COURSE DESCRIPTIONS

English

English 9

English 9 is designed to increase and intensify students' writing, speaking, reading comprehension, and critical thinking skills as a basis for further literary study at the secondary level. Skill practice and application will be completed in conjunction with challenging units composed of short stories, various nonfiction works, drama (Shakespeare's *The Tragedy of Romeo and Juliet*), and poetry. Vocabulary knowledge and application is also a key component of this course and will be studied throughout each unit. Students will demonstrate their proficiency individually as well as in group settings, where they will gain valuable interpersonal skills.

Accelerated English 9

Accelerated English 9 is a rigorous course designed for highly motivated students who want to progress at a rapid pace as they study literature and writing. Since there is minimal time spent on review, students must possess a clear understanding of content from previous years. Students are expected to be independent learners who are willing to undertake an in-depth study of writing, vocabulary, literature, drama (Shakespeare's *The Tragedy of Romeo and Juliet*), research, and grammar. Students are also required to read numerous independent novels throughout the year.

English 10

English 10 is presented through a study of short stories, language, media, public speaking, and writing. Students will delve deeper into the usage and meaning of literary devices and keystone aligned terms through interpretation, application, and analysis. This course is designed to help students better understand their interests and strengths, develop study skills and habits, practice time management, and gain confidence in post-high school planning. English 10 prepares students for the future through vocabulary, testing strategies, and modeled passage analysis of fiction and nonfiction works.

Accelerated English 10

Accelerated English 10 is a course intended for college bound and/or highly motivated students. Students will gain an understanding of classical rhetoric, literary criticism, and historical literary connection through novels, speeches, advertisements, and short stories. This course will prepare students to write, evaluate, and research in APA style, emphasizing the use of details, grammar, evidence, and reasoning to support ideas. Accelerated English 10 emphasizes vocabulary that will prepare students to sit for the SAT/ACT exams during their high school career. This course will further broaden the perspectives of students through literature and orative studies to develop culturally, technologically, and academically literate citizens. Interacting with classic, modern, and contemporary works, students will have the opportunity to develop their personal perspectives of the world in which they live and apply the understanding in their daily lives.

English 11

The central focuses of this course will be the study of American literature and the continued improvement of students' composition, vocabulary, research, and technology skills. Students will be expected to work independently and cooperatively to gain understanding of the literature as well as to produce assignments that relate to the literature. Students will use technology to research and to present quality pieces of work using the software provided on the Macbooks. In addition, students will be required to read novels on an independent basis.

Accelerated English 11

This rigorous course is designed for highly motivated juniors who will be expected to independently read, study, research, and take notes about the assigned literature.

The goal of this course is to prepare students to read and write effectively and insightfully. To reach this goal, students read works from novels, short stories, and poems from American authors. In addition to these readings, students will read books from the college bound reading list throughout the school year and will complete projects on their reading selections.

This course also involves intensive writing in narrative, descriptive, informative, persuasive, and descriptive forms. During the year, students will complete a research project where they will hone their skills of collecting, reviewing, and synthesizing information into a well-organized paper with parenthetical citations.

English 12

English 12 is designed to prepare students who are planning to join the workforce or pursue a two-year degree after high school graduation. Emphasis is placed on developing real-world language usage through grammar and vocabulary, enhancing critical thinking skills by reading and analyzing British literature, public speaking, and refining writing skills. Course work will include written responses, group projects, oral presentations, analyses, tests, and activities.

Accelerated English 12

Accelerated English 12 is designed to prepare students who are pursuing academic study at a four-year college or university. Students will be on developing real-world language usage through grammar and vocabulary, enhancing critical thinking skills by reading and analyzing British literature. The course will emphasize academic writing and analysis, critical thinking, essay writing, public speaking, vocabulary development, projects, and other advanced methods of achievement. The course will require some independent study.

ACM English and ACM Speech

The first semester of this course introduces students to writing at the college level and includes descriptive, narrative and expository writing. The brief essay is emphasized. Students are also instructed in the use of research, emphasizing documentation of sources and avoidance of plagiarism. The second semester focuses on intrapersonal and interpersonal communication, public speaking and rhetorical analysis. Students will acquire theory and develop skills in interviewing, small group discussion, and informative/persuasive/extemporaneous speaking.

Advanced Placement English: Literature and Composition

This college-level course is designed to prepare the exceptional student for the Advanced Placement Test. The course involves intensive writing as a response to the extensive reading and studying of fiction, poetry, and drama written in a variety of periods, disciplines, and contexts. Summer reading will be required by the instructor. The goal of the course is to enable students to write effectively and confidently in narrative, exploratory, expository, and argumentative forms. The students will have the option of taking the AP exam in May. Many colleges and universities will grant the students 3 college credits if they earn a 3 or higher on the AP exam. After completing the course, the students should be able to read complex texts with understanding, write prose of sufficient richness and complexity, and communicate effectively with mature readers.

Advanced Placement English: Language and Composition

This college-level course is designed to prepare the exceptional student for the Advanced Placement Test. The course involves intensive writing as a response to the extensive reading and studying of prose written in a variety of periods, disciplines, and contexts. Summer reading will be required by the instructor. The goal of the course is to enable students to write effectively and confidently in narrative, exploratory, expository, and argumentative forms. The students will have the option of taking the AP exam in May. Many colleges and universities will grant the students 3 college credits if they earn a 3 or higher on the AP exam. After completing the course, the students should be able to read complex texts with understanding, write prose of sufficient richness and complexity, and communicate effectively with mature readers.

SAT Prep (Semester Course)

SAT Prep is a semester elective course designed to help prepare students for the SAT test. In addition to reviewing the basic verbal and mathematical skills assessed on the SAT test, students have access to test-taking strategies specific to the exam, real student work samples with explanations. Students will spend nine weeks working on the verbal and writing component of the SAT and nine weeks working on the mathematics component of the SAT.

Mathematics

Algebra I Squared – 2 credits

Prerequisite Course: Math 2 or Pre-Algebra

This course covers the same content and standards as the Algebra I course. However, the students are given two periods of Algebra to learn the same content. The extra period gives the students time to complete homework during class, so they can access the help from their teachers and peers. The extra period also gives the teacher(s) more time to reteach using various methods of instruction and technology to assist in the learning process. The extra time allows more opportunity to differentiate instruction and better meet students' individual needs.

Algebra I

Prerequisite Course: Minimum of a C Average in PreAlgebra

This course will help students understand Algebra as a study of the structure of real and complex numbers. Students will learn to express unknown quantities as variables (letters), to write equations with these variables, and to solve equations. Linear equations and systems of linear equations and their graphs will be studied. Laws of exponents and exponential functions will be introduced. Polynomials and factoring will be covered. Each of the topics will include practical applications and word problems to provide needed practice and to demonstrate relevance of higher mathematics. Algebra I is the foundation for all other university prep mathematics courses taken by students in high school.

Algebra II

Algebra II is a continuation of the study of real and complex numbers presented in Algebra I. A thorough study of complex numbers and their simplification will be emphasized. Linear equations, systems of linear equations, inequalities and their graphs are continued areas of study. The concept of a function and a relation will be explored along with alternative methods for factoring algebraic expressions. Radicals and their simplification along with quadratic equations and their graphs will be important topics. Properties and applications of exponential and logarithmic functions will be studied, and if time allows an introduction of conic sections will be covered. Each of these topics will include practical applications and word problems to provide needed practice and to demonstrate the relevance of higher mathematics.

Algebra IIA

Prerequisite Course: Algebra I

This course is a continuation of the study of numbers, their representations, and applications. It will include data representation through equations, graphs, and charts. Major topics include data representation, various types of functions, systems of equations, probability, series, statistics and trigonometry.

Geometry

This course will help students understand the basic geometrical concepts as well as the structure of geometry through definitions, postulates, theorems, and proofs. The course will cover topics in measurement, reasoning and logic, as well as parallel and perpendicular lines. The names and types of polygons, triangle congruence and similarity will also be covered along with three-dimensional shapes, surface area, and volume. The study of the circle and its chords, arcs, tangents, secants, and angles formed will also be covered. Three types of proofs will be taught: flow chart, paragraph, and two-column proofs, with emphasis on the two-column proofs. An introduction to trigonometry may be covered if time permits. Algebra topics will be integrated throughout the lessons and practice problems. The sequence of the geometry topics and the structure taught is a valuable lesson students can use in everyday life.

Pre-Calculus

Prerequisite Course: Minimum of a C average in Algebra II

This course prepares a student for the study of calculus. It also includes other advanced and fundamental math topics. The primary focus will include number patterns, equations, various functions (polynomial, rational, exponential, logarithmic, trigonometric), trigonometry with applications, systems of equations, and limits. This course covers the concepts that should be mastered before students can be successful in calculus and other advanced mathematics.

Accelerated PreCalculus

Prerequisite Course: Minimum of a B average in Algebra II

This course prepares a student for the fast paced study of AP Calculus. The primary focus of the course includes number patterns, equations, various functions (polynomial, rational, exponential, logarithmic and trigonometric), applications of trigonometry, limits, derivatives and basic integration. This course covers the essential concepts necessary for success in AP Calculus. The class requires a commitment to hard work, study outside of school hours and the ability to explain reasoning in complete well-written sentences.

Calculus

Prerequisites: A grade of at least a B in all previous math courses and completion of classes through Pre-Calculus

This is a full year course designed to cover both differential and integral calculus. The topics will be studied graphically, numerically, analytically, and verbally. Graphing calculators will be issued to the student and will be used throughout the course. Students will be expected to learn the meaning and the application of derivatives and integrals in order to solve problems, interpret functions and graphs, and utilize graphing calculators. Numerous specific topics will be covered. This class a commitment to hard work.

Advanced Placement Calculus AB

Prerequisites: A grade of at least a B in all previous math courses and completion of classes through Pre-Calculus (Pre AP Calculus is preferred)

This is a full year course designed to cover both differential and integral calculus and prepare the student to take the AP Calculus AB exam. **It is expected that all who enroll in the class will attempt the exam.** The topics will be studied graphically, numerically, analytically, and verbally. Graphing calculators will be issued to the student and will be used throughout the course. Students will be expected to learn the meaning and the application of derivatives and integrals in order to solve problems, interpret functions and graphs, utilize graphing calculators, and apply knowledge to solve and answer AP exam questions in well-written sentences. Numerous specific topics will be covered. This class requires a serious commitment to hard work. It also requires a large amount of time and effort studying outside of school hours to adequately prepare for the AP exam.

Mathematics for Personal and Consumer Finance

This mathematics course is for senior students to have the opportunity to understand mathematics in the context of personal finance and consumer finance. With this understanding, students will work to improve their financial literacy and apply their knowledge and skills, from this course, to manage their personal financial resources effectively and responsibly. Emphasis will be placed on using real-world examples and application.

SAT Prep (Semester Course)

SAT Prep is a semester elective course designed to help prepare students for the SAT test. In addition to reviewing the basic verbal and mathematical skills assessed on the SAT test, students have access to test-taking strategies specific to the exam, real student work samples with explanations. Students will spend nine weeks working on the verbal and writing component of the SAT and nine weeks working on the mathematics component of the SAT.

Science

Environmental Science

Environmental science introduces students to major ecological concepts, and the environmental problems which affect the world. Students will learn about technological developments which have created problems, as well as the technology which is helping to solve them. Basic biological, chemical, and physical science concepts are included as components of environmental issue studies. The major units are aquatic ecosystems, renewable and nonrenewable energy, global environmental problems, current issues of interest, and ecology.

Biology

The focus of this applied science course is biology with an emphasis placed on preparing students to be successful on the Keystone Biology exam. Topics covered include basic biological principles, chemical basis for life, bioenergetics, homeostasis and transport, cell growth and reproduction, evolution, genetics, and ecology. This course is designed to provide students with an overview of the basics concepts of biology, and hopefully promote interest in taking future science courses.

Academic Biology

Through reading, discussion, and laboratory work, this course will help the student develop and achieve the basic learning necessary to understand concepts, facts, and processes involved in biological science. It provides a background in basic principles associated with living organisms and offers a conceptual approach in looking at how organisms, at all levels, interact within their environment.

Conceptual Physics I

This is a full-year introductory course in Physics with the use of algebra to increase the depth of understanding of the topics. Students will be exposed to concepts from the areas of mechanics, sound, and light, and electricity and magnetism. The course is enhanced through the use of demonstrations, projects, and labs when appropriate.

Chemistry

Prerequisite Course: Algebra

Chemistry provides a strong base of problem solving, critical thinking, and laboratory skills. Topics covered include measurement, properties of matter, the Periodic Table, bonding and interactions of matter. One should expect to use prior knowledge of algebra and physical science along with the ability to work independently and cooperatively.

Microbiology I (Semester Course)

Prerequisite Course: Biology

Microbiology emphasizes hands-on activities which offer students the opportunity to explore the impact of bacteria and other microbes in their daily lives. The first part emphasizes the positive role microbes play in ecology, food production and industry. The role of microbes in disease is emphasized in the second part of the course. Regular attendance is mandatory**.**

Microbiology II (Semester Course)

Prerequisite Course: Microbiology I

In this continuation of Microbiology I, students will be introduced to the field of Biotechnology at the microbial level. This lab-intensive course will explore ways biotechnology is being used in medicine, agriculture, and in the environment. Students will also be introduced to careers in biotechnology, genetic engineering, plant cloning and bioremediation. Regular attendance is mandatory.

Penn Highlands Accelerated College Education Anatomy/Physiology I (Semester Course)

Prerequisite Course: Biology

The structure and function of the human body is emphasized in this class. Students will study structures of the integumentary, skeletal, muscular and nervous systems. This course emphasizes medical terminology and students are expected to learn the location and function of the anatomical structures. Pathological conditions will also be stressed.

Penn Highlands Accelerated College Education Anatomy/Physiology II (Semester Course)

Prerequisite Course: Biology and Anatomy/Physiology I

This course is a continuation of the basic anatomy studied in Anatomy/Physiology I. It emphasizes concepts required for entry into more advanced courses and will be particularly suited to students entering the nursing or allied health

programs. The focus will be on the Cardiovascular, Digestive, and Excretory Systems and the disorders that are associated with them. In addition, vocabulary and medical terminology will be an important part of this course.

Physics

Prerequisite Course: Trigonometry or Pre-Calculus/Trigonometry

This is an introductory course based on algebra and trigonometry. It examines physical phenomenon from both a mechanical and energy-conservation aspect. Waves, sound, and optics will also be studied. Although the course follows a theoretical approach, many demonstrations, laboratory experiences, and projects are also included.

AP Biology

Prerequisites: A's & B's in Biology and Chemistry

The AP Biology course is designed to be taken by students after the successful completion of a first course in high school biology and one in high school chemistry. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and to help students gain an appreciation of science as a process. Lab work is a major component of the course and 2 class periods will be utilized to achieve this goal. Coverage is divided between: molecules and cells (25%), heredity and evolution (25%) and organisms and populations (50%).

AP Chemistry

Prerequisite Course: Chemistry

AP Chemistry is an introductory college-level chemistry course. Students cultivate their understanding of chemistry through inquiry-based lab investigations as they explore the four Big Ideas: scale, proportion, and quantity; structure and properties of substances; transformations; and energy.

AP Physics

Prerequisite Course: Trigonometry or Pre-Calculus/Trigonometry

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, conservation, and waves.

Social Studies

Modern US History/Civics

Modern US History/Civics is the second of a two-part American history program. The first course, Early United States History, is offered at the 8th grade level. This, the second course, is given in 9th grade and documents the time period from the end of Reconstruction to the present.

Modern World History

This course will focus on the accomplishments and problem-solving abilities of men and women from the European Renaissance and Reformation era to the present. It does this by presenting the planned historical development of human cultures which is organized in relation to both chronology and geography, with time and place being the underlying strands. The material will be presented in a historical context to illustrate both the cultural similarities and differences that mankind has experienced in history and will be developed in such a manner as to demonstrate the current relevance to students today.

AP United States History

This course is designed to provide students the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history. Demand upon students will be equivalent to full-year introductory

college courses. Students will learn to assess historical materials—their relevance to a given interpretive problem, their reliability, and their importance—and to weigh the evidence and interpretations presented in historical scholarship. This course will help students 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.

AP American Government and Politics

This course is designed to give students a critical and analytical perspective on government and politics in the United States. This course involves the study of general concepts used to interpret American politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs and ideas that make up the American reality. Although no single approach to this study is used, the general units of study include: Constitutional Underpinnings of American Government, Political Beliefs and Behaviors, Political Parties and Interest Groups, Institutions and Policy Processes of National Government, and Civil Rights and Civil Liberties. Admission to this course should depend on the students' interest in the subject as well as on such formal credentials as an outstanding record of academic performance.

Economics (Semester Course)

Economics is a one-half year course in which students learn the fundamental concepts of micro-, macro-, and international economics and apply them in intellectually engaging ways. Some of the topics covered are: Free Enterprise, Comparative Economic Systems, Supply and Demand, Financing a Business, Production and Productivity, and Money and Banking. Consultants from local businesses will visit with these classes. Students will also participate in a simulated online Stock Market Analysis. This will give students experience trading stock and watching the stock markets.

Principles of Democracy (Semester Course)

This course is designed to promote citizenship. Student rights and responsibilities as members of our society are examined. Topics will cover the three branches of government, political parties, elections, the Bill of Rights, and the U.S. Constitution. Special emphasis will be placed on the Presidency and Civil and Constitutional Rights. Some reference to state and local government will also be a part of this course.

Criminal Justice (Semester Course)

Provides an overview of the American criminal justice system. Examines the history, functions, structures, processes and interactions of the three principal components of American criminal justice: police, courts, and corrections.

United States Military History (Semester Course)

The objective of this course is to honor the military service of our citizens, and their contributions to the American way of life. Students will study the history of all the branches of the American military establishment. Students will also study various aspects of American wars and conflicts, military technology, and military life. Guest speakers, field trips, and relevant videos will be used to enhance this course.

Contemporary Issues

Current Events is a one-semester course structured to give the student an understanding of current issues in many areas of a political, social, and economic nature. The course emphasizes research since the topics chosen are very fluid in their nature, meaning that the topics and the amount of coverage on the topics will fluctuate on any given day, week, or month depending on topics current in the media. Students will use multiple methods of technology to accurately determine objective media sources.

Penn Highlands Accelerated College Education Psychology (Semester Course)

This course is a general introduction to the scientific study of the brain, behavior, mental processes of humans and animals, with emphasis on the goals of psychology: to describe, explain, predict and control behavior. Students examine the substance of psychology such as biopsychology, sensation and perception, learning, memory, cognitive processes, affective behaviors, and mental illnesses through an examination of the theories, principles and methods of research used in the field. Examples and applications enable the student to acquire the elements of critical thinking as adapted to the research environment.

Penn Highlands Accelerated College Education Sociology (Semester Course)

This is an introductory course that will familiarize students with the basic principles and theories associated with sociology. This course will prepare students to look critically at a variety of social issues. Critical thinking is emphasized as students are provided thought provoking opportunities to challenge them to examine their diverse world.

The objective of this course is for the student to be able to understand and apply basic theories and perspectives of an entry-level course. This course is designed to enable students to do so through classroom lectures, critical thinking exercises that require application, an entry-level research paper, utilization of study guides, videos, Internet assignments, outside reading and writing assignments.

1960's Through Multimedia (Semester Course)

This course will focus on the political culture of the 1960's, centering on the conflicts between the forces of order, consensus, and containment, and the social forces of protest, resistance, and liberation. In order to make sense of the 1960's, we will spend much of our time looking at how the participants in these movements understood themselves and their movements as forces of change in America by drawing on a number of sources including memoirs, oral histories, music, films and videos. Ultimately, by the end of the course students will be able to develop their own informed interpretation of this pivotal period in U.S. History.

The Holocaust

Prerequisite Course: Modern World History (not on-line)

Holocaust education requires a comprehensive study of not only times, dates, and places, but also the motivation and ideology that allowed these events. In this course, students will study the history of anti-Semitism; the rise of the Nazi party; and the Holocaust, from its beginnings through liberation and the aftermath of the tragedy. The study of the Holocaust is a multi-disciplinary one, integrating world history, geography, American history, and civics. Through this in-depth, semester-long study of the Holocaust, high school students will gain an understanding of the ramifications of prejudice and indifference, the potential for government-supported terror, and they will get glimpses of kindness and humanity in the worst of times. The disciplines involved in the course are literature, history, culture, and art. Students will engage with many fundamental questions about human nature and why such a thing could occur. Students will also research current, similar issues, and some important contributions made by Jewish people.

Physical Education

Walking

In this course students will be graded on how many laps they complete or the distance they walk. Proper walking shoes and students will not be changing clothes. The class will take place in the school hallways, on the track, Heritage Trail, football practice field, and areas around the tennis courts. Students will not have access to the cardio room, weight room, or play games after they complete their laps.

Fitness Training

Fitness Training provides students with both classroom knowledge and practical experience to implement all aspects of strength and fitness training. This class takes place in the fitness training room and covers various fitness training programs and techniques. The course will implement knowledge and training for each student based on their personal fitness level and goals.
This course encompasses two previous courses: Weight Training and Cardio Fitness.

Competitive and Lifetime Games

This class will spend the majority of time involved in various individual and team games. Students will learn the proper ways to complete a basketball shot, volleyball serve, tennis serve, Frisbee throw, bocce toss, baseball swing, overhand throw, punt, kick, and catch. Skills will be tested throughout the semester to track their progress. Testing will also include pacers for fitness. This class will take place in the main gym, track area, tennis courts and other outdoor game/playing areas and each class will involve a 5 minute minimum warm up**. Changing clothes into athletic apparel is required.** Students enrolled in this class **will not have access to the weight room, cardio room, or be allowed to walk for a grade.**

Classroom Driver's Education

This course is part of the enhanced Driver Education Program as developed by Indiana University of Pennsylvania, the Pennsylvania Department of Transportation and the Pennsylvania Department of Education. Emphasis is placed upon decision-making skills, visual skills, night-time driving and parent involvement. This course may be supplemented by a six-hour Behind-the-Wheel driving experience.

Behind the Wheel Driving

This course consists of 6 hours driving time to be performed after school, some weekends or during summer vacation To be eligible to take this course a student must meet the following criteria: Passed 30 hours of classroom education, Have either learners permit or driver's license, Have at least 25-30 hours of driving experience. To sign up students must present their permit or license to Mr. Baker, Mr. Pauley or Mr. Swaim Cost is $200.00.

Health / Human Development

The Health/Human Development course will be made available to all students in the 10th grade or those who have no met their required health credit. The goals of this course is to expose each student to realistic health issues that apply to both adolescence and adulthood and to help them to both understand and make healthy choices that positively impact their own growth and development. Boys and girls will be separated for each class. Mrs. Kensinger will instruct all girls; Mr. Swaim or Mr. Baker will instruct all boys. Course will be evaluated through unit tests and quizzes and several independent and group projects. Unit topics include the following:

- Nutrition
- Physical Activity
- Family History
- Male Reproductive System
- Female Reproductive System
- Pregnancy / Reproductive Health
- Sexually Transmitted Infections

Elective Courses

Foreign Languages

Spanish I

Spanish I offers students a communicative, activity-oriented approach to using and living the language while also learning about people, places and customs. From the very first day, students will have opportunities to hear and speak the Spanish language. Throughout the year, students will exercise listening, speaking, reading, and writing skills, working in a mix of vocabulary, grammar, and culture online through Blackboard. Conversational phrasings and basic vocabulary building gradually expand to include grammatical structures applied to usage situations. Using a variety of methods and learning activities, this course is interactive and requires student participation and involvement for true learning to take place. In addition, there will be a variety of supplementary materials. This course follows Pennsylvania State Standards, ACTFL National Standards, Professional Assessment Recommendations, and a variety of Techniques.

Spanish II

Prerequisite Course: Spanish I

Building upon the foundations of the first year (read description above), Spanish II students are provided with expanded opportunities to use the language in a variety of spoken and written situations. As vocabulary and knowledge of grammatical structures expand, so should the students' creativity, comfort, and confidence for self-expression within the Spanish language expand. Emphasis remains on active use of the language - something that can be used, enjoyed and applied to students' future contacts and career choices. Also, studies continue to include people, places, art, music, and literature; these and other aspects of culture are woven into student experiences within listening, speaking, reading, writing, vocabulary, and grammar, some of which will be online through Blackboard. Using a variety of methods and learning activities, this course is interactive and requires student participation and involvement for true learning to take place. This course follows Pennsylvania State Standards, ACTFL National Standards, Professional Assessment Recommendations, and a variety of Techniques.

Spanish III

Prerequisite Course: Spanish II

Spanish III offers opportunities for even more usage-oriented applications of the language in both academic and real-life situations. Listening, speaking, reading, writing, and conversational skills should improve, as well as knowledge and use of vocabulary and grammatical structures within communications. Also, students will have expanded opportunities for field experiences, visits and career-usage exploration. Using a variety of methods and online learning activities, this course is interactive and requires student participation and involvement for true learning to take place. This course follows Pennsylvania State Standards, ACTFL National Standards, Professional Assessment Recommendations, and a variety of Techniques.

Spanish IV

Prerequisite Course: Spanish III

This advanced course continues to offer expanded study, usage, and growth opportunities for students. Achievement levels for vocabulary, conversation, grammar, culture, and literature will blend knowledge with a variety of opportunities for active use and application in academic and real-life situations. Using a variety of methods and online learning activities, this course is interactive and requires student participation and involvement for true learning to take place. Listening, speaking, reading, writing, and conversational skills should improve, as well as knowledge and use of vocabulary and grammatical structures within communications. Also, students will have expanded opportunities for field experiences, visits, and career-usage explorations. This course follows Pennsylvania State Standards, ACTFL National Standards, Professional Assessment Recommendations, and a variety of Techniques.

Latin I

This course is intended to provide the opportunity of learning how to read Latin at an elementary level. Each day will involve some reading, writing, listening and speaking in Latin, as the student works to extend and deepen his or her knowledge of the use of Latin words, morphology, accidence, grammar and syntax in the communication of thoughts and ideas. Students will be expected to learn basic things about the history of the Roman monarchy, republic and empire as well as Greco-Roman religion, art, philosophy, poetry, oratory, music, theater, institutions, and daily life. Students will begin to have an understanding of our linguistic and cultural heritage from the Greco-Roman world of antiquity.

Latin II

Prerequisite Course: Latin I

This course is intended to provide the opportunity for the student to improve his or her ability to read Latin from an elementary to an intermediate level. Each day will involve some reading, writing, listening and speaking in Latin, as the student works to extend and deepen his or her knowledge of the use of Latin words, morphology, accidence, grammar and syntax in the communication of thoughts and ideas. Students will be expected to extend their knowledge of basic things about the history of the Roman monarchy, republic and empire as well as Greco-Roman religion, art, philosophy, poetry, oratory, music, theater, institutions, and daily life. Students will enlarge their understanding of our linguistic and cultural heritage from the Greco-Roman world of antiquity.

Latin III

Prerequisite Course: Latin II

This course is intended to provide the opportunity for the student to improve his or her ability to read Latin so that works can be read at a level of moderate difficulty, e.g., Caesar, Nepos, Eutropius, Catullus, Martial and the Vulgate. Each day will involve some reading, writing, listening and speaking in Latin, as the student works to extend and deepen his or her knowledge of the use of Latin words, morphology, accidence, grammar and syntax in the communication of thoughts and ideas. By the end of the course of study, students will be expected to be well informed about the history of the Roman monarchy, republic and empire as well as Greco-Roman religion, art, philosophy, poetry, oratory, music, theater, institutions, and daily life. Students will be expected to be well informed about our linquistic and cultural heritage from the Greco-Roman world of antiquity.

Latin IV

Prerequisite Course: Latin III

This course is intended to provide the opportunity for the student to improve his or her ability to read Latin so that works can be read an advanced level. Among the authors whose works are intended to be surveyed are Livy, Cicero, Vergil, Ovid, Horace, Pliny, Juvenal, Tacitus and Suetonius. Each day will involve some reading, writing, listening and speaking in Latin, as the student works to extend and deepen his or her knowledge of the use of Latin words, morphology, accidence, grammar and syntax in the communication of thoughts and ideas. By the end of the course of study, students will be expected to be very familiar with the history of the Roman monarchy, republic and empire as well as Greco-Roman religion, art, philosophy, poetry, oratory, music, theater, institutions, and daily life. Students will be expected to be very familiar about our linquistic and cultural heritage from the Greco-Roman world of antiquity.

Engineering/Technology

3D AutoCAD (Semester Course)

This course is designed to provide students with an advanced knowledge and understanding of concepts dealing with 3D drawings. The course will cover in-depth drafting and design concepts such as: isometric drawings, user coordinated system, creating solid models, editing, dynamic views, rendering and script files. Software used—AutoCAD.

Computer Aided Graphic Design I (Semester)

This course is designed to provide students with basic knowledge and understanding of concepts dealing with graphic design. The course will cover fundamentals of graphic design layout, design layout, design process, design elements and image manipulation. Students will complete projects dealing with Photoshop, digital multimedia production and digital photography.

Computer Aided Graphic Design II (Semester)

This course is designed to provide students with advanced knowledge and understanding of concepts dealing with graphic design. The course will cover in-depth the concepts dealing with the development of the concepts taught in Computer Aided Graphic Design I. Students will complete projects dealing with Photoshop, multimedia production and digital photography.

AutoCAD

This course is designed to provide students with a basic knowledge and understanding of concepts dealing with 2D drawings. The course will cover fundamental drafting and design concepts such as: basic drawing commands, drawing aids, editing commands, grips, creating text, basic dimensioning and plotting. Software used—AutoCAD.

Architectural CAD (Semester Course)

This course is designed to provide students with a basic knowledge and understanding of concepts dealing with architectural drawings. The course will cover fundamental drafting and design concepts that allow you to understand and work with building codes, create a complete floor plan and estimate building cost for an entire home. Software used—3D Home Architect.

Practical Engineering Design I

Prerequisite: 3D AutoCAD

This course will allow students to explore the various engineering field and the functions that engineers perform. The theory of problem solving will be taught. Hands-on experience will be provided as students analyze the strengths and weaknesses of theoretical problems in engineering. Engineering safety will also be taught. Students will work at their own pace using CAD software including Autodesk inventor, Autodesk, AutoCAD, and Computer Aided Graphics software.

Practical Engineering Design II

Prerequisite: Practical Engineering Design I

Students will begin engineering design work given a real world problem as they outline steps in the design process. Students will work in teams as they develop a concept for an item that will be theoretically mass produced. Students will work with engineering graphics software as they prepare hands-on-samples

Practical Engineering Design III

Prerequisite: Practical Engineering Design I, II

Students choosing this course will be participating in extended classroom simulated work. Students will work in teams and independently using the AutoDesk Design Academy Suite and computer aided graphics software. Practical engineering design concepts and processes will be stressed as students learn to develop prototypes of engineering design concepts.

Practical Engineering Design IV

Prerequisite: Practical Engineering Design I, II, III

Students will be finalizing their extended classroom simulated work situation project and will present their work to a committee. Theory of assembly process and quality control concepts will be taught and applied to project work. Students will work in teams and independently to finalize, report on, and demonstrate technical operation of the item manufactured.

Automation and Robotics I (Semester Course) (Grades 10 – 12)

Students taking this course will be exposed to industrial safety, use and care of hand tools and power tools. Students will be exposed to advanced material selection and handling for manufacturing. Manufacturing processes will be introduced. Technology-related mathematics, reading, writing, vocabulary, blueprint reading, basic programming using NXT-G and/or ROBO-C and science are integrated throughout the curriculum.

Automation and Robotics II (Semester Course) (Grades 10 – 12)

Students are instructed in and demonstrate skills/knowledge in basic electricity. Hands-on experience will be provided in circuit component identification, circuit design and wiring. Basic concepts of hydraulics and pneumatics will be taught in this course. Manufacturing concepts related to electrical and fluid power will be introduced. These concepts will be reinforced by providing hands-on activities using hydraulic and pneumatic components. Artificial intelligence and robot applications will be introduced. Students continue to receive instruction in safety and must demonstrate sound safety practices. Technology-related mathematics, reading, writing, vocabulary, blueprint reading and science are integrated throughout the curriculum.

Automation and Robotics III (Semester Course) (Grades 11 – 12)

Students will receive advanced instruction and hands-on training in automation used in manufacturing including industrial robots. Students will use prior knowledge gained to engineer, program, and troubleshoot a real world automated process. Students continue to receive instruction in safety requirements and demonstrate sound safety practices. Students will design a battle bot in small groups. Included in the design of the battle bot the students in their small groups will need to complete an Engineering Design Portfolio. The portfolio will be made up of various sections detailing the design and function of the battle bot. The second part of the course will be the collaboration of all students to design and build a competition battle bot. Included with building the battle bot is the working with local manufactures and engineers to complete the battle bot. Al students will be part of the battle bot team and will be required to complete an Engineering and Design Portfolio for the battle bot. All students will be required to participate in all assigned activities and fundraising needed to build the battle bot. All students in the class will then be invited along to the competition. The preliminary competition is held currently at Westmoreland County Community College in March and the Finals will be held at California University of Pennsylvania in April.

Automation and Robotics IV (Semester Course) (Grades 11 -12)

Students continue to refine skills introduced in A & R I, II, and III. Students are instructed in and demonstrate skills/knowledge in machine safety, precision measuring tools and the introduction to basic numerical control (CNC) and programmable logic controllers. Students will demonstrate knowledge of these automated processes by programming, installing, and troubleshooting basic automated processes. Advanced manufacturing processes examples will be given. Students continue to receive instruction in safety and will demonstrate sound safety practices. Technology-related mathematics, reading, writing, vocabulary, blueprint reading and science are integrated throughout the curriculum.

Business

Exploratory Business (Semester)

The purpose of this course is to give students an understanding of: the main tasks performed by employees in each of the career paths available within the business field (Entrepreneurchip, Management, Human Resources and Labor Relations, Marking, Product/Service Distribution, Information Management, Accounting, and Finance), the basic business principles that govern our business environment, ethical and social responsibility trends in business, and the global marketplace. Students will engage in various business-simulated competitions throughout the course, and study teen entrepreneur Mikaila Ulmer.

Computer Applications I (Semester)

Students will learn advanced word processing skills, use spreadsheet operations, use presentation software, and use the Internet for advanced research and learn desktop publishing skills. **Recommended for all students planning to further their education at the postsecondary level.**

Technology Services (Semester Course)

Technology Services provides students hands on training in web design, hardware repair and maintenance, and software maintenance. In addition students will have the ability to teach the skills they learn by providing training to students, staff, and community members. The Student Technology Team and their advisor must approve students taking this course.

Accounting I (Year)

Planning to pursue a postsecondary degree in business? Then this course is highly recommended. Students complete the accounting cycle for a service business organized as a sole proprietorship with emphasis on analyzing and recording transactions in general journals, keeping ledger accounts, and preparing financial statements. Students will gain exposure to software as a tool for performing accounting processes. **This course is highly recommended for those students who have an interest in owning and operating a business in the future.**

Accounting II (Year)

Prerequisite: Accounting I

Planning to pursue a postsecondary degree in business? Then this course is highly recommended. Students will complete the accounting cycle for a corporate merchandising business with emphasis on analyzing and recording transactions in special journals, keeping special ledgers, and preparing financial statements. Students will gain exposure to software as a tool for performing accounting processes. **This course is appropriate for students planning to pursue a business degree, and is highly recommended for those students who have an interest in owning and operating a business in the future.**

Accounting III (Year)

Prerequisites: Accounting I and II

This course is **designed for those students who wish to pursue a career in accounting**. With a continued focus on corporate accounting practices and the analysis of accounting reports, students learn detailed corporate accounting techniques and become familiar with skills needed to utilize corporate accounting documents as a management tool.

Computerized Marketing (Semester)

Students will gain an understanding of basic marketing principles and the role that marketing plays in the allocation of goods and services as they gain experience from a hands-on approach to online marketing. The class will operate the **Hot Shots Club and simulated photography business** as they take digital pictures, create advertising campaigns, establish retail pricing, update the website, promote sales and make decisions necessary to run a business.

Multimedia I (Semester)

Students will study graphic design techniques including text, layout design, digital photography, advertising, and the dynamics of color while using a variety of software packages and applications to produce print media. Students will learn to design and create basic web page layouts via Google sites and/or IWeb. Students may also participate in the creation and design of specialized projects for contests, district faculty, administration, and student organizations. These projects provide the opportunity to develop collaboration, creativity, and communication skills.

Multimedia II (Semester)

Prerequisite: Multimedia I

Students will implement digital design techniques while using a variety of software packages and applications to produce digital media. Students will create commercials, documentaries, and multi-page websites. Students may also participate in the creation and design of specialized projects for contests, district faculty, administration, and student organizations. These projects provide the opportunity to develop collaboration, creativity, and communication skills.

Multimedia III (Semester)

Prerequisites: Multimedia I and II

Students will study advanced Webpage skills that will be utilized to create websites with specialized features. such as: linked pages, animated graphics, and fill-in forms. Students will also become familiar with basic digital video techniques via IMovie, Clips, or other available software. Students may also work on Bedford Area School District specialized media projects.

Multimedia IV (Semester)

Prerequisites: Multimedia I, II, and III

Students will incorporate advanced digital video production techniques by designing, writing, and producing school-wide and independent video projects. Students will utilize their advanced Dreamweaver skills to add video to websites. Students will study advanced graphic design principles and will produce an electronic portfolio.

Business Law I (Semester)

Recommended for students planning a career in business or planning to own a business.
Through case analysis, research, discussion and debate, students will gain understanding of the law and the legal foundation as well as criminal and civil law and procedures. Students will gain an understanding of contracts and their proper form as well as the obligations of all parties engaged in contracts. Students will hear from a variety of local law enforcement and judicial personnel regarding the application of law to cases.

Business Law II (Semester)

Recommended for students planning a career in business or planning to own a business.
Through case analysis, research, discussion, and debate, students will gain an understanding of the law as it applies to sales, creditors, debtors, bankruptcy, insurance, and employment. Students will analyze current events cases that apply to these topics.

Entrepreneurship - University **of Iowa** partnership course (Semester)

Recommended for Juniors and Seniors who want to own/operate their own business.
This course will give students an understanding of the process for starting and maintaining a business. Students are exposed to the realities of starting and operating a business through the study of real entrepreneurs' pitfalls and challenges. Students will become familiar with teen and adult entrepreneurs through written and video profiles, guest speakers, and local business tours. ****Students enrolled in this class as a junior or senior will be given the University of Iowa final exam. Those students scoring 70 or higher may apply for and purchase 2 University of Iowa undergraduate credits for a nominal fee.**

Computer Science

Computer Science I: Coding Thru Games, Puzzles and Graphics (Semester)

A one-semester course designed to introduce high school students to the world of computer science. During this course, students will learn and apply basic computer programming concepts, such as data types, Strings, and iteration to solve puzzles, create games, control robots, and create artwork. The goal of this course is to spark an interest in computer science and programming.

Computer Science II: Coding Thru Games, Puzzles and Graphics (Semester)

Prerequisite: Computer Science I: Coding Thru Games, Puzzles and Graphics

A one-semester course designed to take a more in-depth look at the world of computer science. During this course, students will take a deeper look at programming concepts, such as iteration, to solve puzzles, create games, control robots, and create artwork. This course will also begin to explore the use of boolean expression and conditional statements.

Application Development I (Semester)

Prerequisite: Computer Science II: Coding Thru Games, Puzzles and Graphics

A one-semester introduction into computer programming and application development. In this course, students will combine the concepts and skills learned throughout CS 1 and 2 to design and create an app for a mobile device. This course will continue to develop the concepts learned in requisite courses. Additional topics of discussion will include: methods and arrays.

Application Development II (Semester)

Prerequisite: Application Development I

A one-semester in-depth look into computer programming and application development. In this course, students will combine the concepts and skills learned throughout the previous App Development course to design, create, and implement a live application of their own. Much of this class will be dedicated to designing, researching, and troubleshooting ideas created by the student. Additional topics of discussion will include: 2D arrays and classes.

Application Development III (Semester)

Prerequisite: Application Development II

A one-semester in-depth look into computer programming and application development. In this course, students will combine the concepts and skills learned throughout the previous App Development courses to design, create, and implement a live application of their own. Much of this class will be dedicated to designing, researching, and troubleshooting ideas created by the student. Additional topics of discussion will include: inheritance and ethics in CS.

Application Development IV (Semester)

Prerequisite: Application Development III

A one-semester in-depth look into computer programming and application development. In this course, students will combine the concepts and skills learned throughout the previous App Development courses to design, create, and implement a live application of their own. Much of this class will be dedicated to designing, researching, and troubleshooting ideas created by the student. Additional topics of discussion will include: recursion and ethics in CS.

AP CS Principles - Course Description

Prerequisite: Computer Science I: Coding Thru Games, Puzzles and Graphics

AP Computer Science Principles introduces students to the breadth of the field of computer science. In this course, students will learn to design and evaluate solutions and apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts and contribute to a computing culture that is collaborative and ethical.

Music

Band (Full Year Course)

This full-year course is designed to develop students' musicianship through study, rehearsal, and performance on their band instrument. This course will help the student gain appreciation of music through contact with an extensive repertoire. The class will include some study of music theory, tuning, skill development, and listening. The music experienced through participation will be of a standard that imparts lasting values.
This course includes participation in the BHS Marching and Concert Bands.

Chorus (Semester Course) (Grade Level 9-10)

This semester course will serve to give students the opportunity to participate in a vocal performance group. The class will be focused on the fundamentals of sound production and performance. While preparing concert literature, students will learn basis music theory and the aspects of being an individual in an ensemble.

Chorus (Semester Course) (Grade 11-12)

This semester course will serve to give students the opportunity to participate in a more advanced vocal performance group. The class will be focused on upper-level techniques of sound production and performance. The concert literature will serve as a foundation for learning basic music theory and the aspects of being an individual in an ensemble.

General Music (Semester Course) (Grade 9)

This semester course will serve to provide an overview of the world of music and our involvement in it as individuals. Topics will include music appreciation, cultural music, musical theatre, movie music, and others. The course will use the textbook Music! and its accompanying media.

Guitar (Semester Course)

This semester course will serve as a general introduction to guitar playing for students with little or no previous experience. Elements of basic guitar technique to be covered include tuning, basic chords, TAB, strumming patterns, picking, basic note reading, and counting. Students will be exposed to various performance styles, including finger picking, classical, blues, and rock/pop. BHS will provide the acoustic guitars to be used for this course. If students desire, they can furnish their own guitar for the course.

Music Theory (Semester Course)

This semester course is offered for students who have a serious interest in music and want to improve their comprehension of music. Course objectives include study of the basic elements of music, notation, harmony, scales, intervals, and beginning composition. Students will also experience sight-reading and ear-training. This course is strongly recommended for those students considering a major in music at college.

Piano

Prerequisite: Music Theory

Class piano is designed to teach the concepts and fundamentals needed to perform on the piano. It will increase musical understanding beyond just reading notes by teaching students a vocabulary of chords and keys, accompaniment patterns, and improvisational techniques. Students will play melodies in several positions and have the opportunity to participate in ensemble playing. Students will develop good practice habits, and learn techniques to increase the muscular agility and flexibility of their hands. We will delve into music at its source, find out how music is constructed, and discover the composers and history behind the music. At the completion of this course, the student will have learned to play some of the standards of piano repertoire while gaining a thorough understanding of the history and basic concepts of music.

Music Composition and Arranging

Prerequisite: Music Theory

This semester course is offered for students who have a serious interest in music composition, arranging, and orchestration. Course objectives include study of the advanced music theory, musical scoring, and computer notation software. Students will have the opportunity to think creatively each day as they compose, arrange, and orchestrate music for a variety of ensembles, both as an individual and as a group. This course is strongly recommended for those students considering a major in music at college.

Art

Art I (Semester Course)

This class is designed for the beginning art student. Students will concentrate on developing skills in, and correctly using the Elements of Design in their artworks. The students will solve visual and spatial problems appropriate to two-dimensional art projects. Proper care of art materials will be emphasized.

Art II (Semester Course)

This class will build on the skills and knowledge gained from the Art I course. The students will work on more advanced art projects. Using the design elements of shape and form, students will create three dimensional additive and subtractive artworks. Proper care of art materials will be emphasized.

Drawing and Design (Semester Course)

This course is designed to introduce students to the art elements including: line, shape, color, texture, value and space, and design principles including: balance, contrast, emphasis, movement, and unity, and their applications using various drawing media. Students will be involved in learning and practicing drawing skills using a variety of materials and will apply those skills using creative thinking and problem solving strategies. Media used will be pen and ink, charcoal, pencil, and pastel.

Ceramics (Semester Course)

Students will mold, carve, and sculpt clay. They will experiment with pinch pots, coils, and slabs. Helpful construction techniques will be covered to ensure successful firing and glazing. Students will be encouraged to creatively fabricate more challenging structures once they have practiced the basic methods of “hand built” clay construction.

Art Major (Grade 12, Full Year or Semester Course) (Must have completed at least four semester art courses)

This class is tailored for grade twelve students that are pursuing a career related to the Arts. Students will select favorite materials and subjects. They will experiment with all possibilities. They will evaluate their work in terms or quality, self-satisfaction, and career value. Proper care of art materials will be emphasized. The students will assemble a portfolio of digital and or original work. Students may be scheduled into this class as their schedule allows.

Senior Art (Semester Course)

This is a semester course for seniors interested in art but not majoring in art. We will explore different media and students may specialize in a media that they enjoy.

Yearbook

Yearbook

In Yearbook, students plan, create, sell and distribute yearbooks. Students learn computer, design, business photography and organization skills throughout the course of the year.

Bedford County Technical Center Courses

Agriscience

The Agriscience program offers a comprehensive animal and plant science program that is laboratory based using a hands-on approach. The program prepares students for farm, biology, scientific, laboratory, and postsecondary pursuits. The content area includes ecology, biological processes, sexual and asexual reproduction, and a study of the chemical/physical laws that govern life processes. Agriculture mechanics will be stressed throughout the program. BCTC houses an active chapter of the National FFA Organization and is an integral part of building leadership, personal growth, and career success for students in the program. The FFA Organization also provides an opportunity for skills competitions and emphasizes public speaking, debate, and demonstration of Agriscience career proficiency. This course

helps students understand the important role agricultural science serves as the Agriscience industry moves into the future. BCTC also is the home for the Bedford County Chapter of the Pennsylvania Young Farmers.

Automotive Technology

The Automotive Technology program provides students with theory and hands-on experience using the latest training and diagnostic equipment to learn trouble shooting and repair of all modern vehicles. This program is a N.A.T.E.F. certified program, giving students enrolled the best training and preparation to complete their ASE certification. Through our program, employability skills, safety, and good work habits are stressed. The Automotive Technology program provides students with a systems approach to all aspects of automobile and light truck maintenance and repair. Our goal is to provide graduates with a strong working knowledge of the automotive industry. This program places an emphasis on engine diagnostics/repair, engine performance, automotive electricity/electronics, steering, suspension, and brake systems.

Biotechnology

Biotechnology is a hands-on program that combines traditional plant and animal breeding with genetic engineering techniques to develop, modify, or improve living organisms. Students will learn to use a variety of laboratory equipment including laboratory glassware, volumetric and electrophoresis equipment, spectrophotometer, centrifuges, autoclaves, microscopes, PH meters, and many other technical laboratory tools.

Instruction will include principles of scientific research; microbiology; genetic transfer; genetically modified organisms; and biotechnology in plant science, animal science, medicine, forensics, and ecology. This course will help students to understand the important role biotechnology serves in today's global economy.

Building Construction

The Building Construction Program provides students with an exciting career that will teach entry-level job skills for the construction industry. Tool and job-site safety in compliance with OSHA standards are stressed. Instruction is provided in carpentry, masonry, plumbing, heating, electrical, and painting/decorating. Skills such as cost estimating, cutting, fitting, fastening, finishing, blueprint reading, and following technical specifications are also taught.

Cosmetology

The Cosmetology Program provides students with a unique learning experience as they perform all the necessary tasks to earn their cosmetology license. Theory is an important part of this course, as it gives the students the information they need to learn in order to pass their State Board Exam. The students have progressive hands-on tasks which enable them to perfect their skills and apply the concepts learned in theory. Students also have the opportunity to work with the public, providing them with job readiness and communication skills.

Instruction is provided in basic skills such as shampooing, scalp treatments, manicuring, hairstyling, cold waving, haircutting, and more. Advanced skills include removal of superfluous hair, thermal waving and curling, chemical hair relaxing, skin care and make-up, hair coloring and lightening, chemistry, shop management, and State Board of Cosmetology laws.

Culinary Arts

This program is offered in a state of the art facility with a variety of professional kitchen equipment and tools. The purpose of the program is to train future leaders in the hospitality industry. Extensive experience in catering special public events is available. Students work on the skills necessary to master various food service study areas. The program includes food preparation techniques; food presentation and service, kitchen management, menu design/development, and culinary math skills.

Health Assisting

The Health Assisting Program offers students with the education to gain access to a versatile, in-demand health care career. Students develop their assisting skills as volunteers at UPMC Bedford Memorial Hospital and the Pennknoll Village Nursing Facility. This unique volunteer opportunity also gives the students a way to interact with patients and acquire hands-on experience.

Instruction in the Health Assisting program provides a background in basic anatomy, physiology, diagnostic studies, pathophysiology, terminology, and practical skills. Studies in dental assisting, use of computers for medical office

procedures, and the possibility of a cooperative work study program are also included in the Health/Medical Assistant course.

Welding

The Welding program prepares individuals to apply technical knowledge and skills in Shielded Metal Arc Welding, Gas Metal Arc Welding, Gas Tungsten Arc Welding, Flux Core Arc Welding, Brazing, Plasma Arc Cutting, and Oxy-fuel Cutting. Hand, semi-automatic, and automatic welding processes are also included in the instruction. Students learn workplace safely practices, types/uses of electrodes and welding rods, study of the physical and chemical behavior of metallic properties of metals (metallurgy), blueprint reading, electrical principles, welding symbols, use of equipment for testing welds by non-destructive methods and destruction and hardness testing, use of portable grinders, positioning and clamping, use of manuals and specification charts, and welding standards established by the American Welding Society.

S.O.A.R./POS

S.O.A.R. stands for Students Occupationally and Academically Ready. It promises that students who are successful in this program will be read to go to work or on to college upon high school graduation. POS stands for Programs of Study. POS is a delivery method for instruction. POS students have the opportunity to:

- Earn industry certificates
- Take nationally recognized end of program exams
- Take higher level academic classes
- Earn free college credits

Each Program of Study is matched to a High Priority Occupation (HPO). These occupations are

- High demand
- High skill
- High wages

They represent available jobs in the state of Pennsylvania.

Programs of Study are matched with colleges across the state. These colleges have aligned their instruction with the academic and technical competencies/tasks that students accomplish in their programs while at the Technical Center. Most of them offer nine free credits. Some, especially the Health Careers, offer less.