study of the theory, practices, and role of marketing in the global business environment. Emphasis is placed on the consumer, marketing concept, target market, and the marketing mix: product, price, promotion, and distribution. Presentation skills are explored from a selling point of view through projects and simulations.
Marketing Communications III	Marketing III provides students with a hands-on perspective of marketing principles, strategies, and practices involved in the promotion and sale of goods and services. Topics include the elements of economics, products and services, laws governing business in the United States, ethical behavior, consumer and staff relationships, channel distribution, advertising, and communications strategies. Students demonstrate proficiency by designing, creating and presenting a marketing plan to a panel of business leaders.
BPA	Business Professionals of America (BPA) membership is available to students pursuing careers in business management, office administration, information technology and other related career fields. To help teach practical applications of business, the students are eligible to compete in The Workplace Skills Assessment Program (WSAP). The students demonstrate their problem solving abilities by competing in events such as finance, management, economics, presentation skills, IT and computer applications. Local leadership meetings and conferences are designed to prepare students for college coursework as well as careers in the business field.
DECA	DECA membership is available to students with career interests in marketing, entrepreneurship, finance, hospitality and management in grades nine through twelve. DECA members have exclusive access to all of the college and career preparation opportunities DECA provides. These include four issues of DECA Direct magazine, participation in DECA's Competitive Events Program to demonstrate their knowledge and earn recognition, opportunities to attend conferences designed to prepare them for college and careers, access to $300,000 in scholarships and more.

VISUAL & PERFORMING ARTS

Visual Art - Design I	**Visual Arts - Art/Design 1** As a fundamental Art course, students will examine the language , materials, media, and processes involved in creating art. Through hands on applications, they will reexamine elements of art and principles of design to enhance skills and to develop and create personal style and individual pieces. By end of course, students will be able to analyze work and provide insight to their own understanding. They will explore the world of art and understand how and why art matters and impacts their future career choices. (This is a semester course)
Visual Studio Art II	This year-long studio course is the second level course for a Visual Art Major. The focus in this course is to continue to develop the whole artist in all areas: from drawing, painting, printmaking, and sculpture. Through sequential learning experiences, students will build foundational skills and developing working knowledge of appropriate skills and techniques. Emphasis is on observational and interpretation of visual environment, life drawing, and imaginative studies. Students will create strong Visual Journals as they develop ideas and thumbnails through research of Artists and History. Ultimately, students will learn to study and analyze how and why works are created. This is the beginning process of building a portfolio for college and career opportunities and for advance level courses. (Prerequisite: Art/Design 1)
Visual Studio Art III	The focus in this course is to continue to develop, strong artistic work ethic, which promotes skills needed to go on to AP Studio Art. Students continued growth of their research skills and importance of Visual Journaling/sketchbooks will be emphasized. Students will create work that demonstrates new technical skills and mediums and to become proficient in utilizing multiple mediums in their works . Students will learn to increase conceptual thinking by reflecting their personal interests and observations in their works. A significant part of this course is the development of Individual and group critique processes. Students are encouraged to develop their own artistic style for a portfolio. (Prerequisite - Art/Design I & Studio Art 2 or teacher portfolio evaluation for placement)
Visual Studio Art IV	**Visual Arts- Studio Art 4** This studio course is a required accompaniment to the AP Studio Art Course. This course meets the requirement for added time needed to meet the Standards and Assessments of the College Board AP Studio Art Course. (Prerequisite- All other Visual Art courses and AP Studio Art Instructor permission) AP Studio Art is for seniors seeking a Visual Arts Major and to achieve college credits. AP Studio Art courses enable students to refine their skills and create artistic works to be submitted to the College Board for evaluation. Given the nature of the AP evaluation, the courses emphasize Quality of work, a Concentration, with attention to and exploration of a particular visual interest or problem, and Breadth of experience in the formal, technical, and expressive aspects of the student's art. Course direction (2-D or Drawing emphasis) will be determined with consult between teacher and student. (Prerequisite: All Art/Design 1 and Studio Art courses) There is a fee for the AP Portfolio Exam Submission This course requires prior approval from AP Studio Art Instructor **Visual Arts - AP Studio Art - Two- Dimensional** AP Studio Art - Two- Dimensional Design courses are designed for students with an academic interest in a two-dimensional art portfolio. These courses focus on a variety of concepts and

	approaches in Drawing, Painting, and 2-D Design, enabling the students to demonstrate a range of abilities and versatility with media, technique, problem solving, and scope. Such conceptual variety will be demonstrated through either the use of one or the use of several media. Students refine their skills and create artistic works to submit via a portfolio to the College Board for evaluation. **Visual Arts - AP Studio Art - Drawing** AP Studio Art - Drawing Technique courses are designed for students with an academic interest in a Drawing Portfolio. These courses focus on a variety of concepts and approaches in Drawing, enabling students to demonstrate a depth of knowledge of the processes and a range of abilities and versatility with media, technique, problem solving, and scope. Such conceptual variety will be demonstrated through either the use of one or the use of several media. Students refine their skills and create artistic works to be submitted via a portfolio to the College Board for evaluation.
Chorus (female students only)	Participants in Chorus are mainly students who are new to the choir program. The curriculum consists of the study of different styles of music, some sung in different languages. Students will learn basic music theory and history to provide a better understanding of the music being performed. Sight singing exercises will be part of the skill enhancement and writing assignments will be mandatory. Students also have the opportunity to work on stage presence and professionalism in performance.
Voice Class (male students only)	Participants in Voice Class are male students in all grades who have a desire to sing and are new to the music program. The curriculum consists of the study of different styles of music, some sung in different languages. Students will learn music theory and history to provide a better understanding of the music being performed. Sight singing exercises will be part of the skill enhancement and writing assignments will be mandatory. Emphasis is on learning how to deal with the individual voice problems of males and professionalism and stage presence while performing.
Concert Choir	Participants in Concert Choir are mainly 10th, 11th, and 12th grade students who have either been in band or chorus previously. The curriculum consists of the study of different styles of music, some sung in different languages. We will continue with learning music theory and history to provide a better understanding of the music being performed. Sight singing exercises will be part of the skill enhancement and writing assignments will be mandatory. Professionalism and stage presence while performing is also highlighted in the class.
Concert Band	Participants in the Concert Band will develop techniques for playing brass, woodwind, and percussion instruments as a means to studying and performing a variety of concert band literature styles. Critical analysis and problem solving, collaboration, and musical skills and understandings are developed through rehearsal and performance experiences. Experience in instrumental music during middle school and/or successful completion of the percussion class is required to enroll.
Symphonic Band	Participants in the Symphonic Band will continue to develop techniques for playing brass, woodwind, and percussion instruments as a means to studying and performing a variety of concert band literature styles. Critical analysis and problem solving, collaboration, and musical skills and understandings are developed through rehearsal and performance experiences. Successful completion of the concert band course, and an audition are required to enroll in the symphonic band class.

Percussion Ensemble	Participants in this *Percussion 101* course will develop techniques for playing percussion instruments (mallet keyboards, snare, timpani, and auxiliary), as well as music reading skills. Critical analysis and problem solving, collaboration, and musical skills and understandings are developed through individual and group experiences. There is no prior experience required to enroll in the percussion class, however the goal of student participation is to prepare them to move into the concert band or symphonic band. Penn Steel Participants in Penn Steel will develop techniques for playing steel drums, as well as music audio and reading skills. Critical analysis and problem solving, collaboration, and musical skills and understandings are developed through individual and group experiences. There is no prior experience required to enroll in the percussion class, however the goal of student participation is to prepare them for public performance.
Guitar	Participants in the Guitar class will develop techniques for playing the acoustic guitar, as well as skills required to read music. Critical analysis and problem solving, collaboration, and musical skills and understandings are developed through individual and group performance. There is no prior experience required to enroll in the guitar class. A guitar will be provided for use during class.
Music Production I	Music Production I is a project-based class that focuses on music composition skills through the use of *Garage Band* software in a Mac computer labs. Students will learn how to use the *Garage Band* sequencing software to create loop compositions and loops, samples, add effects to tracks, and record and edit live audio. Students will also learn elements of music through the study of melody, harmony, rhythm, and form as they learn to apply these elements to their compositions.
Music Production II	Music Production II is a project-based class that focuses on continuing to develop music composition skills through the use of *Garage Band* software in Mac computer labs. Students will continue to learn how to use the *Garage Band* sequencing software to create advanced loop compositions and loops, samples, add effects to tracks, and record and edit live audio. Students will also continue to learn elements of music through the study of melody, harmony, rhythm, and form as they continue to apply these elements to their compositions.
Introduction to Theatre	Introduction to Theatre introduces students to theatrical performance techniques and enhances students' understanding of life through the study and performance of dramatic works. Students develop their ability to express themselves as they are exposed to/experience improvisational acting, scripted acting, monologue performance, dramatic criticism, character development, and other valuable skills that can help them improve their self confidence and better present/express themselves both on stage and off (for example, at a job interview).
Intermediate Theatre	In Intermediate Theatre, students further develop their skills in acting and directing as they read, analyze, and perform scenes from a variety of classic and contemporary plays including: Henrik Ibsen's A Doll's House, Lorraine Hansberry's A Raisin in the Sun, and John Patrick Shanley's Doubt. Students' experiences in Intermediate Theatre will help them be better prepared to participate in mainstage theatre productions in school, the community, and/or professionally.

Advanced Theatre I	In Advanced Theatre, students develop experience and skill in a variety of aspects of theatrical production (acting, playwriting, and technical theatre). The course focuses on extending and refining technique, expanding students' exposure to different types of theatrical techniques and traditions, and to increasing their participation in public productions. These courses also provide a discussion of career and post-secondary placement opportunities.
Advanced Theatre II	In Advanced Theatre, students develop experience and skill in a variety of aspects of theatrical production (acting, playwriting, and technical theatre). The course focuses on extending and refining technique, expanding students' exposure to different types of theatrical techniques and traditions, and to increasing their participation in public productions. These courses also provide a discussion of career and post-secondary placement opportunities.

GRAPHIC DESIGN & DIGITAL MEDIA

Yearbook (Penn Publications)	Yearbook is for intermediate and advanced journalism students who have fulfilled the requirements of Journalism I. Students will contribute to the production and publication process of the annual school yearbook. Students are expected to illicit strong writing and time management skills, self-assessment and improvement and a high level of independence. Assignments are given with expected deadlines for completion that will consist of layouts, photography, and journalism for the yearbook. In addition, the students are responsible for advertising sales and administrative tasks associated with running a business.
Graphic Design I	Graphic Design is the process and art of combining text and images to communicate an idea effectively. It is a very exciting career to enter into. You'll often be working with cutting-edge technology, using your creativity, and having fun doing it. Graphic Design and Production I introduces the student to the world of graphic design and its global impact. Students will gain an understanding of how to apply basic design concepts to the presentation of informative or persuasive material. Each student will work with state of the art iMacs and Adobe software. Students will develop their own business identity and design a wide range of communication products for this business, and will leave this course with a firm understanding of design principles and software, ready to pursue advanced topics in Graphic Design and Production II and III.
Graphic Design II	Graphic Design & Production Classes at Penn Publications offer students a range of activities. In a state of the art Mac Computer Lab with Adobe Photoshop, Illustrator & InDesign CS6, various methods are used to create visual representations of ideas and messages. A graphic designer may use a combination of typography, visual arts and page layout techniques to produce a final product. A business partnership with Xerox provides a digital color press in the classroom which produces a high end commercial product. Students are first introduced to the environment of Penn Publications by developing a personal logo and business card. Each student is given the opportunity to develop a client base. Time is spent building a foundation with each client. For each project a student must identify and understand the audience, clarify the message, and familiarize themselves with the product. As part of the learning experience, clients meet with the students on multiple occasions to discuss design specifications, work on design edits, and to approve final designs. The high level of work flow that is completed requires the student designer to gain skill and expertise while being highly motivated and focused on the needs of their clients which involves completing jobs on time to meet deadlines.
Graphic Design III	Graphic Design & Production Classes at Penn Publications offer students a range of activities. In a state of the art Mac Computer Lab with Adobe Photoshop, Illustrator & InDesign CS6, various methods are used to create visual representations of ideas and messages. A graphic designer may use a combination of typography, visual arts and page layout techniques to produce a final product. A business partnership with Xerox provides a digital color press in the classroom which produces a high end commercial product. Students are first introduced to the environment of Penn Publications by developing a personal logo and business card. Each student is given the opportunity to develop a client base. Time is spent building a foundation with each client. For each project a student must identify and understand the audience, clarify the message, and familiarize themselves with the product. As part of the learning experience, clients meet with the students on multiple occasions to discuss design specifications, work on design edits, and to approve final designs. The high level of work flow

	that is completed requires the student designer to gain skill and expertise while being highly motivated and focused on the needs of their clients which involves completing jobs on time to meet deadlines.
Graphic Design IV - Ind.	Graphic Design & Production Classes at Penn Publications offer students a range of activities. In a state of the art Mac Computer Lab with Adobe Photoshop, Illustrator & InDesign CS6, various methods are used to create visual representations of ideas and messages. A graphic designer may use a combination of typography, visual arts and page layout techniques to produce a final product. A business partnership with Xerox provides a digital color press in the classroom which produces a high end commercial product. Students are first introduced to the environment of Penn Publications by developing a personal logo and business card. Each student is given the opportunity to develop a client base. Time is spent building a foundation with each client. For each project a student must identify and understand the audience, clarify the message, and familiarize themselves with the product. As part of the learning experience, clients meet with the students on multiple occasions to discuss design specifications, work on design edits, and to approve final designs. The high level of work flow that is completed requires the student designer to gain skill and expertise while being highly motivated and focused on the needs of their clients which involves completing jobs on time to meet deadlines.
Digital Media I	Digital Media I covers Web Design. Students will be working with the school, district, and community to provide web design services while getting practical experience. In this course we cover coding websites using HTML, CSS, and JavaScript, The web design process, design teams and the roles of each member in them, Designer/Client interaction, Using Adobe Dreamweaver to build websites, and Web programming using PHP/MySQL. As a final project, students will create a fictional company and design a website for it. **Prerequisite**: **Graphic Design I**
Digital Media II	Digital Media II covers Video Production. Students work in teams to record and create videos covering school, district, and community events. One of our on-going projects is a monthly broadcast of the William Penn News. This course covers video editing using Adobe Premiere, theory and technique of professional filmography, how to work in teams to plan, shoot, edit and publish video, professional green-screening techniques using Adobe Premiere, and special effects using Adobe After Effects
Digital Media III	Digital Media III covers Animation and Game Design. In this course we continue to support the community with video services. In addition, we cover the history and types of games, the game design process, design teams and the roles of each member in them, designer/client interaction, game development using Gamemaker, 3D Animation and resource development using Cinema 4D, and 3D Game development using the Unity Game engine Our Digital Media program prepares student to contribute directly to industry but also gives them an advantage when applying to programs such as Drexel and Wilmington Universities.

ALLIED HEALTH SERVICES

Medical Lab Assistant I	This introductory level course introduces students to the major body systems and the careers related to these systems. Students engage in hands-on learning experiences in the musculoskeletal system, hematology, infectious disease, immunology, urology, cardiology and forensic science. A strong emphasis on career exploration and college requirements is included. Laboratory safety and infection control methods are emphasized.
Medical Lab Assistant II	A continuation from Med Lab I, students start to shift from career exploration and general anatomy and biology to more specific medical topics such as patient care and interaction, legal and economic issues, and health information management. Students will delve into identifying different body tissues, continue with forensic science and learn the ins and outs of medical math.
Medical Lab Assistant III	In year three, students gain in depth knowledge about the different clinical laboratories such as microbiology, hematology, clinical chemistry and molecular biology and engage in topics such as urinalysis, immunology and serology. Students begin to prepare for their senior level certification courses.
Medical Lab Assistant IV	This capstone course is split into two semesters. During one semester, students will study phlebotomy in preparation for the National Health Career Association certification exam. During the opposite semester, students will study EKG in preparation for the National Health Career Association certification exam. During both semesters, students will participate in hands on technical assessments including EKG administration and interpretation and live venipuncture's. Students will be assessed on technical knowledge and skill, as well as professionalism. During MLA IV, students also have the opportunity to participate in a clinical experience at Christiana Care Hospital.
Exercise Science	Exercise Science is the study of acute responses and adaptations to a wide range of physical exercise conditions. This course introduces students to a variety of subject areas within the discipline of Exercise Science. Course topics include exercise prescription, health and wellness, sports psychology, sports nutrition, weight management, in addition to exploring potential careers opportunities in the field of Exercise Science. Students will investigate these topics through inquiry based labs, research and class projects, in addition to guest speakers.

PHYSICAL EDUCATION & HEALTH

Physical Education I	This physical education course is designed to assist with the matriculation process of becoming a "physically educated" person by providing experiences and opportunities for each student to acquire knowledge, skills, and confidence necessary to "value and enjoy a lifetime of participation in healthful physical activities". Course content and objectives are designed to provide realistic and achievable expectations for the student's performance in relevant and meaningful learning experiences in congruence with NASPE and Delaware Department of Education's Physical Education Standards.
Physical Education II	This course will provide the student with opportunities and experiences to enhance developmental levels for skills, knowledge and confidence to enjoy a life span of healthful physical activity. All learning experiences will be comprehensive of the NASPE and Delaware Department of Education Physical Education Standards with realistic and achievable expectations for the student's performance.
Physical Education - Weights	This course encompasses various types of weight training and conditioning techniques. The student will have opportunities to acquire knowledge and skills to be able to develop personal strength and/or training programs.
Health	This course will provide students with the opportunities and experiences to enhance development levels for skills, knowledge, and the confidence to enjoy a lifespan of wellness. All learning experiences will be comprehensive and adhere to the Delaware State Department of Education Standards. **CURRICULUM BASED ON THE NATIONAL HEALTH EDUCATION STANDARDS** The health topical outline as written includes all nine content areas of traditional health education: Alcohol and drug use prevention, injury prevention, nutrition, physical activity, family life & sexuality, mental health, personal & consumer health, and community & environmental health. These content areas also address the top six health risk behaviors indicated by the U.S. Centers for Disease Control and Prevention (CDC): ➡alcohol and other drug use ➡tobacco use ➡physical inactivity ➡inadequate nutrition ➡actions that result in intentional or unintentional injury ➡sexual activity that can cause unwanted pregnancies or infections
Adaptive Physical Education	This physical education course is designed to adapt activities to meet the needs of each student, and assist with the matriculation process of becoming a "physically educated" person by providing experiences and opportunities for each student to acquire knowledge, skills, and confidence necessary to "value and enjoy a lifetime of participation in healthful physical activities". Course content and objectives are designed to provide realistic and achievable expectations for the student's performance in relevant and meaningful learning experiences in congruence with NASPE and Delaware Department of Education's Physical Education Standards.

TECHNOLOGY & ENGINEERING

Engineering Design I Project Lead Their Way – Engineering Curriculum	Level I is designed to teach students how to think and solve problems in a technical society. Students will review the history of technology as it relates to tools, materials, and societal needs. Students will also be exposed to how some technological solutions in the past have led to some of the problems encountered in our world today. During this course students will gain knowledge of hand tools and manufacturing equipment as they solve challenging problems in a team building environment. Using industry standards such as drafting techniques and the problem solving design loop, students will demonstrate and communicate solutions to a variety of real world problems. Each project will be performed using the STEM approach and will satisfy all educational standards.
Engineering Design II	Level II will continue to develop the students' technology literacy by using organizational skills to conduct research, participating in TSA events, and solving real world problems. This course will expose students to material processing and the civil and mechanical engineering fields. Following a design loop, students will produce industry standard drawings and prototypes of their solutions and present them to local officials and industry leaders. Topics that students will explore typically include the renewable energy, aerodynamic, and manufacturing.
Engineering Design III	Level three is a more in-depth study of several engineering areas and manufacturing. Students will build a logical progression statement and utilize mathematics to produce data such as graphs and flow charts associated with various projects. In this course students will apply critical thinking skills and teamwork to worldly challenges. Facing these challenges, they will construct viable arguments which demonstrate their problem solving abilities. Knowledge of mathematics, manufacturing, and systems improvement will be applied in order to solve a wide variety of engineering problems.
I.T. Essentials	The IT Essentials: PC Hardware and Software curriculum provides an introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level information and communication technology (ICT) professionals. The curriculum covers the fundamentals of PC technology, networking, and security, and also provides an introduction to advanced concepts
Networking I	The Cisco 1 curriculum provides general networking theory, practical experience, and opportunities for career exploration and soft-skills development. The curriculum teaches networking based on application, covering networking concepts within the context of network environments students may encounter in their daily lives - from small office and home office (SOHO) networking to more complex enterprise and theoretical networking models later in the curriculum.
Networking II	The Cisco 2 curriculum provides an integrated and comprehensive coverage of networking topics, from fundamentals to advanced applications and services, while providing opportunities for hands-on practical experience and soft-skills development. The curriculum teaches networking based on technology, covering networking concepts using a top-down, theoretical, and integrated approach from network applications to the network protocols and services provided to those applications by the lower layers of the network.

Computer Science I	Exploring Computer Science is a yearlong course consisting of 6 units, approximately 6 weeks each. The course was developed around a framework of both computer science content and computational practice. Assignments and instruction are contextualized to be socially relevant and meaningful for diverse students. Units utilize a variety of tools/platforms, and culminate with final projects around the following topics: Human Computer Interaction, Problem Solving, Web Design, Programming, Computing and Data Analysis, and Robotics.
AP Computer Science Principals (offered FY18)	AP Computer Science Principles introduces students to the central ideas of computer science, instilling the ideas and practices of computational thinking and inviting students to understand how computing changes the world. the rigorous course promotes deep learning of computational content, develops computational thinking skills, and engages students in the creative aspects of the field.
A.P. Computer Science	The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems.
Construction I	Construction I is a course that introduces student in how people use modern construction systems and the management of resources to efficiently produce a product. In this course, students will learn and understand the basics to craft skills; such as: safety procedures, construction math, hand tools, power tools, blueprint reading, materials handling, employability skills, and communication skills. Students will engage in hands-on applications of each unit to practice the skills necessary to be competitive in modern industry requirements.
Construction II	Construction II is a course that specializes in how people use modern construction systems and the management of resources to efficiently produce a structure. Students will apply tools, materials, and energy in designing, producing, using, and assessing construction of structures. Students will be introduced and apply concepts of preparing a site, doing earthwork, setting footings and foundations, building the superstructure, enclosing the structure, installing building systems, finishing the structure, and finalizing site work. Students will engage in hands-on applications to practice and understand the necessary skills to be competitive in modern industry requirements.
Construction III	Construction III is a course that advances students in how people use modern construction systems and the management of resources to efficiently produce and manage a structure. Students will transfer and apply tools, materials, and energy into designing, producing, using, and assessing the construction of residential, commercial, and industrial buildings. Students will select management or skilled trades while transferring acquired knowledge into real-world work applications in accordance with a senior level course. Students will apply and transfer concepts of preparing a site, doing earthwork, setting footings and foundations, building the superstructure, enclosing the structure, installing building systems, finishing the structure and finalizing site work. Students will engage in hands-on applications to transfer and apply these necessary skills to be competitive in modern industry requirements.

Drafting/Design CAD I	Architecture and Design State-of-the-art technology and learning experiences are at the heart of the Architecture and Design major at William Penn High School. Project-based learning engages students in interactive learning and affords the opportunities to work on real-world, contemporary projects enjoyable to learners. All introductory projects use a variety of AutoCAD products to develop valuable skills in Science, Technology, Engineering, Art and Mathematics, and afford the opportunity for students to have free copies of AutoCAD® software at home. Concentrations in both architectural and interior design offer choices for portfolio-based specialized training and preparedness for post-secondary studies in the architecture and interior design fields.
Architectural Design CAD II	Architecture and Design State-of-the-art technology and learning experiences are at the heart of the Architecture and Design major at William Penn High School. Project-based learning engages students in interactive learning and affords the opportunities to work on real-world, contemporary projects enjoyable to learners. All challenging projects develop valuable skills in Science, Technology, Engineering, Art and Mathematics, and afford the opportunity for students to have free copies of AutoCAD® software at home. Model design and construction augment computer design. Concentrations in both architectural and interior design offer choices for portfolio-based specialized training and preparedness for post-secondary studies in the architecture and interior design fields.
Architectural Design CAD III	Architecture and Design State-of-the-art technology and learning experiences are at the heart of the Architecture and Design major at William Penn High School Team-based project-based learning engages students in interactive learning and affords the opportunities to work on real-world, contemporary projects enjoyable to learners. All projects develop valuable skills in Science, Technology, Engineering, Art and Mathematics, and afford the opportunity for students to have free copies of AutoCAD® software at home. Concentrations in both architectural and interior design offer choices for portfolio-based specialized training and preparedness for post-secondary studies in the architecture and interior design fields.
Architectural Design CAD IV	Architecture and Design State-of-the-art technology and learning experiences are at the heart of the Architecture and Design major at William Penn High School. Project-based learning engages students in interactive learning and affords the opportunities to work on real-world, contemporary projects enjoyable to learners. All projects develop valuable skills in Science, Technology, Engineering, Art and Mathematics, and afford the opportunity for students to have free copies of AutoCAD® software at home. Concentrations in both architectural and interior design offer choices for portfolio-based specialized training and preparedness for post-secondary studies in the architecture and interior design fields CD IV focuses on two independent, student selected comprehensive projects and presentations.
Principals of Manufacturing	Principles of Manufacturing provide students with the foundational skills needed to start a career in today's manufacturing industry. In this course, students will learn about proper tool use, production assembly, mechanical print reading, electrical wiring, welding, lock out-tag out, OSHA safety, and key manufacturing mathematical concepts. At the conclusion of this course, students will be prepared for entry into the workforce and/or continued training in a Manufacturing Pathway.

Manufacturing Practices	Provides students with real-world applications in Manufacturing Quality, Safety, and Practices. This course will focus on quality and measurement, emergency and fire safety, emergency and incident management, basic life support, material handling equipment, and computer spreadsheet applications.
Manufacturing Process and Production	Provides students with advanced knowledge of Manufacturing Processes and Production. This course will focus on tool and equipment safety, preventative equipment maintenance and repair, and 5-S and Lean Manufacturing processes.
Advanced Handling and Logistics	Provides students with advanced handling and logistics skills. This course will focus on the manufacturing global supply chain, manufacturing processes, packaging, material processing, inventory control, and transportation. Students will have the opportunity to practice, prepare for and complete the Manufacturing Skill Standards Council (MSSC) National Certification Exam(s).
Electrical Systems and Controls	Provides students with real-world applications in electrical systems and controls. This course will focus on applied mathematics for electricity, AC and DC electrical circuits, electrical motor controls, and concepts of Lean Manufacturing and 5-S.
Fluid Power	Provides students with real-world applications in fluid power. This course will focus on hydraulics, pneumatics, and electro-fluid power.
Electro Mechanical Systems	Provides students with real-world applications in electro-mechanical systems. This course will focus on mechanical drives and programmable logic controllers (PLCs). Students will have the opportunity to practice, prepare for and complete the Advanced Manufacturing Integrated Systems Technology (AMIST) Level I Certification Exam.

CULINARY ARTS

Food Preparation & Production I	Experiences in the Culinary I course focus on the development of skills needed to select, prepare, and serve food which meets culinary and nutritional needs of individuals and families. Emphasis in this course is given to the development of competencies related to nutrition, the food consumer, cooking methods, kitchen organization and equipment, safety and sanitation, menu planning, serving and eating food, food preparation, eating away from home, and jobs and career opportunities in the field of restaurant management and culinary arts. This class will also emphasize proper knife skills and Serve Safe Certification preparation.
Food Preparation & Production II	The fundamental concepts, skills, and techniques involved in basic cookery and baking are covered in this course. Special emphasis is given to the study of ingredients, cooking theories, and the preparation of stocks, broths, glazes, soups, thickening agents, and the grand and emulsion sauces. The basics of vegetable, starch, meat, fish and poultry cookery are covered. Emphasis is given to basic cooking techniques such as sautéing, roasting, poaching, braising, baking and steaming. This class provides an overview of proper identification, usage, cleaning, safety, handling, and care procedures for a variety of culinary tools including refrigeration equipment, fixed equipment, cooking equipment, hand tools, and appliances. Lectures and demonstrations teach organization skills in the kitchen, work coordination, and knife skills.
Culinary Professional	This course provides an in-depth study of the cuisine and the ethnic influences from regions throughout the world. Advanced hands-on techniques will be utilized in the production of menus, preparation of foods, mise en place, organization, and utilizing the fundamental techniques of cooking. Students will understand the importance of purchasing, cost control and restaurant management.
Culinary Professional II	This is an independent courses tailored to the student's goals in hospitality. Activities will include management of school's restaurant and catering service, all while perfecting skills to pass Pro-Start certifications and other appropriate Hotel, Restaurant & Management assessments. Students will take college and career readiness to the next level by offering them our Education to Careers program to all seniors. Accepted applicant will be offered off-campus opportunities through internships, co-ops and/or job shadowing.

AGRICULTURE

Introduction to Agriculture	This course is designed to allow students to explore Plant and Animal Science concepts on an introductory basis. Topics in Plant Science include basic floral design principles and plant structure, function and growth requirements. Students will learn the basics of animal husbandry as well as common animals kept as pets. Students will have the opportunity to work hands on with a variety of cute and cuddly critters!
Plant Science I	Plant Science I offers participants a base knowledge of Ornamental Horticulture concepts, greenhouse management skills and plant propagation techniques through direct instruction and student exploration. Special emphasis is placed on classification of plant materials, differentiation of life cycles and the utilization of technology to develop opinions and justify arguments on current topics in sustainable agriculture. Students are exposed to the greenhouse environment and participate in our National FFA student organization
Plant Science II	Plant Science II is an advanced course focusing on the application of Plant Science concepts through project-based learning. Students draw on prior Horticulture knowledge and skills related to greenhouse management and plant propagation techniques to explore, research and design projects on current topics in Agriculture. Students engage in projects on Penn Farm (farm to school program, community supported agriculture program, and work directly with Delaware Greenways) to make connections between agriculture and both the local and global communities.
Animal Science I	Students will develop basic skills necessary to pursue a career in the animal science industry as a producer, technician or professional. Coursework explores anatomy & physiology, animal behavior, food safety, livestock animals influence on the environment, sustainable agriculture, etc. Prerequisite: Intro to Ag
Animal Science II	Students continue to study animals and related careers,building knowledge of anatomy and physiology, care, behavior, breeding, body systems, genetics, training, and management of large & small animals. Coursework increases knowledge of reproduction and breeding, herd management and facilities, design biotechnology, genetics, evaluation techniques, and alternative animal agriculture such as aquaculture. Prerequisite: Animal Science II
Penn Farm	This Community based farm is a new age addition to Colonial School District's already rigorous project based curriculum and is made available to ALL students regardless of degree program. 300 year old Penn Farm is a learning environment ... The WPHS "Farm-to-School Garden" utilizes approximately four acres of the historic Penn Farm to create a student operated fruit and vegetable production unit which will provide produce for utilization in the William Penn Culinary Arts (Penn Bistro). This project will utilize sustainable farming practices with an emphasis on organic farming methods and the application of modern farming technologies on a small scale. Penn Farm is a student opportunity to see the connection among agriculture, technology, and food & nutrition. www.wppennfarm.net

NON DEGREE STUDENT PROGRAMS

Communities in Schools	This CIS model emphasizes five basic concepts that are essential to students succeeding in life. The core curriculum in this course is entitled "Learning for Life Pt.I" where students are introduced to character traits, public service, ethics and youth safety awareness. Students explore habit development, public speaking, effective presentation skills and service learning. This is an introductory level course.
Driver's Education	Driver Education includes at least 30 hours of classroom instruction, 10-12 lessons of simulation and at least nine lessons of behind-the-wheel instruction. The course is a blend of multi-media instruction in thinking skills, behavior, responsibility, and alcohol instruction as it relates to becoming a safe driver. The student MUST be promoted (per district guidelines) to the 10th grade to be eligible to enroll in the course. The student MUST also pass an additional five credits while they are enrolled in the course to become eligible for a level one learner's permit. Any second enrollment must be done through adult education or summer school at the student's expense. Unless otherwise approved by the building principal, Driver's Education is only scheduled for one semester in grade 10 only.
JDG 9	The JDG Grade 9 course includes: Study skills, personal grooming, goal planning, decision making, choosing a career path, maintaining a positive attitude, coping with change, values clarification, image assessment, writing an autobiography, group dynamics, conflict resolution, and life skills math.
JDG 10	The 10th grade JDG course includes: Problem solving, teamwork, goal setting, money management, workplace math, courtesy and respect, customer service, workplace diversity, career interests, entrepreneurship, leadership, understanding insurances, and writing job applications.
JDG 11	The 11th grade JDG course includes: Career vocabulary, resume writing, sources of jobs, telephone skills, listening skills, stress management, personal budgeting, occupational preferences, career manual, verbal presentations, critical thinking, constructive criticism, and professional ethics.
JDG 12	The 12th grade JDG course includes: Time management, letter of application, choosing career attire, employment interview, job survival, performance evaluations, business etiquette, employee rights, pay and benefits, financial planning, career travel, writing a letter of resignation, and career portfolio. Each senior will develop a Career Portfolio that includes a resume, references, a sample job application, and commendations.
Seminar (RTI)	Seminars are remedial classes designed to develop either students' reading comprehension/literacy skills or math skills. Students are recommended for Seminar classes when their academic performance and assessment scores indicate they are performing below their expected grade-level.

	Seminars are part of the Response To Intervention (RTI) model which mandates increased support to students who are not succeeding academically. Students earn a ½ credit for completion of Seminar II and receive a grade each marking period; seminars are a one semester (two marking periods) course.
Advisory	This is the high school's social education curriculum. It is customized by grade level and focuses on social and emotion needs, and college & career readiness.
Senior Legacy Project	All students, starting with the graduating class of 2016, is required to complete a senior project. Students will select a topic of study and driving question, connected to their degree program. This project requires research, oral and writing skills, use of technology, and applications towards a real life problem or situation. The senior project will include written components, presentation, portfolio and related products.
Internship	Many degree programs will offer opportunities for students to engage in local business internships, starting with the class of 2017. A workforce readiness counselor will manage all interactions between the student and work place.