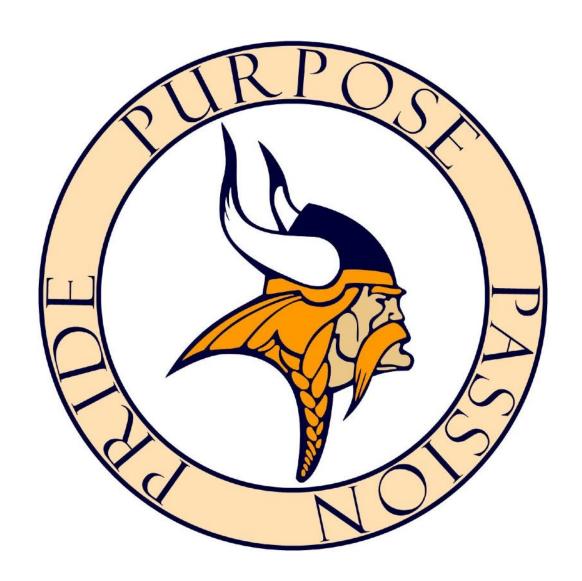
2020 -2021 Hopewell High School Course Curriculum Guide



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INTRODUCTION

Selection of a high school program of study is one of the most important decisions a secondary student must make. Parental input in this decision is vital. In light of this, parents are asked to take an active part in the selection process. The selections made now will determine, in part, what avenues of opportunity are available to the student in his/her post-high school years.

Parents and students should become familiar with the contents of this booklet to help them arrive at the wisest choice of courses. Courses selected should be both challenging and comprehensive in order to accommodate personal and vocational goals and provide for a rewarding high school experience. Certain requirements must be met in order to graduate from Hopewell High School. These subjects are required by either the Pennsylvania Department of Education or the Hopewell Area School Board and must be met by every student. If any of these courses are not successfully completed the student will not graduate. The requirements are listed in the Subject Plan for High School.

All students must schedule a minimum of seven credits unless approved by counselor/principal for specific reasons such as college attendance, IEP, etc. Open periods will result in a scheduled study hall. Students are encouraged to take more than a minimum course load to take full advantage of the diversified curriculum offered at Hopewell. Counselors and administrators of Hopewell High School will assist in answering any questions concerning the curriculum and course selection. Prior to scheduling, teachers will confer with students and sign off on course recommendations.

HOPEWELL AREA SCHOOL DISTRICT OFFERS THE FOLLOWING SUPPORTS AS PART OF OUR SPECIAL EDUCATION SERVICES:

AUTISTIC SUPPORT

Services for eligible students with a disability who require a highly structured program. The program addresses needs related to reciprocal social interactions, communication, and restricted and/or repetitive stereotypical patterns of behavior, interests, and activities. Opportunities for inclusion in general education environments are provided as determined by the Individualized Education Program (IEP) team. The students require intensive interventions such as visual communication systems, highly individualized instruction and schedules, functional academics, basic daily living skills, and individualized behavior management programs. The goal for all students with moderate to severe disabilities is to increase independence and self-sufficiency. District operated programs are available at Hopewell Elementary School, Hopewell Memorial Junior High School and Hopewell High School.

BLIND OR VISUALLY IMPAIRED SUPPORT

Services for students with the disability of visual impairment including blindness, who require services to address needs primarily in the areas of accessing print and other visually-presented materials, orientation and mobility, accessing public and private accommodations, or use of assistive technologies designed for individuals with visual impairments or blindness. For students who are blind or visually impaired, the IEP must include a description of the instruction in Braille and the use of Braille unless the IEP team determines, after the evaluation of the child's reading and writing needs, and appropriate reading and writing media, the extent to which Braille will be taught and used for the student's learning materials. Blind or visually impaired support is available in all buildings at the elementary, junior high and high school levels.

DEAF OR HEARING IMPAIRED SUPPORT

Services for students with the disability of deafness or hearing impairment, who require services to address needs primarily in the area of reading, communication, accessing public and private accommodations or use of assistive technologies designed for individuals with deafness or hearing impairment. For these students, the IEP must include a communication plan to address the language and communication needs, opportunities for direct communications with peers and professional personnel in the child's language and communication mode, academic level, and full range of needs, including opportunities for direct instruction in the child's language and communication mode; and assistive technology devices and services. Deaf or hearing impaired support is available in all buildings at the elementary, junior high and high school levels.

EMOTIONAL SUPPORT

Services for eligible students whose behavior interferes with the ability to learn in the regular education classroom environment without supports. Students with a disability who require services primarily in the areas of social or emotional skills development or functional behavior receive emotional support services. The IEP for each student includes a positive behavior support plan. District operated programs are available at Margaret Ross Elementary School, Hopewell Memorial Junior High School and Hopewell High School.

GIFTED SUPPORT

Services for students who show outstanding intellectual ability which requires more enrichment activities and opportunities in and out of the classroom. Participation in Gifted Support is based upon the individual student's eligibility and need for acceleration and/or enrichment. State mandated identification criteria for the Gifted Support program must be met. All students participating in the Gifted Support program have a Gifted Individual Educational Plan (GIEP). Gifted Support services at the elementary and secondary levels are provided on an itinerant basis in all buildings.

LEARNING SUPPORT

Services are available for eligible students who have difficulty in the acquisition and retention of basic learning skills. Students with a disability receiving learning support have services that primarily focus on

the areas of reading, writing, mathematics, or speaking or listening skills related to academic performance. Learning support is available in all buildings at the elementary, junior high and high school levels.

LIFE SKILLS SUPPORT

Services for students with a disability whose social/behavioral skills are developmentally delayed who require services primarily in the areas of academic, functional or vocational skills necessary for independent living. At the elementary level, programs focus on self-help, readiness skills and then the acquisition of academic skills; the junior high school level focuses on pre-vocational and practical work skills; and the high school level focuses on community-based vocational programming, independent living and recreational/leisure skills. District operated programs are available at Independence Elementary School, Hopewell Memorial Junior High School and Hopewell High School.

PHYSICAL SUPPORT

Services for students with a physical disability who require services primarily in the areas of functional motor skill development, including adaptive physical education or use of assistive technologies designed to provide or facilitate the development of functional motor capacity or skills

SPEECH AND LANGUAGE SUPPORT

Services for students with speech and language impairments who require services primarily in the areas of communication or use of assistive technologies designed to provide or facilitate the development of communication capacity or skills. Speech and language support is available in all buildings at the elementary, junior high and high school levels.

TRANSITION SERVICES

Secondary transition is the process of preparing students for life after they leave high school, including participation in post-secondary education or training, employment, and community living. These three areas are often referred to as "post-secondary outcomes" and are the driving force behind Individualized Education Programs (IEPs) written for students in high school.

Transition planning begins, no later than age 14, as students explore what they want their post-school outcomes to be through career awareness exploration activities. It continues through high school as instruction and community experiences support these outcomes.

Transition planning involves a partnership between the student, the family, school-age services and program providers, post-secondary services and program providers, and local community members. Effective transition involves purposeful planning among all these entities. It entails recognizing the student's current strengths, interests, preferences, and needs, and then identifying what services and supports are needed to achieve future success.

OTHER RELATED SERVICES

Other Related Services are available to students who require such services to gain benefit from their educational program. These services may include: occupational therapy, physical therapy, psychological services, nursing services and school counseling services. Special transportation is also offered to students who are unable to access regular transportation services, due to the disability or the location of the special education program.

- 1. Parent/Guardian(s) and student should read the course descriptions.
- 2. Parent/Guardian(s) and student should discuss subject choices.
- 3. The subject plan for high school should be used as a guide in making subject selections.
- 4. Parent/Guardian(s) and student should complete the course selection form for the appropriate grade level.
- 5. Parent/Guardian(s) must sign the scheduling form, signifying approval of the subjects selected.
- 6. Student must return the completed scheduling form with teacher signatures for core courses.
- 7. If this form is not returned by the due date, the counselors will formulate an appropriate schedule for the student as recommended by the student's teacher.

Counselors recommend six credits plus gym as a minimum schedule.

A study hall will automatically fill any open period. Students may select additional courses through our Cyber Program during study hall periods.

The high school counselors will be available for parent/guardian and student consultation concerning these selections. The counselors will review each schedule to check that it meets student academic and vocational needs and graduation requirements.



The NCAA logo in the course description is important for college-bound student-athletes who want to compete in NCAA sports. These courses are designated as NCAA Core Courses and can be used in the calculation of the NCAA Core Course GPA by the NCAA Eligibility Center. Any student

who thinks they may participate in college athletics should discuss the process with their counselor as soon as possible in their high school career.

GRADE LEVEL SUBJECT PLAN FOR HIGH SCHOOL

GRADE 9

- *English
- *History
- *Math
- *Science
- *Physical Education
- *Intro to Digital Awareness

Electives to complete a full schedule

GRADE 10

- *English
- *History
- *Math
- *Science
- *Physical Education
- *Health

Electives to complete a full schedule

GRADE 11

- *English
- *History
- *Math
- *Science
- *Physical Education

Electives to complete a full schedule

GRADE 12

- *English required
- *P.O.D./Economics or other senior social studies courses required
- *Physical Education

Electives to complete a full schedule

*SUBJECTS REQUIRED FOR GRADUATION

REMEDIAL COURSES:

Students will only be scheduled for remedial courses if indicated in their IEP or at the recommendation of the classroom teacher and counselor.

LANGUAGE ARTS DESCRIPTIONS

TRADITIONAL ENGLISH GRADE 9



Further study of grammar and the application of the writing process to personal, expository, and literary creations. Students also read and analyze through oral and written exercise in each genre of literature. In addition, work will be aimed at those who plan to attend college, advanced technical school, or pursue employment after graduation. **Prerequisite:** English Language Arts 8

TRADITIONAL ENGLISH GRADE 10



Further study of grammar and the application of the writing process to personal, expository, and literary creations. Students also read and analyze through oral and written exercise in each genre of literature. In addition, work will be aimed at those who plan to attend college, advanced technical school, or pursue employment after graduation. **Prerequisite:** English 9

ACADEMIC ENGLISH 9 AND ACADEMIC ENGLISH 10



Content and skills are similar to those of the general English 9 and 10 classes; but, because the students have an above average skill and/or interest level, the classes will move more quickly and discuss topics in more detail than the general courses. In addition, the work will be aimed at those who plan to attend a four or two year college, nursing school, or advanced technical school. **Prerequisite:** Academic English 8 or Academic English 9 average of (83%) or higher and teacher recommendation.

HONORS LANGUAGE ARTS GRADE 9



In addition to the review of grammar, the independent analysis of literature and writing will be stressed. With the reading of basal and supplementary texts, students will create expository and personal essays as well as literary papers. Students will also prepare for the SAT and other college entrance tests through work study, vocabulary, in-class timed writings and readings, and other test activities. **Prerequisite**: Honors 8 average of 93% and teacher recommendation. Students must complete summer reading assignments to remain in class.

HONORS LANGUAGE ARTS GRADE 10



In addition to the review of grammar, the independent analysis of literature and writing will be stressed. With the reading of basal and supplementary texts, students will create expository and personal essays as well as literary papers. Students will also prepare for the SAT and other college entrance tests through work-study, in-class-timed writings and readings, and other test activities. Students must complete summer reading assignments to remain in class. **Prerequisite**: Honors 9average of 93% and teacher recommendation. Students must complete summer reading assignments to remain in class.

AMERICAN LITERATURE 11



This course continues the study of reading and analyzing writing styles through the study of American Literature, historic and contemporary, with an emphasis on nonfiction works. In addition, students will examine readings through the lens of understanding human interaction to determine the application of literary themes in an effort to achieve personal growth. Students advance their writing skills through personal and literary composition, focusing on remediating grammatical errors.

COMPOSITION 11

The primary concerns of this course are grammar review, American literature, and the writing process through a review of descriptive and expository paragraphs, and emphasis on personal essays, short and long formal essays, the research paper, critical papers, and the creation of literary samples. Composition is recommended for college bound juniors who do not elect AP Language 11. A research paper is required. **Prerequisite**: Honors English 10 with average of 83% or academic English 10 with a 90% or higher average and teacher recommendation.

AP LANGUAGE AND COMPOSITION 11



This course emphasizes composition and rhetoric in relationship to literature. A strong overview of American Literature, along with other selected pieces will be presented and analyzed. Students will be required to compose critical analyses as well as a research paper. **Prerequisite**: Honors 10 with an average of 93% or higher and teacher recommendation and teacher recommendation. Acceptance into the program will also be based on a test, including in-class writings. Students must complete summer entrance test and reading assignments to remain in class. Students are encouraged to take the AP Language and Composition exam at the conclusion of the course.

VOCATIONAL ENGLISH 12

This course is adapted to students needing extra academic support. The course is designed for students who are planning to enter the job market or to enroll in a technical school. Topics such as job units, practical writing, logical thinking and problem solving are discussed. Selected pieces of literature will be read and vocabulary skills applied. Note: Placement is based on teacher recommendation only. This is not an NCAA sanctioned class.

BRITISH LITERATURE 12



Students advance their writing skills through personal and literary composition. This process is the continuation of the study of grammar and of writing styles through the study of British Literature.

WORLD LITERATURE 12



The course stresses classical literature and the societal and political changes of man, which influence his literature. The writers, styles, and history from classical Greek to twentieth century works are critically analyzed. Essays, critical papers, and literary writings are related to the readings. Prerequisite: Composition average of 90% or AP Language 11 average of 83% and teacher recommendation.

AP LITERATURE 12



Following a seminar approach, the class will stress independent reading, analyzing, and writing based on selected pieces of world literature. Although a teacher will direct the class, the students will provide discussion and other activities. Prerequisite: AP 11 average of 93% and teacher recommendation. Acceptance into the program will also be based on a test, which includes in class writings. Students must complete summer entrance test and reading assignments to remain in class. Students are encouraged to take the AP Literature and Composition exam at the conclusion of the course.

LANGUAGE ARTS ELECTIVES:

SPEECH GRADES 9-12 ½ CREDIT

Are you ready to learn different types of speeches? Students study the proper organization and manner of orally presenting their thoughts. Students will create original speeches, including but not limited to pet peeve, informative, advertising, award, persuasive, and impromptu. Students will also learn about the communication process and participate in group speaking activities. Please note this is a one-semester course.

ADVANCED SPEECH GRADES 9 – 12 ½ CREDIT

This class would be a continuation of the current Speech course. Students would continue to utilize various facets of speech communications, which includes informal and formal group discussions and debates as well as current events issues. In addition, students will be given the opportunity to thoroughly develop persuasive, impromptu, extemporaneous, and oral interpretive topics. **Pre-requisite:** Speech: 2.0 final grade or higher

HOT TOPICS GRADES 9-12

Do you like to discuss current issues? Students use inquiry skills to present their ideas about current topics in today's world. They will evaluate the author's point of view in various articles and magazines about current issues. Students will be given the opportunity to present their findings during class discussions. Students' writing skills will include alternate or opposing claims, supplying the most relevant evidence for each. Writings will include but will not be limited to editorials, summaries, timed writings, and evidence based writings. This course is geared toward students who enjoy learning about current issues; local, national, and international.

INTRO TO DRAMA GRADES 9-12

Ready...Set...Action!! In addition to the study of plays, production, and history of the theater, the students will learn to use body, voice, and mind effectively. The students will apply the learned skills creatively in a variety of activities, improvisations, and scene work.

DRAMA - GRADES 10-12

Are you ready to perform? Students will apply skills in various performances, including one-act plays and children's plays. This class will deal with the total aspect of the performance with students directing, acting, and operating backstage equipment. **Prerequisite:** Introduction to Drama.

JOURNALISM I GRADES 9-12

Through examination of newspapers and laboratory worksheets, students learn responsibilities of the media, types of articles, journalistic style, page make-up, and headline writing. They also have the opportunity to write for the school paper. In addition, they study public relations/advertisement and mass media when possible. Students must have a minimum average of (83%) in Language Arts and an interest or aptitude in writing.

JOURNALISM II GRADES 10-12

The major responsibility of the students is the production of the school newspaper. Through this activity, student writing will stress in-depth reporting and improved journalistic style. They may also write articles for the school district newsletter and press releases for school activities. With an understanding of public relations/advertisement, students may produce programs and other projects for school functions. **Prerequisite**: Minimum (83%) in Journalism I and/or teacher recommendation.

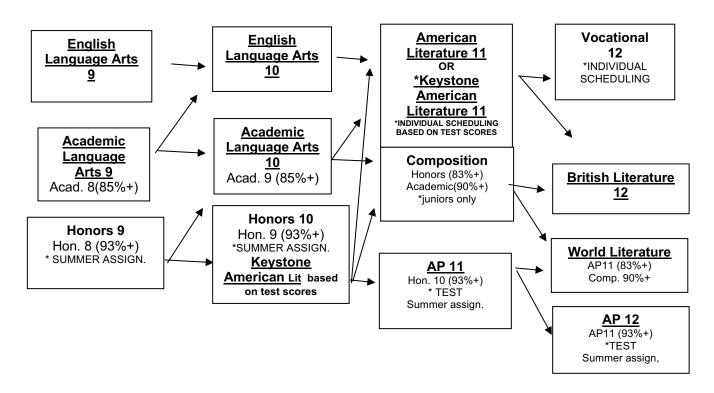
INTRODUCTION TO VIDEO PRODUCTION GRADES 9-12

Students will be introduced to fundamental production procedures, which will include an overview of camera techniques, lighting, editing, and composition. Students will produce teacher-guided and independent projects. Students will also be expected to identify and evaluate production techniques in films and be able to discuss them orally and in the written format. In addition, students will receive an overview of directing involving participation in taping the morning announcements. Students will be accepted into the class based upon available stations and completion of the application available in the guidance office. Preference given to upper class students.

ADVANCED SPEECH GRADES 10 – 12 ½ CREDIT

This class would be a continuation of the current Speech course. Students would continue to utilize various facets of speech communications, which includes informal and formal group discussions and debates as well as current events issues. In addition, students will be given the opportunity to thoroughly develop persuasive, impromptu, extemporaneous, and oral interpretive topics. **Pre-requisite:** Speech: 2.0 final grade or higher

LANGUAGE ARTS DEPARTMENT COURSE FLOW CHART (UPDATED 2018)



Prerequisites are for equal or higher level classes (if applicable)

All placements are subject to teacher recommendation

Advanced Placement: Students must take an entrance test and complete summer reading assignments

Honors 9&10: Complete summer reading assignments Refer to curriculum handbook for more information

Students must follow flowchart unless Language Arts teacher and department chair approve

Prerequisites listed below courses

SOCIAL SCIENCES COURSE DESCRIPTIONS

SOCIAL SCIENCES CORE

Freshman	United States History I*
Sophomore	World History*
Junior	United States History II* **
Senior	Problems in American Democracy and
	Economy or Advanced Senior Social
	Studies or Advanced Placement
	Government and Politics

^{*} In addition to the academic course, an honors placement will be an option as appropriate

Social Science Core Course Descriptions



UNITED STATES HISTORY I

This course is devoted to understanding and interpreting the history of the United States from the launching of a new government under the Constitution through the events of World War I. The people and groups investigated during the scope of US History I responded to events within and outside the United States. This course will be directed so that students study the story of America through the historian's tools of historical significance, continuity and change, cause and consequence, historical perspective and the ethical dimensions of historical interpretation. This course will be presented in time-based units that emphasize the formation of political parties, sectionalism, westward expansion, slavery, segregation, capitalism, imperialism, immigration, the growth of the federal government and evolution of the American government system as it enters prominence in global affairs. The importance of our American story during the time period from 1789-1918 is the background to understanding our human experience; this includes the interactions of culture, race and ideas, the nature of prejudice, the evolution of the political system, the effects of technology and the importance of understanding a globalinternational perspective. The integration of geography, economics, and civic principals from middle school learning will be utilized and strengthened through this survey course on the major developments of US history with an emphasis, where appropriate, on Pennsylvania's development and our interactions with a diverse world.

***An honors level of United States History I is offered for students who have demonstrated a mastery of social studies skills and concepts beyond grade level and are better served through an acceleration of content and skills development. A recommendation from a grade 8 social studies teacher is required for the honors level course.

WORLD HISTORY



Opening units in this academic course will explore the expanding zones of exchange and

^{**} In addition to the academic course, a traditional level course will be offered

encounter during the time from 300-1500 and the intensified hemispheric interactions from 1350-1800. With the emergence of the first Global Age from 1450- 1770 students will follow the story of World History across the continents as technology and transformations set the stage for the Age of Revolutions, 1750-1914. The half-century of crisis and achievement from 1900-1945 will afford students a broad perspective on the impact of the global conflicts of world wars and the post war search for peace and stability. As new and more diverse global concerns rise to the forefront following the Second World War students will investigate the impact of 20th century decisions on the earth's regional peoples and cultures. This course will be presented in chronological, geographically based units divided on historical notions of conflict, cooperation and interaction.

***An honors level of World History is offered for students who have demonstrated a mastery of social studies skills and concepts and are better served through an acceleration of content. The honors course is half-weighted. *** A traditional level of World History may be offered for students who have an IEP or a demonstrated need for additional developmental support in social studies skills and concepts to support their content acquisition. IT IS NOT NCAA RATED. Both of these course options require teacher recommendation. An 89% average is desired for application to the honors level.

UNITED STATES HISTORY II



The United States History II course will continue the study of the story of America's Democratic Republic in the 20th and 21st centuries. Slowing down the timeline and requiring the young historian to investigate topics that impact modern circumstances and understandings required by US citizens at a deeper level than in their previous courses. They should be prepared to draw on previous content and skills learning from an array of high school courses to investigate the political and cultural contributions of individuals and groups in US history, how continuity and change have influenced the history of our democracy and how cooperation and conflict among groups and organizations have impacted the course of the last century in domestic matters and foreign policy. Emphasizing the political, economic and social developments of the previous century this course will be presented in time-based, topic-driven units.

***An honors level of US History II is offered for students who have demonstrated a mastery of social studies skills and concepts and are better served through an acceleration of content. The honors course is half-weighted. An 89% average is desired for application to the honors level course. *** A traditional level of US History II may be offered for students who have an IEP or a demonstrated need for additional developmental support in social studies skills and concepts to support their content acquisition. IT IS NOT NCAA RATED. Both of these course options require teacher recommendation.

SENIOR PROBLEMS OF AMERICAN DEMOCRACY AND ECONOMY



This full year academic course appropriate for all students will focus on understanding the problems posed to members of a democratic citizenry and an

understanding of the role of citizens and as members of the complex American economy. Intended to be practical as well as active, this course may be taken alongside other senior year options

ADVANCED SENIOR SOCIAL STUDIES



The honors level option for seniors is an elective course for college bound students who have a demonstrated ability in Social Studies understandings. It will fulfill the senior level Social Studies credit. The course will focus on research-based experiences for college preparation. It will also highlight a final emphasis on issues related to our local history and the region's significance in Pennsylvania and global history. Geographic, economic, political and historical research opportunities may also be part of the course. This course is weighted. Entrance into this program is by teacher recommendation to only qualified seniors possessing a 93% average in Social Studies and an 89% overall GPA.

ADVANCED PLACEMENT UNITED STATES GOVERNMENT AND POLITICS

Advanced Placement United States Government and Politics is a college in high school course offered to students who wish to experience the rigors of college political science course. As such students must meet criteria for entrance and should expect the course workload to be the same as a college level course. They should be prepared to engage in significant out of class preparation and independently motivated learning. The guidelines from the College Board will dictate the course curriculum. Entrance into this program will be based on the following criteria: Teacher Recommendation, a proven ability to do advanced work in a timely fashion, completion of Honors US History II. *Students in Academic US History may only enroll with teacher recommendation, an A average in Academic US History, an A average in Composition and with counselor/principal approval. This course is weighted.

NCAA

SOCIAL SCIENCE ELECTIVE COURSE DESCRIPTIONS

CONTEMPORARY GLOBAL HISTORY (SENIOR SURVEY)

This is a survey class of the world since World War II with emphasis on the United States as a leader in global relations, the Cold War, and the emergence of new nations. This class is a full year study offered to seniors only as a completion of the story of history begun in the World History and U.S. History II courses. The goal of this class is to create a better understanding of the world today in which the students are to live and work. This course is suitable for all students in their senior year and can be taken alongside other Social Science courses.

PRACTICAL JUSTICE GRADES 10-12 1/2 CREDIT

Practical Justice is a one semester course that concentrates on the United States legal system. It covers the duties of the federal courts as well as the courts of Pennsylvania and is an in depth study into one's legal rights and responsibilities. This course also studies the civil, adult and juvenile criminal processes. The responsibilities of professions and qualifications for acquiring work in the legal field will be discussed as part of the course. Upper class students will have scheduling priority.

INTRODUCTION TO PSYCHOLOGY GRADES 10-12 1/2 CREDIT

This one semester course is an academic course that explores the complex nature of human behavior. Areas of concentration will include the brain, sensation and perception, altered states of consciousness, intelligence and creativity, sleep and dreams, autism, mental retardation (intellectual disability), and mental disorders. A variety of classroom activities and demonstrations will be used to enhance the student's comprehension of important concepts. An 87% GPA or higher is recommended. Upperclassmen will receive scheduling priority.

PSYCHOLOGY II GRADES 10-12 1/2 CREDIT

This one semester course is an academic course designed for college-bound students. It serves as a continuation of the Introduction to Psychology class and is open to juniors and seniors (and possibly sophomores) that have successfully completed the aforementioned class. After a brief review, students explore psychological topics like human growth and development throughout the lifespan, adolescent psychology, personality development, motivation and emotion, gender roles, psychotic mental disorders, and time permitting, even more. A variety of classroom activities and demonstrations will be used to enhance the student's comprehension of important concepts. An 87% GPA or higher is recommended. Upperclassmen will receive scheduling priority.

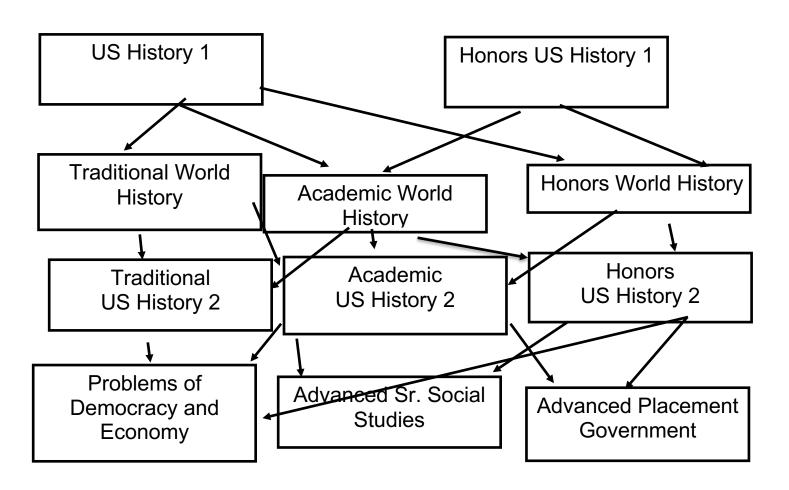
SOCIOLOGY I (ONLINE) 1/2 CREDIT

Providing insight into the human dynamics of our diverse society, this online course is the first part of an engaging two semester program that delves into the fundamental concepts of sociology. This interactive course covers cultural diversity and conformity, basic structures of society, individuals and socialization, stages of human development as they relate to sociology, deviance from social norms, social stratification, racial and ethnic interactions, gender roles, family structure, economic and political aspects of sociology, the sociology of public institutions, and collective human behavior, both historically and in modern times.

SOCIOLOGY II (ONLINE) 1/2 CREDIT

Providing insight into the human dynamics of our diverse society, this online course is the second part of the sociology series. It is a continuation of the study of cultural diversity and conformity, basic structures of society, individuals and socialization, stages of human development as they relate to sociology, deviance from social norms, social stratification, racial and ethnic interactions, gender roles, family structure, economic and political aspects of sociology, the sociology of public institutions, and collective human behavior, both historically and in modern times.

HHS Social Studies Flowchart



MATHEMATICS DEPARTMENT COURSE DESCRIPTIONS

Please Note: Students are not permitted to go "backwards" to a lower course once they have successfully completed a higher level course.

ALGEBRA CONCEPTS 1A AND ALGEBRA CONCEPTS 1B GRADES 9-12



A two year Algebra course, all topics of Algebra I will be covered at a slower pace over two years, important for those students considering a technical or vocational program after high school. This course is technologically enhanced with the MATHia® computer software. Once enrolled, a student must take both years to successfully complete Algebra I requirements. The pace of the class will be adapted to meet students' needs. Each of these courses will meet ten periods per week. Students who excel in Algebra 1A may be recommended to Algebra 1 with teacher approval. Note: Completion of Algebra IA and IB will fill two of the three math credits needed for graduation.

ALGEBRA I GRADE 9-12



For the academic student who plans to attend college, this one year course provides an introduction into algebra with emphasis on real number properties, signed numbers, equation solving, graphing, exponents, polynomials, factoring, and sentences in two variables. This course is technologically enhanced with the MATHia® computer software. It is a preparation for Geometry, Algebra II and future math courses. It is also essential for the students who plan to continue their study of sciences, such as chemistry and physics.

GEOMETRY CONCEPTS GRADE 10-12

A slower paced course in Geometry for students having had Algebra Concepts IA and IB or Algebra I and desiring a minimum academic background in Geometry. The pace of the class will be adapted to meet students' needs, and is important for those students considering a technical or vocational program after high school. **Prerequisite**: Algebra IA & IB or Algebra I. **Note**: After this course students will be prepared for regular Geometry or Algebra II Concepts, but not Regular Algebra II.

GEOMETRY GRADE 10-12



For the traditional academic student, this course involves the study of figures and their relationships as well as methods of proofs. This course is technologically enhanced with the Cognitive Tutor® computer software. **Prerequisite**: Algebra I (or Algebra IA & IB with teacher recommendation).

ACCELERATED GEOMETRY GRADE 9



Accelerated course involving the study of figures and their relationships as well as methods of proofs. **Prerequisite**: Algebra I in eighth grade and teacher's recommendation.

ALGEBRA II CONCEPTS GRADE 11-12

A slower paced course in Algebra II for students having had Geometry Concepts. This course will extend the knowledge of Algebra I to include quadratics, linear equations and inequalities. Prerequisite: Geometry Concepts.

ALGEBRA II GRADE 11-12

Course to extend the knowledge of Algebra I to include algebraic fractions, linear equations and inequalities. This course is technologically enhanced with the Cognitive Tutor® computer 18

software. Prerequisite: At least a (70%) average in Algebra I and Geometry (or the same average in Algebra IA, IB, and Geometry). **Note**: A student must take Geometry (not Geometry Concepts) before taking this course.

ACCELERATED ALGEBRA II GRADE 10 ONLY



Accelerated course to extend the knowledge of Algebra I to include algebraic fractions, linear equations and inequalities. This is a more rigorous course for the accelerated student. Prerequisite: Accelerated Geometry or Geometry (not Geometry Concepts). Note: May be taken concurrently with Geometry (not Geometry Concepts) with a 95% average in Algebra I and teacher's recommendation. This course cannot be taken concurrently with Accelerated Geometry.

COLLEGE ALGEBRA GRADE 12 ONLY



This class is designed for senior students with a background in Algebra and Geometry. This class will explore Algebra I, Geometry, and Algebra II topics from high school and first-year College Algebra topics. **Prerequisites**: Algebra I and Geometry. **Note**: Although not required, Algebra II experience is preferred.

Students taking the classes listed below are required to purchase their own TI - 83 plus or TI - 84 plus graphing calculator.

PRE-CALCULUS GRADE 11-12



Pre-Calculus is a full year course combining studies in advanced mathematical concepts to prepare those students who intend to continue with calculus or who are preparing for college. Topics covered include: advanced algebra, analytical geometry, exponential functions, logarithmic functions, and trigonometric functions. **Prerequisite**: (83%) average in Accelerated Algebra II or a (90%) in Algebra II and teacher's recommendation.

ALGEBRA III/TRIGONOMETRY GRADE 11-12



For the academic student, an advanced study of Algebra with a half year of Trigonometry. **Prerequisite** Average 80% or better in Algebra II. **Note**: Students planning to take Calculus in high school should take Pre-Calculus.

CALCULUS – GRADE 12



For the accelerated academic student, a yearlong study of Calculus that is coordinated with first semester college Calculus; includes some Pre-Calculus topics early in the course. Students may obtain 4 college credits through the University of Pittsburgh College in High School Program. **Prerequisite**: Average 80% or better in Precalculus.

ADVANCED PLACEMENT CALCULUS – GRADE 12



For the accelerated academic student, a yearlong study of Calculus that is coordinated with first semester college Calculus. This course is more accelerated than the standard Calculus course. It is designed to prepare the student for the Advanced Placement exam in Calculus. Students may obtain 4 college credits through the University of Pittsburgh College in High School Program or by passing the AP Exam. **Prerequisite**: Average 90% or better in Precalculus. Teacher recommendation.

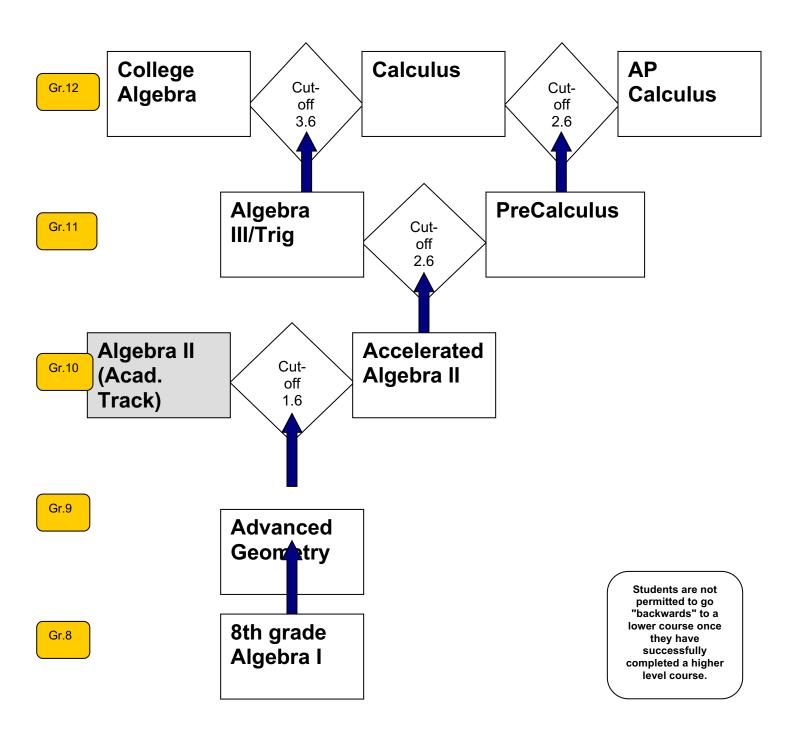
INTRODUCTION TO STATISTICS GRADES 10 -12 (1/2 CREDIT)

A one semester academic course designed as an introduction to statistics for sophomores and juniors who have completed Algebra I. It provides a comprehensive coverage of the basic

principles of data collection, data analysis and applications of statistical methods. Topics to be introduced include: data analysis, probability, simulations, distributions, sampling, confidence intervals and hypotheses testing. Class will fulfill with ½ math credit. **Prerequisite**: Algebra I (or Algebra IA & Algebra IB with teacher recommendation).

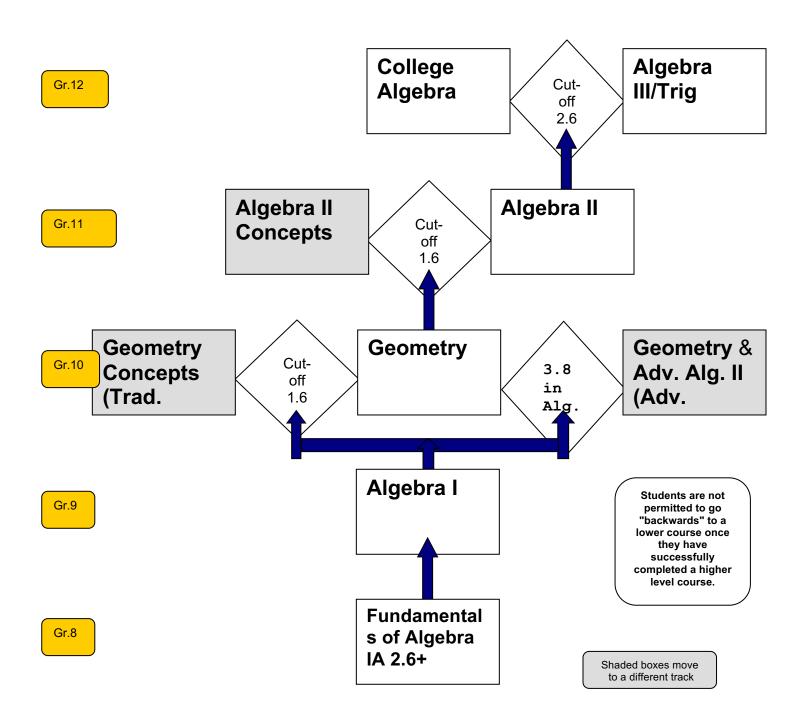
Math Department

Advanced Track



Math Department

Academic Track



Math Department

Traditional Track

Shaded boxes move to a different track

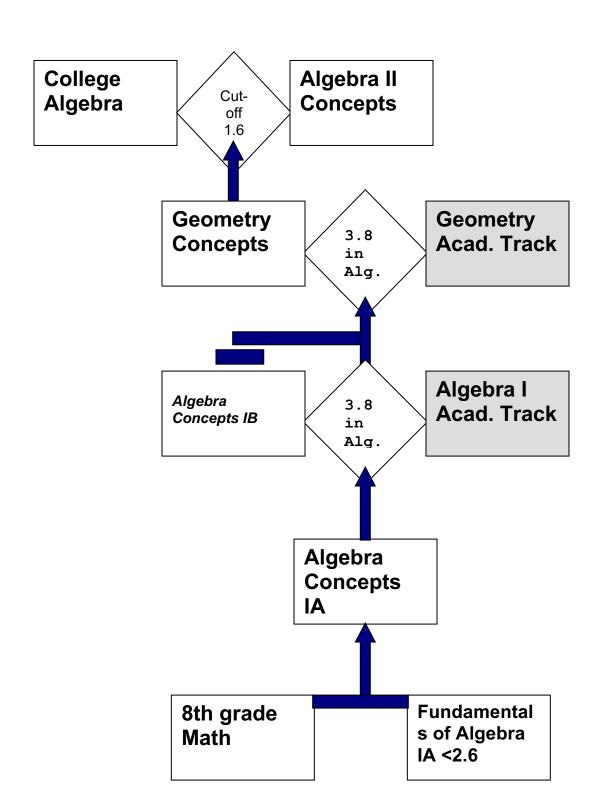
Gr.12

Gr.11

Gr.10

Gr.9

Students are not permitted to go "backwards" to a lower course once they have successfully completed a higher level course.



SCIENCE DEPARTMENT COURSE DESCRIPTIONS

INTRODUCTION TO SCIENTIFIC METHODS



This course serves as an introduction to the scientific practices necessary to be successful in high school science courses. Students learn basic scientific skills including accurate and precise measurement on scientific devices, the use of significant figures, graphing, scientific notation, and dimensional analysis. Students learn to use Google Docs to write lab reports in the high school format and to use Google Sheets for plotting graphs which include lines of best fit. They learn the relationships between data and conclusions and how to write these scientifically in a conclusion that is data driven. In short, students learn and then apply basic scientific practices to various content areas including chemistry, biology, and physics. *Prerequisites: Science* 8.

BIOLOGY 1



This course is designed for the academic 10th grade student as a college preparatory course which prepares students for the Biology Keystone Exam that will be taken at the completion of the course. The topics explored include basic biological principles, the chemical basis for life, bioenergetics, homeostasis and transport, cell growth, cell reproduction, and genetics. Investigative labs, research, and reports are integral to this course. (1 credit) *Prerequisite(s)*: Introduction to Scientific Methods and teacher recommendation.

ACCELERATED BIOLOGY MOZA



This course is designed for the accelerated 9th grade student as a college preparatory course. The topics explored are the same as those of Biology, but students are challenged with more investigative labs, research, and reports Laboratory included. (1 credit) Prerequisites: Honors Science 8, Algebra 1, and teacher recommendation.

BIODIVERSITY AND SCIENTIFIC LITERACY



This course focuses on mastery of the PA Keystone Biology Assessment Anchors. The topics explored include basic biological principles, the chemical basis for life, bioenergetics, homeostasis and transport, cell growth, and cell reproduction. An emphasis will be placed on the structures and processes necessary for all organisms to maintain life. Additional topics to be covered in this course include genetics, ecology and evolution. (1 credit) Prerequisite: Score of Basic or Below Basic on the Biology Keystone Exam, Biology 1 or Accelerated Biology, and teacher recommendation.

BIOLOGY 2



This course is designed for the student interested in advanced science as an intense preparation for college Biology. The topics explored include molecules and cells, genetics and evolution, and organisms and populations. College texts and labs are used, as well as animals or their parts for dissection and study. This course prepares students for careers in biology, medicine, nursing, health technology, and other related science fields. Laboratory included. (1 credit) Prerequisites: 80% in Biology 1, 80% in Chemistry 1 OR 75% in Accelerated Biology 1 and 75% in Accelerated Chemistry 1, and teacher recommendation. No concurrent enrollments.

ADVANCED PLACEMENT BIOLOGY



AP Biology is a college level course that provides a systematic introduction to the main principles of biology and emphasizes problem solving. It is designed for the highly motivated science student who is seeking a second level biology course. The topics explored are similar to those in Biology 2, but they are taught at the college level. This course is fast paced and designed to prepare students for the AP Biology Exam, which may qualify the student for college credit. Students experience research methods in genetic engineering, microbiology, and biotechnology. Laboratory included. **This class meets 7 periods per week.** (1.4 credits) *Prerequisites: 80% in Biology 1, 85% in Chemistry 1, 80% in Algebra 2 OR 75% in Accelerated Biology, 75% in Accelerated Chemistry, 75% in Accelerated Algebra 2, and teacher recommendation.*

ENVIRONMENTAL SCIENCE

This elective course is designed as a multidisciplinary approach to studying the environment. The topics explored include types of pollution, global climate change, ozone depletion, alternative energy sources, and others. (1/2 credit) *Prerequisite: Biology 1*.

ONLINE ANATOMY 1

This course introduces high school students to the fundamental concepts of anatomy and physiology – including the genetics, cells, tissues, organs, and systems as well as the musculoskeletal and nervous/sensory systems. As they progress through each unit, students will learn about the major body systems, as well as common diseases and disorders associated with each system. Students are introduced to these fundamental health science concepts through direct instruction, interactive tasks, and practice assignments. This course is intended to provide students with a strong base of core knowledge and skills that can be used in a variety of health science career pathways. (1/2 credit) *Prerequisite: Biology 1 OR Accelerated Biology 1*.

ONLINE ANATOMY 2

This course is the second part of the anatomy series. This course completes the study of the human anatomy by studying the cardiovascular, respiratory, integumentary, lymphatic, and immune, as well as the digestive, urinary, and endocrine systems. The course wraps up with a section on human reproduction and development. Each section continues the discussion of the major body systems, as well as common diseases and disorders associated with each system. Students will investigate basic medical terminology as well as human reproduction and development. Students are introduced to these fundamental health science concepts through direct instruction, interactive tasks, and practice assignments. This course is intended to provide students with a strong base of core knowledge and skills that can be used in a variety of health science career pathways. (1/2 credit) *Prerequisites: 70% in Introduction to Anatomy 1*.

CHEMISTRY 1



This course is designed for the academic 10th or 11th grade student as a college preparatory course. The topics explored include classification of matter, chemical reactions and equations, molar relationships, stoichiometry, and gas laws. Investigative labs, research, and reports are integral to this course. Laboratory included. (1 credit) *Prerequisite(s): 70% Algebra 1, Biology 1, and teacher recommendation.*

ACCELERATED CHEMISTRY



This course is designed for the Accelerated student as an accelerated college preparatory course. The topics explored are the same as Chemistry 1, but more investigative labs, research, and reports are required. Laboratory included. (1 credit) *Prerequisites:* 80% in Accelerated Biology 1 OR 90% in Biology 1, 70% in Accelerated Geometry, and teacher recommendation. No concurrent enrollments.

CHEMISTRY 2



This is a second year chemistry course designed as an intense preparation for college Chemistry. The topics explored include thermochemistry, redox chemistry, reaction rates, chemical equilibrium, acid-base chemistry, nuclear chemistry, organic chemistry, and electrochemistry. Extensive lab experience and individual research are included. This course prepares students for careers in chemistry, medicine, engineering, nursing, health technology, and other related science fields. Laboratory included. (1 credit) *Prerequisites: 80% in Chemistry 1, 80% in Biology 1 OR 70% in Accelerated Biology 1, 70% in Accelerated Chemistry 1, and teacher recommendation.*

ADVANCED PLACEMENT CHEMISTRY



AP Chemistry is a **college level** course that provides a systematic introduction to the main principles of chemistry and emphasizes problem solving. It is designed for the highly motivated science student seeking a second level chemistry course in grades 11 and 12. The topics explored are similar to those in Chemistry 2, but are taught at the college level. This course is fast paced and designed to prepare students for the AP Chemistry Exam, which may qualify the student for college credit. Students will experience intense and advanced laboratory activities. **This class meets 7 periods per week.** (1.4 credits) *Prerequisites: 90% in Chemistry 1, 90% in Algebra 2 OR 80% in Accelerated Chemistry 1, 80% in Accelerated Algebra 2, and teacher recommendation.*

PHYSICAL SCIENCE



This course is a class in which students will study the principles of chemistry and physics that include matter, energy, structure of atoms, chemical reactions, forces, and motion. Laboratory included. (1 credit) *Prerequisites: Introduction to Scientific Methods, Biology 1, Algebra 1, and teacher recommendation.*

PHYSICS



This course is designed for the academic student as a college preparatory course. The topics explored include the nature and cause of motion, resolution and cause of forces, curvilinear motion, heat, work, waves (sound and light), optics, fundamentals of electricity, and magnetism. Laboratory included. (1 credit) *Prerequisites: 70% in Chemistry 1, 70% in Geometry OR 60% in Accelerated Chemistry 1 and 60% in Accelerated Geometry, and teacher recommendation. No concurrent enrollments.*

ADVANCED PLACEMENT PHYSICS 1



AP Physics 1 is an algebra-based, introductory **college-level** physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. This course is fast paced and designed to prepare students for the AP Physics 1 Exam, which may qualify the student for college credit. Students experience intense and advanced lab activities. *Prerequisite(s): 85% in Accelerated Chemistry, 85% in Accelerated Algebra II, OR 90% in Chemistry 1 and 90% in Algebra II, and teacher recommendation. No concurrent enrollments.*

ADVANCED PLACEMENT PHYSICS 2



AP Physics 2 is an algebra-based, introductory **college-level** physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. This course is fast paced and designed to prepare students for the AP Physics 2 Exam, which may qualify the student for

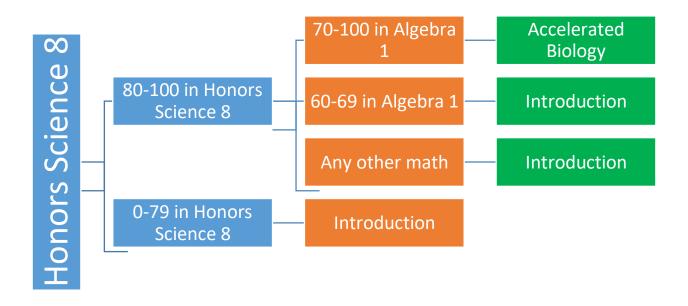
college credit. Students experience intense and advanced lab activities *Prerequisite(s)*: 85% in Accelerated Chemistry 1 OR 90% in Chemistry 1, and Algebra 3/Trig OR Pre-Calculus, and teacher recommendation.

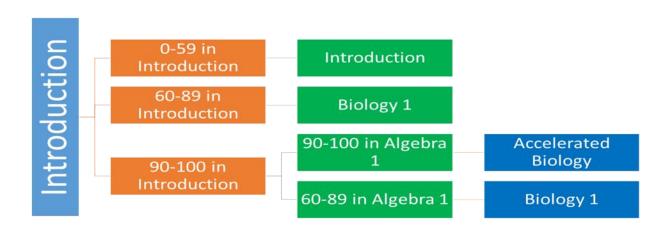
ASTRONOMY ½ CREDIT

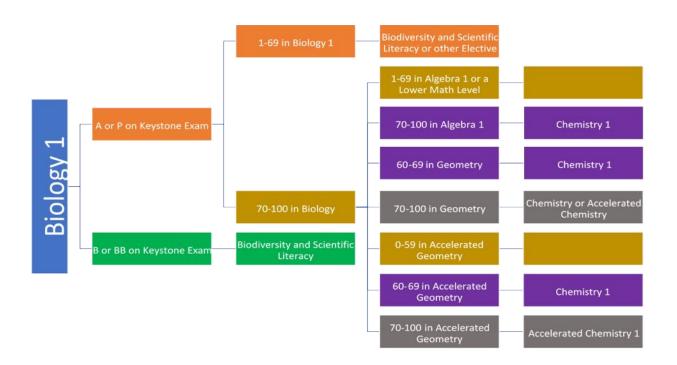
This course is an elective designed as a multidisciplinary approach to studying space science. The topics explored include the universe, solar systems, galaxies, stars, and stellar evolution. In addition to the history of astronomy, emphasis is also placed on the current night time sky, as well as the stars and constellations for each season.

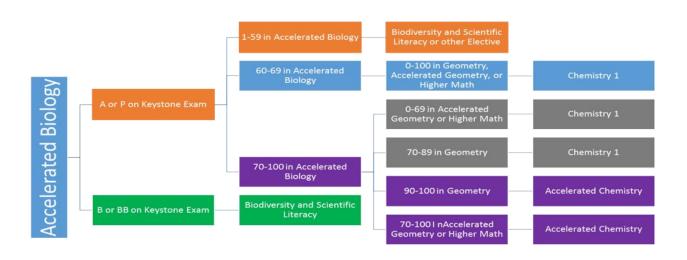
COMPUTER PROGRAMMING

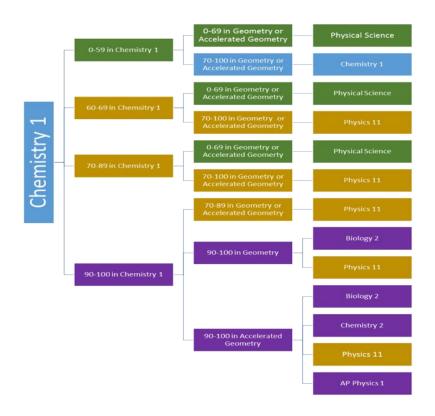
Computer programming is a course designed for those students contemplating a career in engineering, technology, or the sciences. Students will learn and program in Alice and BASIC. Recommended for students possessing an above average GPA and able to handle a rigorous curriculum with individual work. Grades 10, 11, 12. One year, one credit. A previous computer course or proficiency in computer use is necessary.

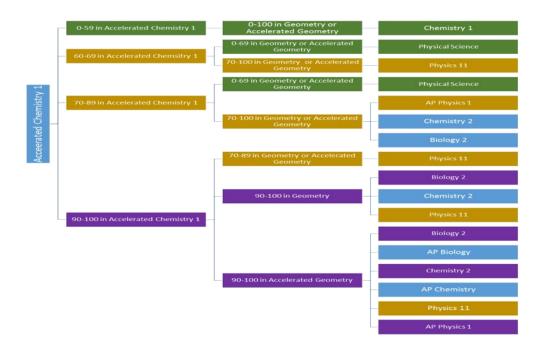












FOREIGN LANGUAGE COURSE DESCRIPTIONS

ALL FOREIGN LANGUAGE COURSES MEET NCAA GUIDELINES.



Prerequisites:

Students who have completed a year of language with a C (70%) average should be permitted to continue their study of language to the next level unless their language teacher suggests otherwise. These suggestions and/or recommendations will be submitted to the counseling office by the individual teacher prior to the scheduling of classes for the new school year.

FRENCH I

Consists of a careful blend of listening practice, guidance in speaking, and attention to vocabulary building, reading practice, and grammar study. An introduction to French culture is also provided.

FRENCH II

Provides for listening and speaking skills while emphasizing careful development of reading and writing. Grammar review and extension give students both understanding of and practice in grammatical principles. The study of culture is continued at this level.

FRENCH III

Continues the development of aural-oral and reading skills begun in French I and II. The emphasis at this level is on creative use of language. There is extensive work in grammar, reading, and writing.

FRENCH IV

Continues the practice of aural-oral development. Advanced grammar and extensive reading are included. Oral and written analyses of literary works are stressed. The course prepares students for college placement.

GERMAN I

This is a basic introductory course stressing the speaking and understanding of the German language. Useful, everyday vocabulary is taught through a variety of methods, such as: internet activities, cooperative learning drills, listening drills and partner/group activities.

GERMAN II

Students will explore city life, vacation/travel and student life as they become familiar with vocabulary within thematic topics. Language proficiency in listening, speaking, reading and writing is stressed.

GERMAN III

Students continue with thematic topics, such as: home life, typical family life and leisure time. Grammar concepts and language structures are stressed in order to achieve a higher level of language proficiency in listening, speaking, reading and writing.

GERMAN IV

This is a more concentrated course stressing the student's self-expression through the spoken and written word. Short stories are utilized to improve reading and listening skills which are assessed through written and oral assignments.

ITALIAN I

Italian I is designed for students to begin a formal study of the Italian language and culture. The interactive approach in this course encourages oral proficiency, attentive listening, accurate writing, and reading for comprehension through diverse, proficiency-based activities. Basic conversational vocabulary and grammar are stressed. Authentic materials, and culture are integral parts of this course. Developing foreign language study skills and establishing a solid base for further language study are additional goals of this course.

ITALIAN II

Prerequisite: C or better in Italian I

The main objective of this course is to increase oral proficiency, hone listening skills, improve writing accuracy, and continue to read for comprehension. These goals are accomplished by diverse, proficiency-based activities. Although there is a considerable emphasis on grammar at this level, the focus of this course is practical and situational vocabulary. Development of functional use is stressed to provide students with the communicative skills needed to survive in Italy. Italian materials and films provide additional enrichment and variety to this course.

ITALIAN III

Prerequisite: C or better in Italian II

This course is designed to increase the focus of oral proficiency and fine-tune reading and listening comprehension as well as writing skills. These goals are accomplished by diverse, proficiency-based activities. The emphasis is on expanding grammar at this level, through practical and situational vocabulary. Development of functional use is stressed to provide students with the communicative skills needed to survive in Italy. Italian materials and films provide additional enrichment and variety to this course. The primary goal is to achieve competency in the spoken language, along with more complex skills in reading and writing. A variety of texts (written, audio-visual, etc.) are introduced to present contemporary Italian culture. Students' progress is evaluated through oral and written exams, homework assignments, and participation in class.

ITALIAN IV

Prerequisite: C or better in Italian III

This sequence aims to develop skills and areas of competence acquired in Italian 1, 2, and 3, while teaching students to produce more authentic and more accurate Italian speech, comprehend more sophisticated structures in written and oral form, and broaden their understanding of contemporary Italian culture and society. A variety of texts are incorporated (authentic written materials, songs, film, short stories) to present contemporary Italian culture. Students' progress is evaluated through oral and written exams, homework assignments, and participation in class.

LATIN I

The first year of Latin is an introduction to the language. It focuses on English definitions and derivatives of Latin words which are used to structure sentences that are translated from Latin to English. The students learn basic Latin grammar and sentence construction through the presentation of stories in their textbook, Ecce Romani, which also demonstrate daily life, culture, and historical events.

LATIN II

The second year of Latin continues to build upon the concepts introduced in the first. The stories become longer and more complicated, including all 6 verb tenses by the end of the curriculum. The study on history also continues, concluding with the 2nd Punic War and its aftermath.

LATIN III

Latin III offers students the opportunity to use their accumulated Latin knowledge, even as they continue to build upon it. While the majority of the course continues to use the Ecce Romani textbook, supplemental material is taken from the works of Pliny the Younger, allowing students to read a first-hand account of the eruption of Mt. Vesuvius.

LATIN IV

This course completes the student's study of Latin grammar, which allows them to read several selections in Latin, including works from Caesar, Catullus, Ovid, Martial, and Vergil.

SPANISH I

The first level is an introduction to the basic language structure. Students will hear, speak, read, and write Spanish and become acquainted with where Spanish is spoken and the customs and cultures of those countries.

SPANISH II

The second level is a continuation of the basic language skills and knowledge. Oral and aural skills are practiced as are reading and writing skills. The study of Spanish customs and culture is continued.

SPANISH III

At this level the students continue the study of grammar and culture and expand their oral and aural abilities.

SPANISH IV

This course refines the students' oral, aural, and written skills. A variety of materials and activities are employed as the students advance their grammar and cultural studies

BUSINESS EDUCATION DEPARTMENT/COMPUTERS COURSE DESCRIPTIONS

THESE 4 COURSES WILL BE OFFERED TO STUDENTS IN ANY GRADE AND WILL BE OFFERED VIA THE HOPEWELL CYBER ACADEMY.
ALL COURSES ARE SEMESTER COURSES (1/2 CREDIT).

COMPUTER LITERACY GRADES 9–12

In this ONLINE course, students will gain the basic computer skills they need to become confident and prepared to use technology at school, at work, and in everyday life. Topics include search engines and web browsers, keyboarding and typing, presentations and image editing, and spreadsheets. Students will also become familiar with a number of free, web-based applications, such as Gmail, OpenOffice.org, Blogger, Google Calendar, and Google Reader. The student must be able to read and follow detailed on-screen instructions and be able to save and open network computer files independently.

INTRO TO BUSINESS A GRADES 9–12

In this ONLINE introductory course, students learn about the roles of business and marketing in the free enterprise system and the global economy. Basic concepts of economics systems, job seeking and workplace skills, and planning and launching a business are introduced to provide students with a strong background as they prepare to make important decisions as consumers, wage earners, and citizens. The real-world impact of technology, effective communication, and interpersonal skills is also explored through hands-on software projects and written assignments.

INTRO TO BUSINESS B GRADES 9–12

In the conclusion of this two-part ONLINE course, students build on the knowledge gained in part A as they learn about the roles of business and marketing in the free enterprise system and the global economy. Basic concepts of economics systems, job seeking and workplace skills, and planning and launching a business are introduced to provide students with a strong background as they prepare to make important decisions as consumers, wage earners, and citizens. The real-world impact of technology, effective communication, and interpersonal skills is also explored through hands-on software projects and written assignments.

PREREQUISITE(S): Introduction to Business A

LEADERSHIP AND CAREER DEVELOPMENT GRADES 9-12

This ONLINE course is for students who wish to learn how to choose a college or career, complete a college/job application, apply for scholarships, prepare for a career by building your resume and cover letter, and develop interviewing skills.

PERSONAL KEYBOARDING GRADES 9-12 1/2 CREDIT

Personal Keyboarding is a one-semester, pass/fail course taught on personal computers and is designed to introduce the keyboard. Students learn to key all letter, number, and symbol keys by touch using correct fingering and posture techniques. The Micro-Type Pro software program is administered which allows students to receive individualized, hands-on practice until skill is mastered. Students are also taught basic word processing skills while learning to format documents. This course is highly recommended for completion before taking other computer-related courses. It will provide an excellent background for further computer training and continuing application of the skills in many other high school courses.

CODING AND WEB PAGE DESIGN GRADES 9-12 1/2 CREDIT

Coding and Web Page Design is a one semester course designed to introduce students to designing web pages through coding. Students will be introduced to coding through easier to learn languages that relate to Web Page creation (HTML, CSS and JavaScript). The student will learn how to create and style his or her own Web Pages using code he or she created. Students will work in a self-paced individualized environment and learn to use on-line resources to assist them in their coding.

ACCOUNTING I GRADES 10–12

In Accounting I, the students learn to keep the financial records of a business. During the first semester the students work for a service business organized as a proprietorship, and during the second semester they work for a merchandizing business organized as a partnership. The course guides the students from understanding concepts to applying those concepts in manual applications and then applying the concepts in computer applications using Automated Accounting software. Accounting I enables students to gain insight into the operation and function of a business enterprise; to build a foundation in accounting principles and terminology; to establish an understanding of how the basic principles of accounting can be adopted to personal use; to develop habits of accuracy, neatness, and thoroughness; and to develop an understanding of how to prepare, read, and interpret simple business reports and financial statements. It is designed for students with a variety of career objectives including the accounting field and related business fields. It is highly recommended for students planning to study any area of business while in college.

ACCOUNTING II GRADES 11-12 1/2 CREDIT WEIGHTED

In Accounting II, students work for a merchandising business organized as a corporation. They learn accounting principles for departmentalized accounting, payroll, depreciation, inventory, accounting control systems, adjustments, and financial statements. After the concepts are learned and practiced, the students apply those concepts in computer applications using Automated Accounting software. They learn to read and analyze the financial statements prepared by hand and by the computer. This course will enable students to understand the importance of systematic, accurate records as a guide to successful business management and to gain skill in the use of accounting to prepare those records. The course will create a sound basis for majoring in any business field for those who wish to continue their education as well as prepare for the workplace. **Prerequisite**: Accounting I.

BUSINESS LAW GRADES 10-12 ½ CREDIT

Business Law II is a one-semester course designed to build on student knowledge of law in both the private and business arenas. Legal knowledge is expanded from Business Law I to include the following topics:

- A. Ethics and Forms of Business
- B. Crimes and Torts
- C. Contract offer and acceptance
- D. Consideration
- E. Sales contracts
- F. Consumer protection
- G. Legal considerations in marriage and divorce
- H. Career Exploration

Emphasis is placed on the practical application of legal principles to everyday situations. Textbook resources include learning via critical thinking exercises, enrichment activities, and

Prerequisite: Practical Justice or Business Law I.

FINANCE FOR PERSONAL AND BUSINESS APPLICATION GRADES 10–12 ½ CREDIT

A one-semester course designed to introduce and explain the finance aspect of business and life including credit management, money management, investing, banking, consumer purchasing, stocks, and financial security. Students will become familiar with all aspects of the finance world including managing their own finances and uses the stock market to understand the economy. The information offered in this course would be applicable to college bound students as well as those who enter the workforce upon graduation from high school. Students will compete in a "stock market" contest tracking the movement of stocks of their choice and a budget simulation. Emphasis will be put on dollar value earned and fluctuation of each particular stock.

YEARBOOK GRADES 9*, 10-12

This course is open to any student who wishes to participate in the production of the Viking Yearbook. The student will learn all the essentials of a yearbook publication including, but not limited to, design, layout, writing and reporting skills, photography, finance, and advertising. In addition, the student will work in a team environment; learn to plan and meet deadlines; and develop teambuilding, idea generation and problem-solving skills. The course will be graded on the normal scale. *With 8th grade yearbook experience and sponsor recommendation

WORD/EXCEL - COMPUTER APPLICATIONS I GRADES 9-12 1/2 CREDIT

Computer Applications I is a one-semester course introducing word processing (Microsoft Word) and electronic spreadsheet (Excel) software. Many of the documents used in completing the assignments have already been keyed, so it is not a keyboarding course. Using these documents, the students work through exercises to become familiar with the features of the software. Topics will include basic, formatting, and automatic Word features as well as tabs, tables, graphics, newsletters, research tools, templates, mail merge for letters, envelopes, and labels. Students will be introduced to basic Excel features as well as entering formulas and functions, sorting and filtering data, and working with pictures, templates, hyperlinks, comments, and research tools. Students will also learn to consolidate workbook data and create and modify charts. An introduction to PowerPoint basics may also be included, time permitting. This course will enable students to create professional looking documents for school classes, college, and the workplace.

ADVANCED WORD/EXCEL, COMPUTER APPLICATIONS II GRADES 9–12 ½ CREDIT

Newly revised course, Computer Applications II is a one-semester course introducing advanced applications for spreadsheets (Excel) and word processing (Word) software. Using existing documents, the students work through exercises to become expert at advanced features of the two most widely used Microsoft Office applications. Word topics will include working with and creating styles and templates, building forms, advanced graphics, customizing Word and integrating Word with other programs. Excel topics include automating worksheets through the use of macros, enhancing charts, using what-if analysis, and analyzing data with pivot tables. Upon completion of the course, students should be prepared for MOS (Microsoft Office Specialist) testing and certification in both Word and Excel. These certifications can be valuable, industry recognized enhancements to a student's list of skills. This course is essential for college classes as well as preparing students for the MOS Exam and jobs in the workplace.

ENTREPRENEURSHIP GRADES 11-12 1/2 CREDIT

Entrepreneurship is a semester course which prepares students to learn the entrepreneurial process and to obtain experience in owning and managing a business. It will provide students with a flexible background that will enable them to adjust to career shifts and meet the demands of a constantly changing marketplace. Entrepreneurship will encompass self-assessment, product selection/service, types of ownership including franchising, determining location and customers, marketing the business, financing, and managing employees. Developing a business plan and real-world exposure to problems encountered in being an entrepreneur will also be discussed. Prerequisite: Finance for Personal and Business Application.

INTRO TO DIGITAL AWARENESS GRADES 9* 1/2 CREDIT

This class aims to prepare students for digital awareness both through citizenship and applications, for a digital citizen knows how to harness the power of technology safely, respectfully, responsibly, and effectively. Students will know how to make safe, responsible, and respectful choices to harness the learning potential of digital media in a 24/7 connected world through examination of nine elements of digital citizenship.

*Note: This is a required class for all incoming 9th graders.

EVOLUTION OF GAMES GRADES 9*, 10–11 ½ CREDIT

"Gaming" doesn't only mean "video games". Gamers also play board games, card games, simulations, and participate in interactive stories. This course gives students the opportunity to explore the history of games, gain an understanding of how games reflect historical context and culture, and determine how game designers made use of available technology and resources. The course shows how professional game designers utilized dynamics from ancient games in today's blockbuster hits by studying and playing the games of Babylon, Egypt, Rome, Europe and India. Students' prototype and play games, as well as, get hands-on experience "modding" an existing game to create a game of their own.

GAME DESIGN GRADES 10-12 ½ CREDIT

This course breaks down the game design process step by step. You will learn the fundamentals of game mechanics, game art, and game narratives. Throughout the course students will be building, playtesting, and continually improving team built apps that can be played with friends and added to your game portfolio. In this course we use CodeSpark, Game Star Mechanic, Game Salad, Swift Playgrounds and Apple Xcode.

Prerequisite: Evolution of Games.

ELECTIVES - ARTS DEPARTMENT COURSE DESCRIPTIONS

BAND GRADES 9-12

Band students in grade 9-12 are scheduled as a course.

All students who elect band will participate in marching band. During the fall the class work will continue with laboratory experience twice a week on Wednesday and Thursday from 3:00 p.m. to 5:00 p.m., two after school rehearsals a week. All rehearsals and practices are mandatory. There will be mandatory dress rehearsals prior to all concerts. Performances will include 10 football games plus playoff possibilities, pep assemblies, basketball games, concerts, community parades, Baccalaureate, graduation and Band Festivals. Prior to the start of school, a two week band camp will be provided at no expense to prepare for the marching experience. A one week ½ day camp is also provided for freshman, percussion and Vikettes. All Camps and Performances are mandatory. **Prerequisite:** Junior High Band or Teacher recommendation.

JAZZ BAND GRADES 9-12

Jazz band class is an elective music course for students who perform on jazz instruments (saxophone, trumpet, trombone, or rhythm section). Students will learn and rehearse music for jazz performances. All jazz band students also participate in concert band and marching band events. **Prerequisite:** Junior High Band or Teacher recommendation.

CHORUS GRADES 9-12

This class is designed for the student who wants to master the skills of Chorus. Daily class work is directed toward a particular performance. Students in this class will sing more difficult music as well as develop the higher skills of music performance. All students are required to participate in three annual concerts (Winter Concert, Pops Concert, and Spring Concert) In addition, occasional performances are held for civic functions and other school activities. There are also three mandatory after-school dress rehearsals preceding each concert.

ART

ART I GRADES 9-12

Art is a fundamental course emphasizing the study of Elements of Art and Principles of Design, color theory, vocabulary, art criticism, art history, and aesthetics. Students become competent in the use of various materials and basic processes as they develop their own personal modes of expression.

ART II GRADES 10-12

Art II builds upon the student's technical skills and primary knowledge of the Elements and Principles developed in Art I. Areas of concentration include drawing, graphic design, three-dimensional design, ceramics, watercolor painting and work in the artist's personal sketchbook. Emphasis is placed on sculpture, art history and aesthetics. **Prerequisite**: Art I and teacher recommendation based upon portfolio assessment.

ART III GRADES 11-12

Art III is a course designed for the student who wishes to improve artistic technique and to advance his/her understanding of the visual world. Coursework includes advanced drawing with a focus on the study of human anatomy, ceramic techniques, acrylic painting, the study of 19th

and 20th century art history, textile design and work in the artist's personal sketchbook. **Prerequisite**: Art II and teacher recommendation based upon portfolio assessment.

ART IV GRADE 12

Art IV provides opportunities to the highly motivated and/or career oriented student to increase artistic confidence and maturity through the development of a multimedia portfolio. Emphasis is placed on a studio approach to studies in oil painting, printmaking, ceramics, and advanced figure drawing. This course also includes a special independent study component which provides a platform for individualized student inquiry and creation. **Prerequisite**: Art III and teacher recommendation based upon portfolio assessment.

DRAWING AND PAINTING GRADES 10-11 1/2 CREDIT

Drawing and Painting is a semester course that is designed to develop the student's creative and technical skills in a variety of drawing and painting media. Students will create original two-dimensional artworks through exploration and utilization of diverse materials, formats and subject matter. Media studied include pencil, pen and ink, charcoal, watercolor, acrylic and oil painting.

Prerequisite: Art I

FAMILY AND CONSUMER SCIENCES COURSE DESCRIPTIONS

FAMILY & CONSUMER SCIENCES (PREREQUISITE FOR ALL OTHER COURSES)

This course examines life management skills in the areas of personal and family living; wellness, nutrition, and foods; financial management; living environments; appropriate child development practices; fashion and clothing; and job readiness. Emphasis is placed on students applying these skills during their teen years. Through simulated experiences, they learn to fulfill their responsibilities associated with the work of the family and community. FCCLA leadership activities will be integrated into this course to provide an opportunity for early adolescents to develop personal leadership and citizenship skills.

Unit 1: Personal, Family, & Community Living

- Personal Development (self-awareness, values, goals, decision making strategies)
- Family Relationships (coping with challenges such as grief, divorce, communication)
- Peer relationships (developing healthy relationships, dating, abuse)
- Career options and job readiness with FCCLA

Unit 2: Consumer Management

- Money Management (creating budgets, goal setting, savings)
- Consumer issues (identify theft, credit cards)
- Consumer rights & practices

Unit 3: Children & Parenting Skills

- Teen pregnancy
- Responsibilities (safety, abuse, care taking of children)
- Parenting styles, positive guidance, financial liabilities

Unit 4: Fashion & Clothing

- Personal wardrobe (explore designers, history of fashion)
- Laundry (care and stain removal)
- Basic repairs (hand sewing, buttons)
- Community outreach

Unit 5: Food & Nutrition

- Safety & Sanitation
- Equipment & Knife skills
- Basic food preparations with lab
- MyPlate

Unit 6: Living Environment (Interior Design)

- Elements & Principles of design
- Design & function of space
- Creating a personal space

FASHION AND INTERIOR DESIGN 1/2 CREDIT, PREREQUISITE FCS 1

Students will gain an understanding of the elements and principles of design and utilize them to create elaborate living spaces. They will learn to analyze a client's need and select appropriate

colors, fabrics, furnishings, lighting, and furniture. Students will prepare sample rooms and floor plans while being exposed to various career opportunities in Interior Design.

Units to be covered:

- Elements and Principles of Design
- Architectural Styles of Homes
- Furniture Designs
- Home Accessories
- Textiles/Fibers
- Lighting
- Interior Backgrounds (Wall & ceiling treatments, floor treatments, window treatments)
- Floor Plans
- Client Design & Presentation
- Careers

Students will explore the role of fashion in everyday life, to develop a sense of personal style, to explore careers related to the fashion industry, and to learn the fundamentals of clothing construction, including operating a sewing machine and using a commercial pattern to construct a garment.

Units Include:

- Basic sewing equipment/safety
- Understanding/following a pattern
- Build a sewing portfolio of seams and types of stitches

CHILD DEVELOPMENT 1/2 CREDIT, PREREQUISITE FCS 1

Students will develop a positive understanding of the growth and development of children and parenting skills. Class activities will emphasize the responsibilities and challenges of parenting focusing on prenatal development through the age of three.

Units:

- Prenatal Care and Development
- Birth and Delivery
- Infancy
- Toddlerhood
- Developmental theorists
- Brain Development
- Growth & Development 1-3 years (Physical, Intellectual, Emotional, & Social)
- Evaluating child services
- Careers

BAKING & DESSERTS ½ CREDIT, PREREQUISITE FCS 1

In this course, the student will prepare yeast breads, rolls, cakes and other dough-based products from scratch. The student will produce and decorate dessert products. The student will work with assorted pastry techniques and will learn techniques of storage and safety when working with the various foods produced.

Units Include:

- Quick Breads/Yeast Breads
- Cakes/Cookies
- Pies
- Candy

- Decorating
- Party Planning
- Fruit

INTERNATIONAL FOODS ½ CREDIT, PREREQUISITE FCS 1

Through this course, students will explore a variety of culturally specific foods and preparation techniques. Students will explore the influences on various cuisines, including geography, climates, natural resources, and economics.

Units include the following countries: France, Germany, Spain, Italy, Greece, Israel, Mid-East, African, Russia, India, China, and Japan

CULINARY ARTS ½ CREDIT, PREREQUISITE FCS 1

Students will develop an understanding of basic nutritional concepts through instruction in nutritional requirements and the planning, purchasing, preparation, and service of nutritious foods. Students will also explore careers and employment opportunities in the area of food and nutrition and compare these careers to personal abilities and characteristics.

Units Include:

- Meat/Poultry/Fish
- Eggs
- Dairy
- Vegetables
- Salads
- Casseroles
- Soups

TECHNOLOGY EDUCATION COURSE DESCRIPTIONS

ROBOTIC DESIGN AND CODING FUNDAMENTALS GRADES 9-12 1/2 CREDIT

This is an introductory course in the basics of robotic construction and both graphical and text based coding. The course is structured around iterative, engineering design processes, real-world applications and opportunities for students to build teamwork and collaboration skills. Students will engage in hands-on engagements that encourage creative solutions and innovation through experimentation.

INTRODUCTION TO ANIMATION GRADES 9-12 ½ CREDIT

This class develops the basic skills necessary to produce digital character based animation, titles, and visual effects using a variety of software tools. Students will learn and experience the arts of storytelling through animation as well as evaluate these concepts in current media venues.

CADD I: DESIGN FUNDAMENTALS GRADES 9-12

This is an introductory course in freehand sketching and computer-aided drafting and design. Students will be taught basic technical drawing fundamentals and then progress to basic AutoCAD interface techniques, commands, and tools.

CADD II: INTERMEDIATE DESIGN GRADES 10-12

This is course is aimed at refining and further developing design, drawing and drawing productivity techniques using AutoDesk software tools. Students will continue their exploration of commands, tools, and technique is designing both 2D and 3D models through a combination of demonstration and practical exercises. **Prerequisite:** CADD I

CADD III: ARCHITECTURE DESIGN FUNDAMENTALS GRADES 11-12

This is an exploratory course in architecture and home design. Students will be taught the fundamental skills and concepts necessary for architectural planning, designing and drawing utilizing AutoDesk's Revit tool. **Prerequisite:** CADD I, CADD II

PHYSICAL EDUCATION COURSE DESCRIPTIONS

PHYSICAL EDUCATION GRADES 9-12 1/2 CREDIT

Physical Education emphasizes developing and maintaining a high level of individual fitness. The curriculum is also designed to provide a variety of activities that will stimulate enjoyment of team games and to develop skills for lifetime activities. Adaptive activities and evaluation is provided for those with physical limitations that have been documented by a medical doctor.

HEALTH EDUCATION GRADE 10 ½ CREDIT

Health Education is a course designed to provide students with the skills needed to make responsible decisions. Units covered in this semester course include: Mental, Emotional and Social Health, Relationships, Nutrition, Growth and Development, Alcohol, Tobacco and Other Drugs, CPR, STI's and HIV Education and Personal Safety. The objective is to provide the students with total awareness of wellness leading to a high quality of life.

PHYS ED ELECTIVE COURSE GRADE 11/12 ONLY

WEIGHT TRAINING/SPORT CONDITIONING GRADE 11/12 ½ CREDIT

The course will focus on fitness, placing a higher emphasis on individual sport performance and/or personal fitness plans, rather than the traditional physical education curriculum. Students can expect to learn various training methods and techniques to enhance health Related components of Fitness while incorporating a strong emphasis on safety and injury prevention. Students and athletes wanting to train for a specific sport will also be able to learn how to design specific workouts that include pre/post assessments, training and nutrition goals. This course would be a great elective for students who appreciate the benefits of an active lifestyle, who enjoy working out, or who are planning on entering a career in the wellness field.

BEAVER COUNTY CAREER & TECHNOLOGY CENTER (BCCTC)

BCCTC - GRADES 10-12

The Beaver County Career & Technology Center (BCCTC) is an extension of Hopewell High School. Students attend the BCCTC in one of the programs designed to prepare them to enter the job market with viable trade skills.

Application is made in January of the sophomore year and participation in BCCTC training occurs in the next two school years as students spend one half of their school day at the BCCTC. The selection of candidates who will attend the BCCTC is made based upon the following belief: Students selected should be those who can best profit by the program and will most probably succeed. This is determined by evaluating students' interests, abilities, and assessing school performance.

The minimum requirement is that a student must pass all ninth and tenth grade required subjects. A special needs tenth grade student may qualify for early admissions to the BCCTC by recommendation of their counselor and by final approval of the building principal.

The Beaver County Career and Technology Center (BCCTC) is available to all of our students who are interested in investigating and/or pursuing a career in a variety of 17 vocational, occupational, and technical careers.

The BCCTC offers twelve 2 year programs as well as five 3 year programs. Between these programs, there are over 35 different types of certification offered.

In their senior year, a work study through BCCTC's cooperative education program is offered to students who meet the BCCTC requirements. This work study program enables students to work within their prospective career industries to gain valuable experience preparing them for the growing job market.

The BCCTC has matriculation agreements with several local colleges and trade schools. This agreement provides the students who graduate from the BCCTC, the opportunity to further their education by carrying their credits earned at the BCCTC with them; saving them money and time. More than 70% of the BCCTC graduates continue their education in colleges, technical schools, or apprenticeships.

If the student does not wish to pursue further education after graduation, a placement service established at the BCCTC, will do everything possible to help students find employment in the area for which they are trained. All seniors will be provided with copies of their resumes when they graduate.

The following programs are offered to grades 10-12:

- Business Information Systems*
- Collision Repair and Technology*
- Electrical Occupations*
- HVAC (Heating, Ventilation and Air Conditioning)*
- Cosmetology (this is a 3 year program and it is highly preferred to register 10-12 grades for state licensure hours requirement)

^{*}also offered as 2 year programs

The following programs are offered grades 11 & 12:

- Machine Tool Technology
- Welding
- Commercial Art & Design
- Graphic Arts & Printing
- Automotive Technology
- Logistics & Materials Management
- Culinary Arts
- Greenhouse/Landscaping
- Health Occupations
- Veterinary Assistant
- Carpentry
- Masonry/Bricklaying

<u>Note:</u> Algebra I and Geometry are offered at BCCTC. One full year of BCCTC Algebra I or Geometry is a ½ credit. Therefore, two years of BCCTC Algebra I and/or two years of BCCTC Geometry must be completed to earn one full math credit in the respective class.

SEE COUNSELOR OR BCCTC WEBSITE FOR MORE INFORMATION.

^{*}Students earn 3 credits each year of BCCTC attendance.

Beaver County Career & Technology Center 145 Poplar Avenue • Monaca, PA 15061 • 724-728-5800

PROGRAM OF STUDIES 2020-2021



Choose Your Future

Your Career Starts Here!

Mission Statement

The mission of the Beaver County Career & Technology Center is to prepare graduates to be well-trained technicians, ready for the workplace of today and tomorrow, aware of the world around them and prepared for the changing technology.

BEAVER COUNTY CAREER & TECHNOLOGY CENTER

Mrs. Mary Jo Kehoe	President
Mrs. Lesia Dobo	Vice-President
Mr. Bruce Woodske	Treasurer
Mrs. Christy Hughes	Secretary
Mrs. LeeAnn Prodonovich	

School District	<u>Alternate</u>	
Aliquippa	Ms. Janice Cain	
Ambridge	Mr. Scott Angus	
Beaver	Ms. Wende Dikec	
Big Beaver Falls	Ms. Darcelle Slappy	
Blackhawk	TBD	
Central Valley	Mr. George Zaritski	
Freedom	Mrs. Mary Ann Petcovic	
Hopewell	TBD	
Midland	Ms. Cheryl Williams	
New Brighton	Ms. Christeen Ceratti	
Riverside	Mr. Seth Foley	
Rochester	Mr. Brian May	
South Side	Mr. Craig Stewart	
Western Beaver	TBD	
	Aliquippa Ambridge Beaver Big Beaver Falls Blackhawk Central Valley Freedom Hopewell Midland New Brighton Riverside Rochester South Side	

ADMINISTRATIVE STAFF

Mr. David Wytiaz	BCCTC Administrative Director
Miss Laura J. DelVecchio	BCCTC Assistant Administrative Director
Dr Fric G Rosendale	Chief School Administrator/Superintendent of Record

2019-2020 **i**

ADMINISTRATIVE SUPPORT STAFF

Mrs. LeeAnn Prodonovich	Administrative Assistant
	to the Administrative Director
Mrs. Linda Mitchell	Business Office Assistant
Mrs. LeeAnn Prodonovich	Administrative Assistant
Miss LeeAnn Robison	Administrative Assistant
Mrs. Lisa Miklos	Administrative Assistant

INSTRUCTIONAL ASSISTANTS

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PROGRAM OFFERINGS AND STAFF

Automotive Technology	Alan Valasek
Business Information Systems	
Career Assessment, Recruiting	
& Marketing Specialist	Elizabeth Lanshcak
Carpentry	David D. Liptak
Collision Repair Technology	
Commercial Art & Design	
Cooperative Coordinator	
Cosmetology	
Cosmetology	Laurie Conti
Culinary Arts	
Electrical Occupations	
First Aide Attendance Clerk	
Graphic Arts/Printing	Nicole Demark
Greenhouse/Landscaping	
Health Occupations	
HVAC-R	Daniel Ostronic
Learning Facilitator	Susan Chance
Learning Facilitator	Jamie Kuriger
Logistics & Materials Management	Christopher Graham
Machine Tool Technology	George Metz
Math Instructor	
Masonry/Bricklaying	Mark LaMont
Career Counselor	Anne Liller
Perkins School Counselor	Burt Mamula
Security	Richard Chapala
Veterinary Assistant	
Welding	Carl Cosentino



BEAVER COUNTY CTC PROVIDING CAREER OPPORTUNITIES

MESSAGE FROM THE DIRECTOR The Beaver County Career & Technology Center is a full-time career and technology center that serves the fourteen (14) school districts of Beaver County in Pennsylvania. Our school is dedicated to providing a program of high quality, cutting-edge technical training integrated with a strong academic education and an emphasis on critical thinking, problem-solving, decision-making, and team-building skills.

Beaver County Career & Technology Center

145 Poplar Avenue Monaca, PA 15061 724-728-5800 724-775-2299 (FAX) www.bcctc.org

Administration:

Mr. David Wytiaz Administrative Director

Miss Laura J. DelVecchio Assistant Administrative HISTORY OF THE BEAVER COUNTY CTC The Beaver County CTC officially opened its doors in the fall of 1978 under the name of the Beaver County Area Vocational Technical School. It is a full-time area vocational-technical school that serves the fourteen (14) school districts of Beaver County in Pennsylvania. The school is located in Center Township adjacent to the Community College of Beaver County.

INDUSTRY LEADERS GUIDE THE WAY The Beaver County Career & Technology Center's curriculum is closely tied to the needs of business and industry. Through twice-yearly Occupation Advisory Committee meetings, advisors guide program development to assure that the curriculum and equipment match the needs and standards of employers. Employers tell us what skills are needed for success in their fields and those are the skills we teach. Instructors align course curriculums with skills employers need for employees to be successful.

"SOAR" (STUDENTS OCCUPATIONALLY AND ACADEMICALLY READY) Since SOAR was introduced at the BCCTC, many positive changes have taken place.

Mission of SOAR: The mission of SOAR is to prepare students for college and careers in a diverse, high-performing workforce.

Goal of SOAR: SOAR is the career and technical Program of Study (POS) educational plan that articulates the secondary career and technical programs to postsecondary degree or diploma or certificate program. SOAR programs lead students into a career pathway that align the secondary courses to a postsecondary program to complete a degree or certificate.

What is SOAR: SOAR is built on programs of study which incorporate secondary education and postsecondary education elements and include coherent and rigorous content aligned with challenging academic standards and relevant career and technical content. These career and technical programs of study include a statewide articulation agreement partnership between secondary schools and postsecondary institutions.

SOAR Supports High Demand Careers: SOAR programs prepare today's student for High Priority Occupations (HPO) which include career categories that are in high demand by employers, have higher skill needs, and are most likely to provide family sustaining wages.

Benefits of SOAR:

- Saving Money on College Tuition
- Saving Time by Shortening College Attendance
- Getting on the Right Career Pathway
- Entering the Job Market Ready
- Getting a Consistent Education

Framework of SOAR:

Secondary Components

Validated Competency Lists (follow directions below to go to the SOAR website):

Go to: www.collegetransfer.net Go to: SEARCH on the top menu

Scroll down to: PA Bureau of CTE SOAR Programs

Enter: Program Name or CIP Code

Enter: Graduation Year

Click: SEARCH for participating colleges

- Alignment to PA Academic Standards
- Articulation to Postsecondary Institutions (www.collegetransfer.net)
- PDE/BCTE Career and Technical Education Program Approval
- End of Program Assessment
- Industry Certification Alignment, if appropriate

We look forward to serving the needs of the students and employers of Beaver County.



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Admissions Information

The Beaver County CTC offers a variety of programs designed to meet students' educational needs and career goals. Students who have an interest and desire to pursue career or technical education should contact their sending school counselor, who will work closely with the Beaver County CTC Assistant Administrative Director to facilitate the enrollment process.

All students apply for admission through their sending school and receive their diploma from their sending school district. A certificate of completion from the Beaver County CTC will be presented to students who have successfully completed their curriculum at our graduation ceremony. There are a limited number of students accepted into a program to allow for individualized, high-skilled instruction. To be considered for enrollment, students should have their application on file at the Beaver County CTC as early as possible.

In the months preceding enrollment, students are presented with course information by the Beaver County CTC Career Counselor assigned at their school and they are also invited to tour the Beaver County CTC during the day or attend our open house in the evening. Students may check with their sending school counselors for scheduled visitation dates.

Students who attend private and parochial schools or are home-schooled are also welcome to attend the Beaver County CTC. These students need to contact the superintendent's office of the school district in which they reside to obtain enrollment procedures.

TUITION AND FEES

Tuition-free public education is provided to high school students through the tax support of citizens and businesses from each of the fourteen Beaver County school districts. The programs offered at Beaver County CTC are elective and some of the programs require that students purchase uniforms. For some programs, there are fees for items that the student will keep, such as a tool kit or books.



Beaver County Career & Technology Center Programs Offered

- *Automotive Technology
- *Business Information Systems
 - *Carpentry
- *Collision Repair Technology
 - *Commercial Art
 Cosmetology
 - *Culinary Arts
 - *Electrical Occupations
 - *Graphic Arts & Printing
 - *Greenhouse/Landscaping
 - *Health Occupations
 - *HVAC-R
- *Logistics Materials Management
 - *Machine Tool Technology
 - *Masonry/Bricklaying
 - *Veterinary Assistant
 - *Welding

^{*} PA Department of Education approved Programs of Study that qualify students for articulated credits throughout the state.

FOURTEEN PARTICIPATING SCHOOL DISTRICTS

Our School is an extension of the educational programs of the fourteen (14) participating school districts. The option of vocational education at the Beaver County CTC gives students a full range of educational choices.

Aliquippa Area School District 800 21st Street Aliquippa, PA 15001-3998 724-857-7500

Ambridge Area School District 855 Duss Avenue Ambridge, PA 15003 724-266-2833

Beaver Area School District 855 Second Street Beaver, PA 15009 724-774-4021

Big Beaver Falls School District 1503 Eighth Avenue Beaver Falls, PA 15010 724-843-3420

Blackhawk School District 500 Blackhawk Road Beaver Falls, PA 15010 724-846-6600

Central Valley School District 160 Baker Road Extension Monaca, PA 15061 724-775-5600

Freedom Area School District 1701 Eighth Avenue Freedom, PA 15042 724-775-7644 Hopewell Area School District 2354 Brodhead Road Aliquippa, PA 15001 724-375-6691

Midland Borough School District 173 Seventh Street Midland, PA 15001 724-643-8650

New Brighton Area School District 3225 43rd Street New Brighton, PA 15066 724-843-1795

Riverside Beaver County School District 318 Country Club Drive Ellwood City, PA 16117 724-758-7512

Rochester Area High School District 540 Reno Street Rochester, PA 15074 724-775-7500

South Side Area School District 4949 State Route 151 Hookstown, PA 15050 724-573-9581

Western Beaver County School District 343 Ridgemont Drive Midland, PA 15059 724-643-9310



FAQ'S

Q. WHAT IS A CAREER & TECHNOLOGY CENTER?

A. It is an extension of the courses of study of your own high school, offering training in occupational, vocational and technical programs. This training will develop attitudes and skills that can lead to employment and/or further education.

Q. HOW IS THE BEAVER COUNTY CTC SUPPORTED?

A. The Beaver County CTC is a school that is owned jointly by the fourteen (14) Beaver County School Districts. Students do not pay a tuition charge to attend.

O. WHO CAN ATTEND THE BEAVER COUNTY CTC?

A. Students enrolled in grades 11 and 12 who reside in Beaver County may attend the Beaver County CTC. Students who are interested in enrolling in the Cosmetology Program must start in grade 10. Beginning with the 2018-2019 school year, students enrolling in Business Information Systems, Collision Repair Technology, Electrical Occupations and HVAC-R may start Beaver County CTC in grade 10. Students enrolled in private schools are also welcome to attend the Beaver County CTC. Adults are encouraged to take advantage of the outstanding adult education offerings at the Beaver County CTC.

O. HOW WILL THE BEAVER COUNTY CTC HELP ME?

A. The education you will receive at the Beaver County CTC will open doors for you. You will learn new skills that are valued by employers. You will experience real-life work situations in your chosen career field, and you will have options to continue your education after high school. Beaver County CTC programs are designed to prepare students of various ability levels to enter jobs in technical and skilled occupations. Most of the students who complete a Beaver County CTC program find employment in their area of study or further their education in college or technical schools. Employers are eager to hire Beaver County CTC students because they have gained hands-on skills and experience and need minimal training. Additionally, students will have the opportunity to earn industry certification(s) that gives them the edge when seeking employment.

O. DOES THE BEAVER COUNTY CTC HELP GRADUATES FIND JOBS?

A. Yes. A placement service is established at the BEAVER COUNTY CTC. Everything possible will be done to help students find employment in the area for which they are trained. A work study program is offered to students during their senior year if they meet the requirements. Also each senior will be provided with copies of their resume when they graduate.

Q. IS COLLEGE AN OPTION AFTER BEAVER COUNTY CTC?

A. About 70% of Beaver County CTC graduates continue their education in colleges, technical schools, or apprenticeships. Beaver County CTC programs provide practical experience to compliment students' academic interests. Almost every program at the Beaver County CTC offers students an opportunity to earn advanced credits through agreements with the Community College of Beaver County and several other educational institutions.

Q. CAN I GAIN WORK EXPERIENCE WHILE I'M LEARNING?

A. During their senior year, qualified students may gain experience in work environments related to their field of study. Options available include job-shadowing activities, clinical experiences, or a cooperative education arrangement with employers, through which students "earn while they learn".

Q. WHAT IS THE PROCESS FOR REGISTRATION FOR THE BEAVER COUNTY CTC?

A. Every high school student has the legal right to attend the Beaver County CTC. Your home school guidance counselor can register you for the Beaver County CTC at the same time you register for other classes. If you have any questions or problems, see your school guidance counselor or call the Beaver County CTC Assistant Administrative Director at 724-728-5800, Ext. 217.

WORK-BASED LEARNING

AT THE BEAVER COUNTY CTC, learning is not confined to the four walls of a classroom. Through a program called Work-based Learning, students have the chance to learn firsthand about various jobs and careers. The program includes three components: cooperative education, job shadowing, and clinical experience. Each of these opportunities enables students to learn about work environments and job responsibilities.

COOPERATIVE EDUCATION

Cooperative education, or co-op, is a unique plan of education that integrates classroom learning with related supervised work experience. Eligibility to participate in co-op is determined by meeting the criteria based on grades, attendance, and a recommendation from the Beaver County CTC instructor.

Students benefit from participation in cooperative education by getting a head start on their careers while they are still enrolled in school. Supported and guided by their instructor and the co-op coordinator, students work in approved training sites and earn a fair wage for their efforts. They apply the skills and knowledge they have learned at the Beaver County CTC to actual job responsibilities, and at the same time, develop important interpersonal skills, teamwork strategies, and work ethics that are necessary for success in the workplace. Co-op bridges the gap between education and the world of work.

Employers also benefit from their participation in cooperative education. The program allows local companies to hire students with good technical skills who can then be molded to meet the current demands of the industry. Although many students become permanent employees after graduation, employers are not obligated to retain students for any reason.

Ongoing communication is encouraged among all participants throughout the process to ensure the success of each student's experience. The employer works with the co-op coordinator to provide feedback regarding the student's progress. Credit toward a high school diploma is earned for satisfactory work experience, and grades are assigned based on the employer's evaluation and the student's performance at the Beaver County CTC.

CLINICAL EXPERIENCE

Clinical experience is available to students enrolled in the Health Occupations program. Intended to provide valuable on-the-job training and insights, clinical experience takes students into the workplace for a period of time, during which they become involved in day-to-day operations and job functions. Clinical experience allows students to be exposed to the particular fields they are considering.

JOB SHADOWING

Job shadowing is a short-term experience during which students accompany workers as they go about their day performing duties in their everyday work environment. Students benefit from seeing work as it is performed in actual employment situations and enjoy learning firsthand from adults who have careers in fields that interest them. The program is designed to give students a better understanding of the career and what is needed to help them in their decision-making process.

STUDENT ORGANIZATIONS AND ACTIVITIES

STUDENTS AT THE BEAVER COUNTY CTC HAVE A WEALTH OF OPPORTUNITIES to expand their learning while having fun and making new friends. Participation in student organizations and activities fosters leadership development, community service, and cooperative interaction among students and faculty. Students enjoy a broad spectrum of activities, including skill competitions, career and technology fairs, trips, service projects, and special events.

Competition among peers can exert a strong motivating force to achieve and excel, as many Beaver County CTC students have discovered while competing as individuals or in teams at regional, state and national skill contests. The school has built a solid reputation for competing and winning at all levels.

At present, nine (9) student organizations are very active at the Beaver County CTC. Students may choose to join SKILLSUSA, FCCLA (Family, Career, and Community Leaders of America), DECA (Distributive Education Clubs of America), FBLA (Future Business Leaders of America), FFA (Future Farmers of America), AWS (American Welding Society), NTHS (National Technical Honor Society), NHBA (National Home Builders Association) and HOSA (Health Occupation Students of America). The objective of these organizations is to offer challenging programs that build leadership, citizenship, and pride in career education. Each organization is composed of student officers, and members who work toward the betterment of individuals, the school, and the local community.

SKILLSUSA - The largest of the organizations has over 300,000 members nationwide. It emphasizes respect for the dignity of work, high standards and trade ethics, workmanship, scholarship, safety and partnership with business. It also serves as the school's student government, since all students are eligible to participate in SkillsUSA. District, state, and national conferences provide students with ample opportunity to compete for recognition and achievement awards.

FCCLA - The Family, Career and Community Leaders of America Club is open to students enrolled in the Food Preparation & Service program. This organization places emphasis on promoting personal growth and leadership development through family and consumer science education, focusing on the multiple roles of family members, wage earners, and community leaders. There are FCCLA chapters in all 50 states, plus Puerto Rico. Pennsylvania boasts over 700 members, with chapters in every county. The Beaver County CTC chapter members are active participants in leadership training events, competitions, and state and national conferences.

DECA – The Distributive Education Clubs of American is an association of marketing students in a career and technical student organization designated to enhance a specific career objective in marketing, management, business, or distribution. Any student enrolled in a Marketing or Business Education course is eligible for membership in local, state and national DECA chapters. The DECA tagline is: "Developing Future Leaders in Marketing, Management and Entrepreneurship." The four points are: **Vocational Understanding** - Students develop first-hand knowledge of merchandising management and the opportunities available in their chosen

career. **Civic Consciousness -** Students learn to recognize their obligations to the community in which they live. **Social Intelligence -** DECA members develop poise and social graces as well as becoming aware of the social environment through DECA social events.

Leadership Development - DECA activities are designed to give students the opportunity to participate in many activities which teach leadership skills.

Page 10 The Future Business Leaders of America is an educational association for students preparing tor careers in business, entrepreneurial, or business-related fields. The association prepares students for employment by promoting competent, aggressive business leadership, increasing understanding of American free enterprise, establishing career goals, encouraging scholarships, promoting efficient money management, and developing character and self-confidence. Co-curricular activities encourage career development, civic service, economic education, community involvement and business advocacy. Partnerships are formed with Chambers of Commerce, local businesses, industries, and government. An extensive skills competition program is offered to challenge members' achievements in their academic pursuits. Membership in FBLA is unified on the local, state, and national levels. FBLA has over 250,000 active members in more than 13,000 chartered chapters throughout the United States, its territories, the Pacific, Asia and Europe.

FFA – The Future Farmers organization is for students preparing for careers in the industry of agriculture. FFA activities and award programs complement instruction in vocational agriculture/agribusiness by giving students practical experience in the application of agricultural skills and knowledge gained in classes. A major emphasis of the FFA Club is the development of leadership skills and abilities to prepare young people for leadership roles in their agricultural careers. To be a member of FFA, students must be enrolled in the vocational agriculture/agribusiness program. Students may retain their membership in the FFA following their graduation until age 21. FFA makes a positive difference in the lives of students by developing their potential for **premier leadership**, **personal growth and career success** through agricultural education. The mission of Agricultural Education is to prepare and support individuals for careers, build awareness and develop leadership for the food, fiber and natural resource systems.

AWS – The American Welding Society was founded in 1919 to help keep the United States Competitive in an ever-changing industrial world. Since it was founded, it has grown to over 50,000 members from all over the world. The AWS helps to set standards in welding procedures, welding supplies, qualifications for welders, inspection procedures and standards of education in the welding field. The Beaver Valley Student Chapter was organized in 1989 as a partnership with the Community College of Beaver County's welding program. The Beaver Valley Student Chapter is part of the Pittsburgh section of the AWS. The Student Chapter annually elects officers, competes at the Pittsburgh's Section's Weld-Off competition, attends technical meetings, and takes part in the annual Student Day activities.

NTHS - The purpose of the National Technical Honor Society is to reward excellence in workforce education, develop self-esteem, pride and encourage students to reach for higher levels of achievement, promote business and industry's critical work-place values - honesty, responsibility, initiative, teamwork, productivity, leadership, and citizenship, help schools build and maintain effective partnerships with local business and industry, and champion a stronger, more positive image for workforce education in America. Society membership is an important career and professional investment recognized by education, business and industry. Members receive the NTHS membership certificate, pin, card, graduation tassel, window decal and official

NTHS seal to be applied to the member's diploma or training certificate, the opportunity to purchase NTHS commencement accessories and other official NTHS gear, *The Artisan*, the online newsletter of the Society, and personal recommendations for employment, college admission and scholarships provided by NTHS National Headquarters. The NTHS is an internationally recognized and proven program with over 1,500 member schools and colleges. The NTHS contributes to a strong, positive school image in the local community, and membership develops self-esteem and pride.

NHBA – National Home Builders Association – Each chapter is sponsored by a local or state Home Builders Association (HBA). Students participate in field trips, internships, and community projects. They are eligible for scholarships and summer job opportunities.

HOSA - Health Occupations Students of America – Starting with the 2014-2015 school year, BCCTC began offering HOSA in the Health Occupations Curriculum. The benefits of offering a HOSA chapter are below:

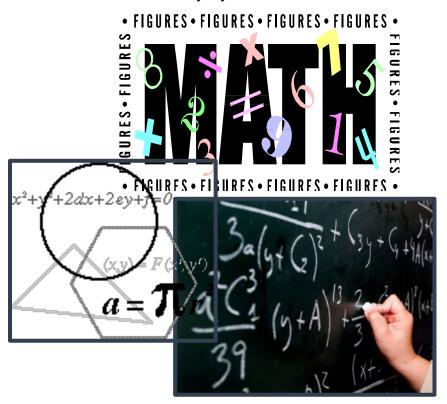
- The curriculum, students, and overall success of the program would improve with this added opportunity for professional development, leadership, competition, networking, and scholarship awards.
- Opportunities for scholarships are available with HOSA. At the Pennsylvania Chapter level alone, over \$80,000 in funds were awarded in 2013.



Algebra

Instructor: Mr. Michael Laderer

The Algebra program provides students with the fundamentals of Algebra I. This method uses an online curriculum that follows the Common Core curriculum standards. While using the online curriculum, students will spend three out of five days a week in a traditional classroom setting, analyzing problems taken from situations that many people encounter in their everyday lives. Some problems have to do with jobs, business, banking, manufacturing, and commerce, while others involve travel, hobbies, sports, or entertainment. In each case, they will use Math and Algebra to make sense of the situation, enabling them to make decisions, recommendations, and pose further questions in search of solutions. Students will use today's technology to learn algebra skills that can be incorporated into their BCCTC course curriculum and everyday life.



Units of Study

Number Patters, Variables and Formulas
Proportional Reasoning and Percentages
Analyzing Data and Making Predictions
Finding Linear Equations from Graphs

Graphing Quadratic Equations

Solving Systems of Linear Equations

Laws of Powers

Slope-Intercept Linear Inequalities

Literal Equations

Graphing Inequalities

Rational Expressions

Direct and Indirect Variation

Polynomial Arithmetic

The Distributive Property

Absolute Value

Inequalities

Graphs of Absolute Value Equations

Solving Quadratic Equations

Solving Systems of Linear Equations

Radical and Roots

General form of a Linear Equation

Statistics

Probability

Parallel and Perpendicular Lines

Introduction to Logical Principles

Matrices

Properties of numbers

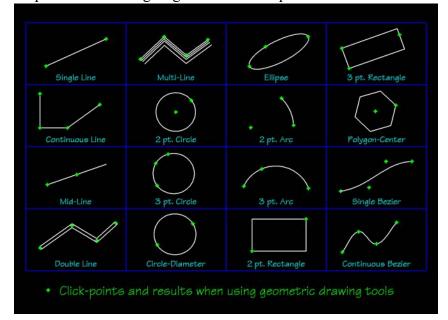
Modeling Situations with Formulas, Tables of Values, and Graphs

Slope

Units of Study The Pythagorean **Theorem Basic Geometric Properties Triangles Parallel Lines** Similarity and **Congruency Quadrilaterals** Circles **Surface Area and Volume** Geometric **Transformations and** Symmetry **Right Angle Trigonometry Area and Perimeter**

Geometry

The Geometry program is the key to the students' understanding of geometric concepts and development of spatial reasoning skills. Lessons allow students to be able to make the transition from concrete to abstract thinking. The course is presented as an on-line course, but it is conducted in a classroom setting with a full-time instructor assisting and enhancing the students' learning experience. The curriculum presents geometric problems to the students using multiple representations: worksheets, diagrams, equations and written text, to allow students a variety of methods to visualize and learn the concepts presented. In the classroom, the problems are related to the students' personal experiences and to the students' CTC course curriculum. Activities engage students in inductive and deductive reasoning to make sense of geometric concepts. The students are also shown the connections between Geometry and Algebra, which facilitates a deeper understanding of geometric concepts.



LEARNING FACILITATOR

Facilitator: Ms. Susan Chance Assistant: Mrs. Betsy Evanchak Assistant: Ms. Jamie Kuriger

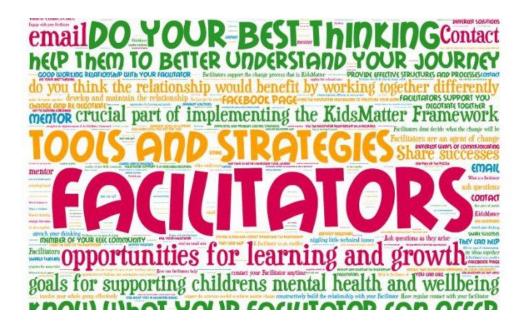
LEARNING CENTER

The primary purpose of the learning center is to provide assistance to all students. Many students, for a variety of reasons are struggling with education. The learning center staff is available to offer assistance, modifications, and/or adaptations as outlined in individual learning plans.

Industry standards, craft committees, and Pennsylvania State Standards drive vocational programs. Each CTC student is expected to develop strong work ethic skills and improve reading, writing, and math skills in relationship to their career path. Students are encouraged to succeed in their paths by practicing self-advocacy skills and requesting and accepting assistance from all available resources.

The goal of the learning center is to promote achievement for all of our students. The Learning Facilitator and staff will foster self-confidence, self-discipline, and accountability for choices. We look forward to creating a partnership with parents, family, and the community to assist the student to reach his or her potential.

The Beaver County CTC welcomes students with disabilities. The Individuals with Disabilities Education Act (IDEA) makes it clear that all schools have the duty to educate children in the least restrictive environment. The Beaver County CTC is committed to providing vocational education to students in the general education setting.



Automotive Technology

PDE Approved Program of Studies - CIP Code 47.0604

Certifications

Certified Emissions Inspector

Certified Safety Inspector, Category I

EPA 609 Refrigerant Recycling Certification SP/2 Safety

Career Pathways Listing

Motor Vehicle Inspectors

Mobile heavy Equipment Mechanics (Except Engineers)

Automobile Specialty Technicians

Motorcycle Mechanics

Automobile Master Mechanics

Airframe and Power Plant Mechanics

Motorboat Mechanics

Bus and Truck Mechanics

Diesel Engine Specialists

Tire Repairers and Changers

Electronic Equipment Installers, Motor Vehicles

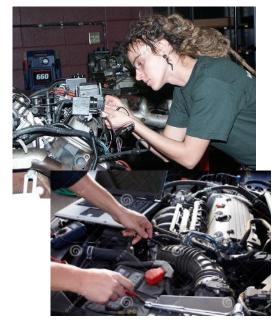
> Service Station Attendants

Instructor: Mr. Alan Valasek Assistant: Mr. Jason Davis

An instructional program that prepares individuals to apply technical knowledge and skills to engage in the servicing and maintenance of all types of automobiles and light trucks. This program includes computer analysis of malfunctions in electrical systems, cooling systems, brake systems, drive train and suspension systems through the use of technical repair information. State Inspection and Emission Inspection Certifications are offered.

Most employers regard the successful completion of a training program in automotive technology as the best preparation for trainee positions. High school programs, while an asset, vary greatly in scope. Graduates of these programs may need further training to become qualified. Students who complete this program are well prepared to enter entry-level technician positions or to advance their technical education.

The ability to diagnose the source of a problem quickly and accurately requires good reasoning ability and a thorough knowledge of automobiles. Many technicians consider diagnosing hard-to-find troubles one of their most challenging and satisfying duties. For trainee automotive service technician jobs, employers look for people with strong communication and analytical skills. Technicians need good reading, mathematics, and computer skills to study technical manuals. They must also read to keep up with new technology and learn new service and repair procedures and specifications.





Business Information Systems

PDE Approved Program of Study CIP Code 52.1201

Instructor: Ms. Renee DiGiacomo

Technology is the fastest growing field right now, and there is no sign of it stopping any time soon! The Business Information Systems' program combines studies in computer information systems with business/management courses, which serves as a bridge between technical and business communities. This bridge connects students to exciting careers that use technology. Students who study in this program for two years will graduate with a strong understanding of computers in the business world, possess marketable skills, and be able to pass industry-level certification exams, which makes them more credible job candidates.

The U.S. Bureau for Labor Statistics indicates that the need for computer professionals and executives is growing at a fast rate as companies are becoming more global. Information Technology has the greatest potential for new jobs and is growing by 37% by the year 2018. These jobs are among the highest paid and have the highest rate of job satisfaction.

This program provides industry-related curriculum that prepares students for post-secondary schooling and business and technological careers. The two-year studies include: Computer Literacy Basics, Internet Core Concepts, Information Technology, Microsoft Office 2013 (with an emphasis on Excel and Access), Personal Finance, Introduction to Business, Business Communications and Ethics, and Cyber Security. Supplemental coursework includes: Intro to Programming (using Scratch and Alice), Career Education (focusing on successful job interviewing), and Career Portfolio. Students who graduate from this program will be able to:

- Understand the concepts of computer operating systems, hardware and software interactions, firewalls, internal components and peripherals, storage devices, virus detection, and networking.
- o Identify document task requirements and make educated decisions about technologies and appropriate applications.
- O Understand concepts of Cyber Security, a fast-growing field of IT, and the importance of solid security measures that ensures confidentiality, integrity, and availability of data.
- Be knowledgeable enough to take and pass Microsoft Office Specialist (MOS) certification exams.
- Be knowledgeable enough to take and pass Internet Core Concepts (IC³) certification exams.
- o Identify intrinsic hardware components of the computer.



BIS Certifications

Microsoft Office Specialist 2016

✓ Word

✓ PowerPoint

✓ Access

✓ Excel

Internet and Computing Core (IC³) GS5

- ✓ Computing Fundamentals
- **✓** Key Applications
- ✓ Living Online

CareerSafe Cyber Safety
Awareness Training

International Computer Driver's License (ICDL)

RiseUp Customer Service

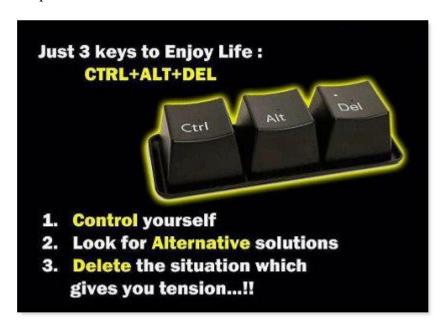
BUSINESS INFORMATION SYSTEMS - CONTINUED

- O Understand that good communication skills are the foundation of any successful businessperson.
- o Understand human, cultural, and societal issues related to business and technology and practice legal and ethical behavior.
- Work collaboratively for project development and presentations.
- o Create and graduate with a professional career portfolio.
- o Successfully prepare and interview for a job/career.

Students who graduate from the program with exemplary grades and attendance may qualify for one of the program's articulation agreements with local post-secondary schools, colleges, and universities. The BCCTC is a registered Certiport testing center, and students who work to potential are offered industry-related certification tests, which can assist them with reaching their educational and personal goals and market their credentials while maximizing their employment opportunities.

Future Business Leaders' of America (FBLA) is a prestigious business club that has been around for decades. It is also the premiere club that is practiced in the BIS classroom. Students who are active members will learn valuable leadership skills and will prepare to compete against students from other schools in business/technology related competitions at conferences. Students can earn awards, certificates, and even the chance to travel with the club to compete against PA students at the state level. Students can list FBLA on their resumes to show that they are true leaders in their field! Half-tuition FBLA scholarships are offered from multiple local post-secondary schools.

This program does not limit students to computer-only careers. It can open doors in any field that uses technology and values employees who are skilled at using ever-evolving technology tools and software. If you are interested in understanding how Information Technology can make businesses work better, the Business Information Systems program will help you to reach your career potential!



Carpentry

PDE Approved Program of Study - CIP Code 46.0201

Instructor: Mr. David Liptak Assistant: Mr. Eugene Faiella

The Carpentry program prepares individuals to apply technical knowledge and skills to layout, fabricate, erect, install and repair structures and fixtures using hand and power tools. This program includes instruction in common systems of framing, construction materials, estimating, blueprint reading and finish carpentry techniques. In addition, students will demonstrate the ability to:

- Describe various types of materials and methods available to the construction trade.
- Describe business functions and principles.
- Describe the complexity of the building construction industry.
- Describe the complex interrelationships among numerous trades and professions within the industry.
- Stay current with any new technology or codes related to the building/construction industries.

When the Carpentry course is completed, you will have the ability to write clear, concise, legible and accurate technical reports, communicate orally in the language of the construction industry to customers, co-workers and supervisors, perform basic manipulative skills of the trade, interpret plans, drawings, codes and specification, lines, symbols and abbreviations on working drawings or blueprints, and analyze specifications and contract drawings.



Certifications Offered

PA Builders Skill Certificate

Career Possibilities

Self-Employed Contractor

Construction Inspector

Carpenter

Roofer

Construction Laborer

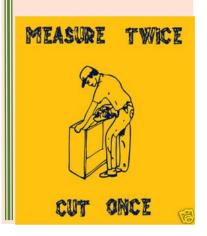
Patternmaker

Drywall Inspector

Insulation Worker

Roofer Apprentice

Carpenter Apprentice



Collision Repair Technology

PDE Approved Program of Study - CIP Code 47.0603

Career Possibilities

Estimator

Refinisher Technician

Alignment Technician

Welder/Fabricator

Owner/Operator

Shop Manager

Fiberglass Repairer

Paint Preparer

Automotive Body and Related Repairers

Automotive Class Installers and Repairers





Instructor: TBD

Most of the damage resulting from everyday vehicle collisions can be repaired, and vehicles can be refinished to look and drive like new. A Collision Repair Technology repairer straightens bent bodies, removes dents, and replaces crumpled parts that cannot be fixed. They repair all types of vehicles, and although some work on large trucks, buses, or tractor-trailers, most work on cars and small trucks. They can work alone, with only general direction from supervisors, or as specialists on a repair team. In some shops, helpers or apprentices assist experienced repairers.

Each damaged vehicle presents different challenges for repairers. Using the broad knowledge of automotive construction and repair techniques, Collision Repair Technology repairers must decide how to handle each job based on what the vehicle is made of and what needs to be fixed. They must first determine the extent of the damage and order any needed parts.

The Collision Repair Technology program is an instructional program that prepares individuals to apply technical knowledge and skills to repair damaged automotive vehicles such as automobiles and light trucks. Students learn to examine damaged vehicles and estimate cost of repairs; remove, repair and replace upholstery, accessories, electrical and hydraulic windows, and seat operating equipment and trim to gain access to vehicle body and fenders; remove and replace glass; repair dented areas; replace excessively damaged fenders, panels and grills; straighten bent frames or auto body structures using hydraulic jacks and pulling devices; and file, grid, sand repaired surfaces using power tools and hand tools. Students refinish repaired surfaces by painting with primer and finish coat.



Commercial Art & Design

PDE Approved Program of Study - CIP Code 50.0402

Instructor: Mr. Francis Mano

Commercial Art & Design is an instructional program in the applied visual arts. The program prepares individuals to use artistic techniques to effectively communicate ideas and information to business and consumer audiences via illustrations and other forms of media. Commercial Art includes instruction in concept design, layout, airbrush and techniques such as engraving, 3-D design, silkscreen, drawing, cartooning, painting, and computer graphics.

Training in Commercial Art includes an awareness of careers available to the student derived from many Units of Instruction. Students are first taught basic skills and development of vocabulary and techniques. As students enter their senior year, they define these skills and may choose to specialize in one area of study while still receiving instruction in other areas.

This class is geared for the advertising artist, one who enjoys art and would possibly consider art as a career.



Career Possibilities

Advertising Artist

Animator

Art Director

Cartoonist

Costume and Mask Designer

Floral Designer

Graphic Designer

Illustrator

Interior Decorator

Photographer

Printing Layout Artist

Sculptor

Sign Artist

Tattoo Artist

Type Setter



Cosmetology

PDE Approved Program of Study - CIP Code 12.0401

Certifications Offered:

Cosmetologist

Manicurist

Career Possibilities:

Manicurist

Salon Owner

State Board Inspector

Beauty School Instructor

Hair Stylist

Salon Manager

Vocational Instructor

Men's Hair Stylist

Skin Care/Make-Up Technician

Units of Instruction:

Sanitation/Safety

Hair Styling/Hair Coloring

Scalp Treatment

Manicuring

Facial Massage

Cosmetology Theory

Chemical Applications

Personal Preparation

Business Ethics

Hair Pressing

Instructor: Mrs. Dolores Mason Instructor: Mrs. Laurie Conti

Cosmetology is a three-year program designed to train students to learn a variety of services related to the care of hair, skin, and nails. Students are expected to have strong attendance to become eligible to take the Pennsylvania State Board of Cosmetology Exam. Instruction includes the latest techniques in hair cutting, styling, chemical applications, coloring and Esthetics. Manicuring, pedicuring, make-up and ethnic haircare are included. Specific instruction of sanitation and disinfection will be presented to follow the steps that address the specific tasks according to Pennsylvania State Laws and Regulations. Students will be introduced to Employment Skills, Salesmanship, and Business Ethics necessary for professional development. The State Exam preparation curriculum will follow guidelines set for Pennsylvania State Board of Cosmetology Regulations. According to the PA State Board of Cosmetology, students must have met the mandatory hours to take the State Board Exam and complete 1250 hours for licensing.







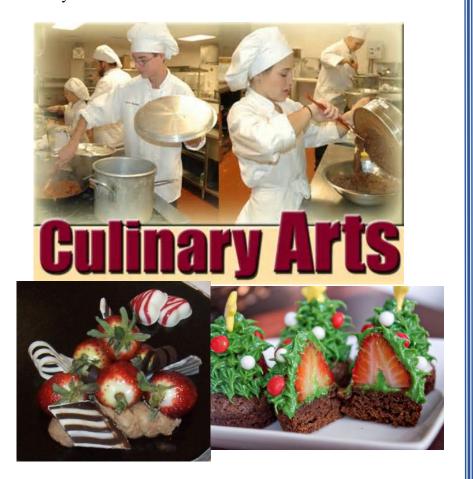


Culinary Arts PDE Approved Program of Study - CIP Code 12.0508

Instructor: Mrs. Camille Stevenson Assistant: Mrs. Brandy Gallagher Assistant: Ms. Mary Mathews

Culinary Arts is an instructional program that prepares students for employment related to institutional, commercial or self-owned food establishments or other food industry occupations. Instruction and specialized learning experiences include theory, laboratory and work experience related to planning, selecting, preparing and serving of quantity food and food products; nutritive values; use and care of commercial equipment; safety; and sanitation precautions. Instructional skills are provided to individuals desiring to become employed in all areas of the food service industry at entry level.

Students choosing to take the "ServSafe" Food Safety Certification class may receive college credit for attaining "ServSafe" certification and will qualify to apply for the Pennsylvania Department of Agriculture State Food Safety Certification.



Certifications Offered: ServSafe Certificate

Career Pathways:

Dietician and Nutritionist

Cashier

Sous Chef

Restaurant Worker

Waiter/Waitress

Food Beverage Manager

Chef/Head Cook

Caterer/Host/Hostess

Combined Food Preparation/Servers

General Food Preparation Worker

Units of Instruction: Recipes/Menu Planning

Large/Small Equipment

Restaurant Service

Sanitation/Safety

Baking

Receiving and Shipping

Hot and Cold Food Preparations

Management and Employability Skills

Electrical Occupations

PDE Approved Program of Study - CIP Code 46.0399

Certifications Offered:

PA Builders Skill Certificate OSHA-10

Career Pathways:

Electrical Sales/Electrical Apprentice/Electrical Inspector/Electrical Contractor

Electricians/Electrician Helpers

Electrical Contractor/Telephone Installer

Electronic Home Entertainment Installer/Repairer

Electric Motor/ Power Tool/ and Related Repairers

Telecommunications Equipment Installer/Repairer/Commercial and Industrial Equipment

Units of Instruction:

Occupational Introduction/Load Center Changes/Safety

National Electrical Code NEC

Trade Information/Wiring Methods/Shop Equipment/Conduit Bending/Basic Electrical Theory

D.C. Circuits/A.C. Circuits/Pipe Threading/Conductors/Specialty Tool/ Running Wire

Low Voltage Wiring/Blueprint Reading

Instructor: Mr. George Mitsch

An instructional program that prepares individuals to apply technical knowledge and skills necessary to install, operate, maintain and repair electrically-energized residential. commercial, and industrial systems, AC motors, and electrical distribution panels. Instruction emphasizes practical application of mathematics, science, circuit diagrams, use of electrical codes, and includes sketching and other subjects essential for employment in electrical occupations. Reading interpretation of commercial and residential construction wiring codes and specifications, installation and maintenance of wiring, service and distribution networks within large construction complexes area also critical components of the program.



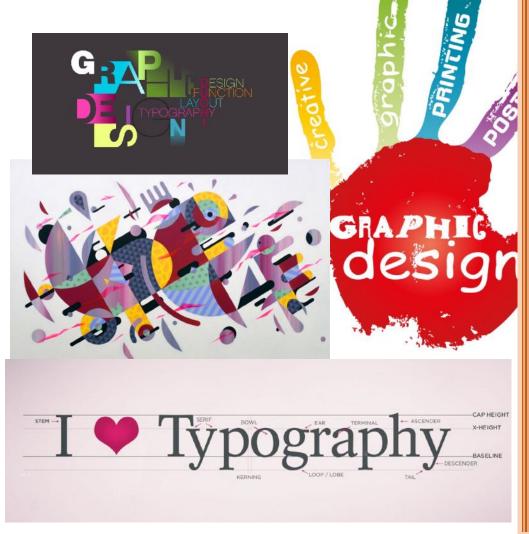


Graphic Arts & Printing

PDE Approved Program of Study - CIP Code 10.0399

Instructor: Mrs. Nicole DeMark

Graphic Arts is an instructional Program that generally prepares individuals to apply technical knowledge and skills to plan, prepare and execute commercial and industrial visual image and print products using mechanical, electronic and digital graphic and printing equipment. Students learn desktop publishing, layout, composition, presswork and bindery as well as photography, flexography, lithography, photoengraving and other graphic arts techniques. Emphasis is on typographical layout and design using computer graphics, photo typesetting, camera and plate making, offset preparation and operation, paper cutting, ink and color preparation and dynamics and airbrush and screen printing production.



Certifications Offered:

Adobe

GAERF PrintED

Precision Exams

Career Pathways:

Graphic Designer

Bindery Worker

Prepress

Technician

Desktop Publisher

Prepress Worker

Printing Press Machine Operator

Photographer Process Worker

Units of Instruction:

Art Work/Offset Platemaking

Photographic Process

Press Operation/Screen Printing

Image Assembly

Finishing Procedures

Process Photography

Digital Photography

Computer/Desktop Publishing

Continuous Tone Photography

Greenhouse/Landscaping

PDE Approved Program of Study - CIP Code 01.0601

Certification Offered:

PA Pesticide Applicator Certification

Career Pathways:

Landscape Design

Floral Designers

Nursery & Greenhouse Manager

Retail Manager

Floral/Nursery Sales

Greenhouse/Nursery Worker and Gardener

Landscaping and Groundskeeper

Lawn Care Manager

Tree Trimmers and Pruners

Units of Instruction:

The National FFA Organization

Floral Construction and Design

Greenhouse Crop Production

Small Gasoline Engine Repair

Landscaping/Landscape Equipment Handler

Small Business Entrepreneurship

Pesticides/Fertilizer/Plant and Soil Science

Instructor: Mr. Bryan Lehocky

The Greenhouse/Landscaping program will be a benefit to any student pursuing any of the horticulture careers such as floriculture, landscaping, and greenhouse/nursery.

All students are trained in a general curriculum, studying subjects such as plant growth and identification, soil science, greenhouse management, and small business development. Students interested in floriculture will concentrate their time in the greenhouse working with flowers and houseplants. In addition, students will work with the arrangement of flowers and other decorative materials, constructing projects such as centerpieces, corsages, and wreaths.

Those interested in landscaping and mechanics will specialize in the repair and maintenance of small engines, construction of landscaping projects, hardscaping, and operation of horticulture equipment on the Beaver County CTC property.

The Beaver County CTC has an active chapter in the National FFA Organization in which all students are urged to actively participate.



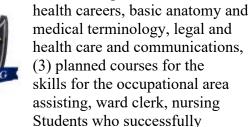
Health Occupations

PDE Approved Program of Study - CIP Code 51.0899

Instructor: Ms. Theresa Cairns Assistant: Mrs. Elizabeth Mitsch

The Health Occupations instructional program is designed to prepare individuals for entry-level employment in a minimum of three (3) related health occupations under the supervision of a licensed health care professional. Instruction consists of core course content with clinical experiences in one or two health related occupations. The core curriculum consists of planned courses for

introduction of physiology, ethical aspects of and at least three knowledge and such as medical assisting, etc.



complete the certifications offered will be eligible for advanced standing with the Community College of Beaver County in the Multi-Skilled program, and lab hours once admitted to the Nursing program, and twenty-four 24 credits in the Associate of Science in the Health Science degree program.

Units of Instruction:

Pennsylvania Approved
Competency Tested Nurse Aide
Training and Clinical
Resident Rights
Nutritional Issues/Meal Servicing

Ethical/Legal Responsibilities Mental Health/Social Service Emergency/Care/First Aid/CPR Concepts of Long-Term Care Mathematics for Health Careers Body Mechanics

Growth and Development
Death and Dying

Nursing and Patient Care Skills

Client Resident
Abusive Prevention
Infection Control
Communication

Restorative Health
Care Skills
Safety and Mobility
Employment Preparation
Anatomy and physiology

Basic Human Needs



Certifications Offered:

PA Nurse Aide Registry/Nurse Aide Competency Training

Healthcare Provider CPR

Healthcare Provider AED

First Aide/Blood Borne Pathogens

Career Pathways:

Physical Therapist Assistant/ Radiologist Technologists and Technicians

Dietetic Technicians/Medical Assistant

Surgical
Technologist/Registered Nurse

Occupational Therapist
Assistant/ Licensed Practical
Nurse



HVAC-R

PDE Approved Program of Study - CIP Code 47.0201

Certifications Offered:

See page 29

Career Pathways:

Mechanical Engineer

Vocational Education Teachers, Secondary School

Cost Estimators/HVAC Contractor

Sales Representatives, Mechanical Equipment/Supplies

Heating/ AC and Refrigeration Mechanic/Installer

Helpers – Installation, Maintenance and Repair Workers

Sheet Metal Workers/Piper Fitters

Units of Instruction:

Basic Electricity/Controls

Leadership Competencies/Domestic Refrigeration

Commercial Refrigeration/Heat Pumps

Hydronic Heating/Basic Refrigeration

Sheet Metal Fabrication

Air Treatment/Distribution

Basic Refrigeration/Job Seeking Techniques

Entrepreneurship/Customer Service

Instructor: Mr. Daniel Ostronic

The Heating, Ventilation, Air Conditioning and Refrigeration program is an instructional program that prepares individuals to apply technical knowledge and skills to install, repair and maintain commercial and domestic heating, air conditioning and refrigeration systems. Instruction includes theory and application of basic principles involved in conditioning of air (cooling and heating); filtering and controlling humidity; operating characteristics of various units and parts; blueprint reading; use of technical reference manuals; the diagnosis of malfunctions, overhaul, repair and adjustment of units and parts such as pumps, compressors, valves, springs and connections; and repair of electric/electronic and pneumatic control systems.

Students enrolled in the class learn basic electric as it applies to the electrical power sources and circuits used in heating and air conditioning and refrigeration equipment.



Various hands-on training simulations are used to teach basic repair and maintenance of equipment. Students will learn to solder and braze as well as use other forms of connections for copper tubing refrigerant lines. Instruction also includes design and fabrication of cut work, blue print reading wiring diagrams, and installation of electrical hook ups to power sources. The students will also use acetylene torches, electrical meters, compound gauges, and other field related hand tools to remove and/or replace parts in any heating, air conditioning and refrigeration equipment.





Logistics & Materials Management

PDE Program of Study - CIP Code 52.0203

Certifications Offered:

Certified Logistics Associate (CLA)
Certified Logistics Technical (CLT)
Fork Lift Operator
OSHA 10-Hour General Industry

Career Pathways:

Transportation Managers

Storage and Distribution Managers

Sales Representatives, Wholesale and Manufacturing

Sales and Related Workers, All Others

Dispatchers, Except Police, Fire, and Ambulance

Production, Planning and Expediting Clerks

Shipping, Receiving, and Traffic Clerks

Units of Instruction:

Warehouse Safety & Ergonomics

Inventory Management

Procurement/Buying Operations

Receiving Operations

Stocking and Put-Away Operations

Order Selection

Packing Operations

Shipping & Transportation Operations

Material Handling Equipment

Industry Trends & Technology

Logistics & Supply Chain Management

Marketing

Economics

Management

Instructor: Mr. Christopher Graham

The Logistics & Materials Management class is an instructional program that prepares individuals to manage and coordinate logistical functions in an enterprise and to undertake the responsibilities associated with receiving, storing, shipping, controlling and distributing products and materials and the various systems and record keeping pertaining to these operations.

Students will be instructed in the use of storage space, inventory control and shipping and receiving practices; equipment such as fork lifts, conveyors, hand trucks, carts and other devices used to transport materials and/or supplies to various destinations; and the various types of packaging techniques necessary for safe transport of goods.

Students will learn the many types of documents used in logistics such as purchase orders, invoices, bills of lading, requisitions and quotations. Students will also be instructed in the areas of transportation and traffic which will cover freight rates and tariffs, freight classification rules and freight rate analysis.



Machine Tool Technology

PDE Approved Program of Study - CIP Code 48.0501

Instructor: Mr. George Metz

The Machine Tool Technology is an instructional program that prepares individuals to apply technical knowledge and skills in all aspects of

shaping metal parts. Instruction computations relating to work tooling and feeds and speeds of Emphasis is placed upon bench operation of lathes, power saws, machines grinders, drills and



equipment (CNC and CIM). Instruction also includes the use of precision measuring instruments such as layout tools, micrometers and gauges; methods of machining and heat treatment of various metals; blueprint reading; and the layout of machine parts. Instruction prepares students to operate all types of hand and computer controlled machines.



Certifications Offered:

NIMS Level Machining Skills

Career Pathways:

Heat Treating, Annealing, and **Tempering Machine Operators** and Tenders, Metal and Plastic

the

milling

Heat Treating Equipment Steers, **Operators, and Tenders, Metal** and Plastic

Combination Machine Tool Setters and Set Up Operators, **Metal and Plastic**

Tool and Die Makers

Grinding, Honing, Lapping and **Deburring Machine Set-Up Operators**

Lathe and Tuning Machine Tool Setters, Operators and Tenders, **Metal and Plastic**

Sawing Machine Operators

Units of Instruction:

Shop and Machine Safety

Radial Arm Drill Presses

Manual Milling Machine

CNC Lathe

Computer Aided Manufacturing (CAM)

CNC 4-Axis Vertical Machining Center

Grinders and Saws

Manual Engine Lathe

Shaper

Layout

Masonry/Bricklaying

Instructor: Mr. Mark LaMont

PDE Approved Program of Study -CIP Code 46.0101

Certifications Offered:

PA Builders Association Skills Certificate

Career Pathways:

Construction and Building Inspectors

Construction Managers

Stone Sawyers

Cement Masons and Concrete Finishers

Career Pathways:

Helpers, Construction Trades, All Others

Brick/Block/Stone Masons Setters

Helpers, Brick Masons, Stone Masons, and Tile and Marble Setters

Construction Laborers

Masonry/Bricklaying is an instructional program that prepares individuals to apply technical knowledge and skills in the laying and/or setting of brick, concrete block, glass block, hard tile, marble and related materials using trowels, levels, hammers, chisels, and other hand tools.

Instruction in this trade includes learning skills involved in the cutting, chipping and laying of brick and concrete block, the mixing and spreading of mortar and other bonding agents. As a student, you will learn to use such tools as trowel, jointers, hammers, levels, gauge line, and squares. Training will also be given in measuring distances from reference points and marking guidelines on working surfaces so the student can lay out their work. Knowledge of mortar, cement, and other bonding agents is important to workers in this





Veterinary Assistant

PDE Approved Program of Study - CIP Code 51.0808

Certifications:

Approved Veterinary Assistant Designation

Career Pathways:

Veterinary Technician/Veterinary Technologist

Veterinarian

Zoologist

Wildlife Biologist

Laboratory Animal Technician

Agriculture and food Scientist

Laboratory

Units of Instruction:

Medical Terminology
Anatomy and Physiology
Common Diseases of Companion
Animals

Animal Restraint and Behavior External Parasitology Surgical Assisting Procedures Pharmacy Procedures

Radiology Assisting Procedures
Veterinary Laws, Regulations and
Ethics

Medical Records
Physical Examination Procedures
Animal Nursing Skills

Veterinary Sanitation and Aseptic Technique

Laboratory Procedures
Therapeutic Techniques and
Grooming
Zoonotic Diseases

Instructor: Mrs. Stephanie Vuckovich Assistant: Ms. Glenda Tetemanza

Veterinary Assistants provide care for animals in laboratories, veterinary hospitals, and clinics. Veterinary Assistants perform routine tasks under the supervision of animal scientists, veterinarians, and veterinary technologists and technicians. They also play an integral role in the veterinary practice.

The Veterinary Assistant program prepares students to work in an entry level position in a veterinary practice. This program also provides a solid educational foundation in preparation for a post-secondary Veterinary Technology degree.

The responsibilities of the Veterinary Assistant are as follows:

- Restraint of patients during veterinary procedures.
- Clean and maintain kennels, examination, and operating rooms to control the spread of disease.
- Fill medication prescriptions ordered by the veterinarian.
- Assist veterinarians in examining animals to aid in the diagnosis of disease.
- Administer oral and topical medication.
- Prepare examination or treatment rooms to ensure they are stocked with appropriate supplies.
- Clean, maintain, and sterilize instruments or equipment.
- Monitor animals recovering from surgery, and notifying the veterinarian of any unusual changes or symptoms.
- Observe and monitor animals to detect behavioral changes or clinical symptoms that could indicate illness or injury.
- Perform hygiene-related duties, such as grooming, clipping coats and toe nail trims.
- Educate or advise clients on many aspects of animal health care.
- Collect laboratory specimens, such as urine and feces for testing.
- Nutrition and feeding of patients.
- Perform routine laboratory tests or diagnostic tests, such as blood chemistries and complete blood counts.
- Perform office reception duties, such as scheduling appointments or helping customers.
- Perform various accounting duties, such as invoicing and maintaining inventories.

Welding PDE Approved Program of Study - CIP Code 48.0508

Instructor: Mr. Carl Cosentino Assistant: Mr. Greg Wilbur

Welding is the most common way of permanently joining metal parts. In this process, heat is applied to metal pieces, melting and fusing them to form a permanent bond. Because of its strength, welding is used in shipbuilding, automobile manufacturing and repair, aerospace applications, and thousands of other manufacturing activities. Welding also is used to join beams when constructing buildings, bridges and other structures and to join pipes in pipelines, power plants and refineries.



<u>Certifications Offered</u>: A.W.S.D1.1 Welding Certification

<u>Career Pathways</u>:
Metal Fabricators, Structural Metal
Products

Millwrights

Structural Iron and Steel Workers

Sheet Metal Workers

Welding Machine Setters and Set-Up Operators

Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders

Welders, Cutters, Solders, Braziers

Welders/Fitters/Cutters/Production

Welding Machine Operators and Tenders

Signal and Track Switch Repair

Units of Instruction:

Write clear, concise, legible and accurate technical reports

Communicate in the language of the construction industry

Perform basic manipulative skills of the trade

Interpret plans, drawings, codes, specifications, lines, etc.

Analyze specifications and contract drawings

Make accurate labor and material estimations

HOPEWELL AREA SCHOOL DISTRICT CYBER ACADEMY

If interested in a Cyber education, please contact the HS Counselors to get more information about how to pursue your Cyber education while remaining a Hopewell High School Student.

Additionally, students may take courses for remediation, enrichment and or advancement through our Cyber program. Your counselor, principals or the Cyber coordinator, Mr. Dean Nelson, can assist with any questions.

Options for Earning College Credit While in High School

Taking college courses while still in high school can be a fantastic way to gain experience, build your resume, and get an early start on college. As college admissions becomes more selective, schools are increasingly looking for students who have shown they can complete college-level work. We have a number of options open to us at Hopewell High School and we hope more and more students continue to take full advantage of them. These options are open to 11th and 12th grade students.

Dual Enrollment

Penn State Beaver - Penn State offers a 75% tuition discount to high school **Dual Enrollment** students. To apply, students must fill out their dual enrollment application and bring it to Mr. Collins. You can find information on available courses and course schedules from Mr. Collins or from Penn State's registrar's office. If there is a financial hardship that may prevent you from taking a course Penn State does have limited grant money available that can help with the remaining cost of tuition. More information can be found at: https://beaver.psu.edu/admissions/become-a-pennstater/dual-enrollment

CCBC - CCBC also allows high school students to take **Dual Enrollment** college courses. Bring completed applications to Mr. Collins. CCBC courses aren't offered at a discount but they are very affordable and Pell Grant money may be available if a student qualifies. Applications and information on available courses and course schedules can be found here: http://www.ccbc.edu/HighSchool

Robert Morris University - RMU also offers a traditional **Dual Enrollment** program similar to those at CCBC and PSU-B. Dual Enrollment students are offered a 70% tuition discount. In order to apply, students should pick up an application from Mr. Collins.

Normally Hopewell students take Dual Enrollment courses after school or in the evenings.

CCBC Academies

CCBC offers several academies for 11th and 12th grade high school students. These academies give our students the opportunity to get an early start on their education for in-demand career fields. Enrolled students attend Hopewell High School for their core classes for ½ of the school day and take college classes at CCBC for the rest of their day. After two years in the academies students will have completed the equivalent of their first year of college. These college classes are mostly transferrable to most 4-year colleges and universities.

CCBC's High School Academies Include:

CCBC Aviation Academy – Students can begin preparation to become a Professional Pilot, Air Traffic Controller, or Aerospace Management.

CCBC Health Academy – This academy prepares students for careers in the health professions. Graduates of this program are able to apply for nursing schools, pre-med programs, etc.

CCBC Stem Academy – This academy offers three different tracts: Coding, Engineering, or Process Technology

CCBC Criminal Justice Academy – Students are able to begin their training for careers in law-enforcement and criminal justice.

CCBC Construction Academy – Students graduating from this tract are prepared to begin careers in construction management, safety, project management, and design. Students interested in exploring one or more of these academies should contact Dr. Dreshman at the high school (<u>dreshmanj@hopewellarea.org</u>) or explore this link: http://pub.ccbc.edu/HS Academy/index.html

PITT College in High School

Students enrolled in AP Calculus or Calculus have the option of taking the course for college credit through the University of Pittsburgh's College in High School program. At the beginning of the school year students will need to decide if they are choosing this option. They will need to pass Pitt's midterm and final exams in order to earn credit for the course. In addition to passing the exams, students will be required to pay for the credits (<\$300 for 4 Pitt credits). These credits are then able to be transferred to most 4-year colleges and universities.

All college classes for any of the above programs are recorded on our transcripts but are not counted towards graduation requirements, GPA, or class rank.



Do you want to learn how to fly a plane, help pilots safely land and take off, or pilot a drone?

Do you desire to explore high demand, high pay, and exciting career fields?

CCBC's Aviation Academy is the place for your education to take-off and soar to new heights.

The CCBC Aviation Academy is the only program in the United States that offers high schools students the opportunity to explore Professional Pilot, Air Traffic Control, and Aerospace Management career paths.

You'll gain hands-on experience in the air and the classroom at our locations at the Aviation Sciences Center at the Beaver County Airport and Parkway West Career & Technology Center in Allegheny County – all while earning up to 28 college credits before high school graduation.

BENEFITS

- · Exploring high-demand aviation career pathways
- Earning up to 28 college credits while still in high school
- Learning from experienced college faculty members with extensive aviation backgrounds.
- · Accomplishing actual aircraft flying
- Completing a Private Pilot's certification

REQUIREMENTS

- Students in grades 11 and 12 with a minimum GPA of 2.5
- Make sure to also check your school district's eligibility guidelines.

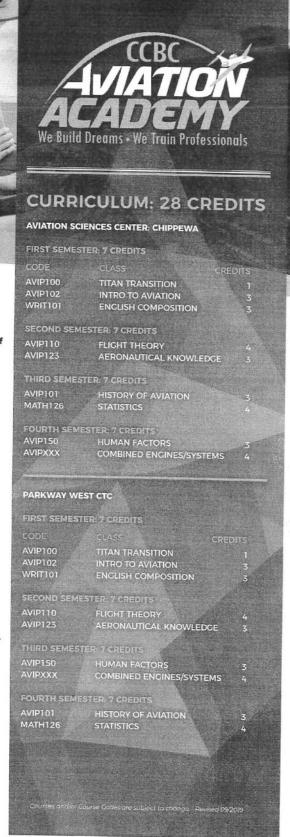
HOW TO ENROLL

- Contact your school's guidance office for enrollment information.
- Scholarships are available for qualified students.
- Submit CCBC Aviation Academy application.

TO LEARN MORE ABOUT THE AVIATION ACADEMY

Lauren Susan, Assistant Dean of High School Academies & Dual Enrollment:

- lauren.susan@ccbc.edu
- . 724-480-3418





Do you have a passion for helping others? Are you interested in a career in the healthcare field?

Enroll in CCBC's Health Academy to prepare to care.

You'll gain hands-on experience in our classrooms, labs, and clinical sites as you explore careers in nursing, practical nursing, radiologic technology, physical therapy, respiratory therapy, nurse practitioner, physician assistant, nurse anesthetist, and physician and more. Learn patient care and have the opportunity to earn up to 28 college credits before graduation day.

BENEFITS

- Learning from experienced college faculty members who are also nurses
- Continuing your studies to earn an associate degree in nursing or radiologic technology or a diploma in practical nursing and other healthcare fields
- Getting career-ready for one of the most in-demand and compassionate jobs regionally and nationally

REQUIREMENTS

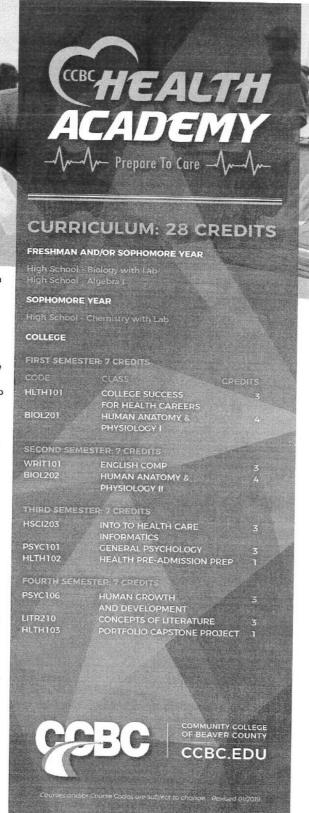
- · GPA of 2.75 or higher
- · Good attendance
- Good conduct
- Recommendation from principal or guidance counselor
- High school prerequisite courses: Biology with lab, Chemistry with lab, Algebra

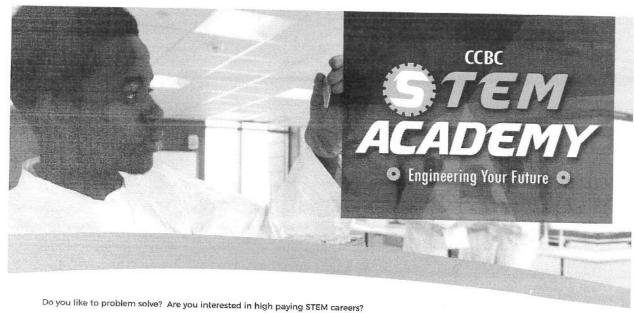
HOW TO ENROLL

- Contact your school's guidance office for enrollment information.
- Scholarships are available for qualified students.
- Get your enrollment approved by your parent or legal guardian and the high school principal or designee.

TO LEARN MORE ABOUT THE HEALTH ACADEMY

- · Health Academy Champion:
 - · 724-480-3489
 - healthchampion@ccbc.edu





Enroll in CCBC's STEM Academy to engineer your future.

You'll gain hands-on experience in our classrooms and labs while connecting with our industry partners in new and emerging career fields like Process Technology and Engineering. As a CCBC STEM Academy student, you will also have the opportunity to earn up to 28 college credits while still attending high school.

BENEFITS

- Learning from experienced faculty and studying our industry-designed and approved curriculum
- Continuing your studies toward an associate degree in Engineering or Process Technology
- Getting job-ready for high-demand, well-paying jobs coming to Beaver County and the region

REQUIREMENTS

- Good attendance
- Good conduct
- Recommendation from principal or guidance counselor

The following program-specific requirements also apply:

- **Engineering Admission Criteria**
 - High school junior with a minimum of 3.0-grade point average
 - High School prerequisite courses:
 - Sophomore Year Complete Algebra II with a "B" or better and Chemistry with a "C" or better
 - Junior Year Complete Pre-Calculus with a "B" or better
- Coding Admissions Criteria
 - High school junior
 - Minimum GPA of 2.5
- Process Technology Admissions Criteria
 - High school junior
 - Minimum GPA of 2.5

HOW TO ENROLL

- Contact your school's guidance office for enrollment information.
- Scholarships are available for qualified students.
- Get your enrollment approved by your parent or legal guardian and the high school principal or designee.

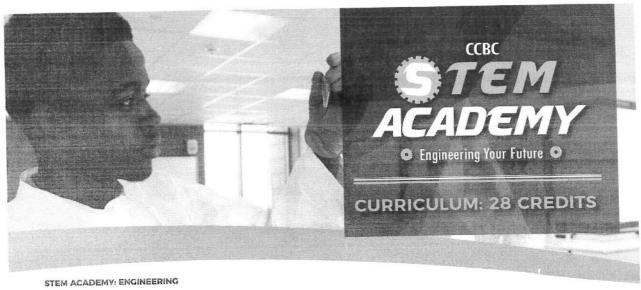
TO LEARN MORE ABOUT THE STEM ACADEMY

- STEM Academy Champion:
 - 724-480-3539
 - stemchampion@ccbc.edu



COMMUNITY COLLEGE OF BEAVER COUNTY CCBC.EDU

Courses and/or Course Codes are subject to change. Revised 01/2019



FIDST SEMES	TER: 7 CREDITS		THIRD SEMES	STER: 7 CREDITS	
CODE	CLASS	CREDITS	CODE	CLASS	CREDITS
ENGR130 WRIT101 COLL100	ROBOTICS ENGLISH COMPOSITION TITAN TRANSITION	3 3 1	ENGR100 MATH160	ENGINEERING FOUNDATIONS CALCULUS I IESTER: 7 CREDITS	3 4
SECOND SEN	ESTER: 7 CREDITS		MATH161	CALCULUS II	4
ENGR120 CHEM101	CAD: COMPUTER AIDED DRAFTING GENERAL CHEMISTRY	5 3 4	LITR210	CONCEPTS OF LITERATURE	3

STEM ACADEMY: CODING

COMM201

FIRST SEMES	TER: 7 CREDITS		THIRD SEMES	STER: 7 CREDITS	
CODE CISW216 WRIT101	CLASS ANDROID APP DEVELOPMENT ENGLISH COMPOSITION TITAN TRANSITION	CREDITS 3 3	CODE CISW101 CISW212 PSYC101	CLASS CRE CLIENT SIDE SCRIPTING LANGUAGES SQL FOUNDATIONS GENERAL PSYCHOLOGY	DITS 3 1 3
SECOND SEM CISW218 CISW211 COMM201	IESTER: 7 CREDITS IOS APP DEVELOPMENT DATABASE FOUNDATIONS PUBLIC SPEAKING	3 1 3	FOURTH SEM CISW206 CISW213 LITR210	SEVER-SIDE PROGRAMMING LANGUAGE ADVANCED SQL & REPORTING CONCEPTS OF LITERATURE	3 1 3

STEM ACADEMY: PROCESS TECHNOLOGY

FIRST SEMES	TER: 7 CREDITS	
CODE	CLASS CRED	ITS
PTEC150	PTECH: INDUSTRY OVERVIEW AND	1
PTEC151	PTECH: FUNDAMENTALS AND	1
PTEC152	PTECH: EQUIPMENT	1
WRIT101	ENGLISH COMPOSITION	3
COLL100	TITAN TRANSITION	1
SECOND SEN	MESTER: 7 CREDITS	
PTEC170	PTECH EQUIPMENT: TECHNOLOGY AND	1
PTEC171	PTECH EQUIPMENT: EQUIPMENT I AND	1
PTEC172	PTECH EQUIPMENT: EQUIPMENT II AND	1
PTEC172	PTECH EQUIPMENT: UNIT OPERATIONS	1
PIECITS		7

PUBLIC SPEAKING

THIRD	SEMESTER: 7	CREDITS

CODE	CLASS	CREDITS
PTEC106 PSYC101	INSTRUMENTATION I GENERAL PSYCHOLOGY	4
FOURTH SEM	ESTER: 7 CREDITS	
PTEC206	INSTRUMENTATION II	4
LITR210	CONCEPTS OF LITERATURE	3



REQUIREMENTS

- · GPA of 2.0 or higher
- · Cood attendance
- · Good conduct
- · Recommendation from principal or guidance counselor

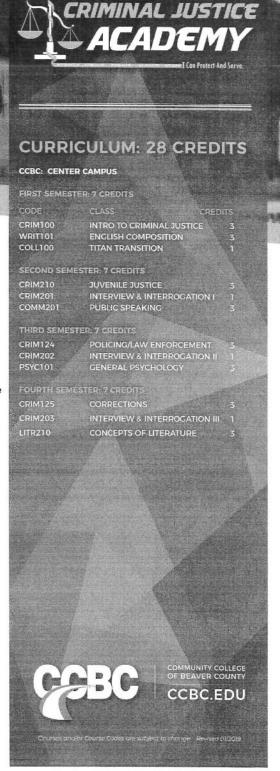
rewarding job fields regionally and nationally.

HOW TO ENROLL

- Contact your school's guidance office for enrollment information.
- · Scholarships are available for qualified students.
- Get your enrollment approved by your parent or legal guardian and the high school principal or designee.

TO LEARN MORE ABOUT THE CRIMINAL JUSTICE ACADEMY

- Criminal Justice Academy Champion:
 - · 724-480-3463
 - cjchampion@ccbc.edu





Do you have a passion for planning, designing, and creating? Are you interested in a career in construction?

Enroll in Mascaro Construction Academy to prepare to design and construct,

You'll learn specialized project management techniques to oversee the planning, design, and construction of a project, from beginning to end. You'll gain hands-on experience in our classrooms and construction learning labs, along with being taught in real-world settings. As a CCBC Mascaro Construction Academy student, you'll have the opportunity to earn up to 28 college credits while still taking your high school classes.

BENEFITS

- Learn from experienced college faculty members.
- Complete all the of the coursework and continue your studies toward an associate degree in Construction Management, as well as a certificate in other service-related fields.
- Get career-ready for one of the most high-demand job fields in our region and nationwide.

REQUIREMENTS

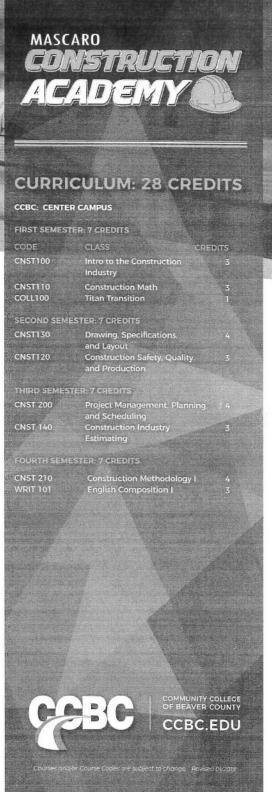
- Grade Point Average of 2.00
- Good Attendance
- · Good Conduct
- · Recommendation from principal or guidance counselor

HOW TO ENROLL

- Contact your school's guidance office for enrollment information.
- · Scholarships are available for qualified students
- Get your enrollment approved by your parent or legal guardian and the high school principal or designee.

TO LEARN MORE ABOUT THE MASCARO CONSTRUCTION ACADEMY,

- Mascaro Construction Academy Champion:
 - · 724-480-3450 | constructionchampion@ccbc.edu





Dual Enrollment (Nondegree) Form

If you are registering as an undergraduate nondegree dual enrollment student, you must complete and return this form to the campus where dual enrollment is planned. Enrollment as a nondegree student does not imply admission to the University. You must make formal application to be considered for admission as an undergraduate degree student. This form must be accompanied by an official high school transcript.

SECTION 1: Biographical I	nformation			
Last Name	First Name		Middle Name	
Social Security or PSU ID	E	mail	100000	
Gender Male Fema	le Date of Birth		Country of Birth	
Home Address (Permanent Reside	nce)			
Street				
City		State_	Zip	
Length of Time at Residence				
Phone	C	Cell		
SECTION 2: Enrollment & Enrollment Request for (pick one)	Spring Summer	OFall	Year	
Campus Location			and the second	
Have you previously taken dual enro	illment courses at Penn State?	O No	Oyes	
Course Schedule Number	Course Name/Abbrev	viation	Section	1
Course Schedule Number	Course Name/Abbrev	viation	Section	1
High School	Current Grade Level_		Year of Graduatio	n
Counselor/Advisor Name		Counselor Ema	ail	
Have you ever been dismissed or so OR are you ineligible to return to a			idary school, Penn State	e, or any other institution Yes
Is there an unresolved or pending of				O Yes
Have you ever pled guilty or no co criminal offense, OR are there crim			ersion program for, and No	d/or been convicted of a
SECTION 3: Ethnic Backg	round			
Federal law requires that institution employees. Your individual informat for each category. Select the approp	tion will be kept strictly confident	tial. The law o	nly requires institutions	
Is your ethnicity Hispanic/Latino (Cu	ıban, Mexican, Puerto Rican, So	uth or Central	American, or other Spar	nish culture or origin)?
OYes ONo				
What is your race? (select one or mo				
White Black or African		0.1 5 15		
American Indian or Alaskan Nat	tive Native Hawaiian or	Other Pacific	Islander	

Page 2 Last Name
SECTION 4: Residency Status
Are you a U.S. Citizen? Yes No
If no, which of the following statements describes your citizenship status?
I am an immigrant (permanent resident) residing in Pennsylvania.
I am an immigrant (permanent resident) residing in another U.S. state or territory.
I have a nonresident visa. Specific type:
Are you a legal resident of the Commonwealth of Pennsylvania?
Yes, less than 1 year Yes, more than 1 year No
Information about Penn State's Residency Policy can be found at: http://bulletins.psu.edu./bulletins/bluebook/general_information.cfm?section=Tuition2.
SECTION 5: Signatures STUDENT I have completed all applicable sections of this form and I affirm accuracy of the information provided. I understand the inaccurate information provided on this form may be cause of refusal or cancellation of my enrollment.
I authorize the University to release any information, including grades, evaluations, and final transcripts, to the high schonamed above at any time throughout the enrollment period. I also authorize representatives from the University, including professor, to discuss course progress with high school officials and/or my parent/guardian at any time. I also understated I will be expected to adhere to all student and academic policies related to dual enrollment and withdrawing from course. I have been advised that if withdraw from a course, I will be responsible for the cost of the tuition as determined the University.
Student Signature
PARENT/GUARDIAN I have reviewed this form and approve of my child enrolling in the course(s) stated above. I understand that transportation and from the University will not be provided. Furthermore, I understand that my child will be expected to adhere to all stude and academic policies of the University, including those policies related to dual enrollment and withdrawing from a course have been advised that if my child withdraws, I will be responsible for the cost of fuition determined by the University.
Parent/Guardian SignatureDate
*The Social Security number (SSN) you provide for enrollment purposes, or when requesting special services, will be used by the Universe to verify your identity for official record keeping and reporting. If you choose not to supply your SSN, certain services, such as transcript academic verification, tax reporting, financial aid, and other services may not be available to you, and Penn State cannot guarantee complete academic record for you. Your SSN will be stored in a central system and only used for official reporting and record keeping will not be used as a primary source to identify you within the Penn State system; the PSU ID will be used as the primary identifier.
Statement of Nondiscrimination

Statement of Nondlacrimination

The University is committed to equal access to programs, facilities, admission, and employment for all persons. It is the policy of the University to maintain an environment free of harassment and free of discrimination against any person because of age, race, color, ancestry, national origin, religion, creed, service in the uniformed services (as defined in state and federal law), veteran status, sex, sexual orientation, marital or family status, pregnancy-related conditions, physical or mental disability, gender, perceived gender, gender identity, genetic information, or political ideas. Discriminatory conduct and harassment, as well as sexual misconduct and relationship violence, violates the dignity of individuals, impedes the realization of the University's educational mission, and will not be tolerated. Direct all inquiries regarding the nondiscrimination policy to Dr. Kenneth Lehrman III, Vice Provost for Affirmative Action, Affirmative Action Office, The Pennsylvania State University, 328 Boucke Building, University Park, PA 16802-5901; Email: kli2@psu.edu; Tel 614-683-0471. Penn State encourages qualified persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation or have questions about the physical access provided, please contact Jill Tress at 724-773-3867 or jmt31@psu.edu in advance of your visit. Nondiscrimination: http://guru.psu.edu/policies/AD85.html

Dual Enrollment Registration Form

High school students who have been approved by their local school district to participate in the Dual Enrollment program should complete our online application and then submit this form along with your official high school transcripts to:

L	LBC - Aamissions	& Registration	1 Campus Drive	Monaca,	PA 15061
Si	udent Informati	on			
N	ame:				
A					
2			Date of Birt		
	Mail Address:				
li	gh School Inforn				
li	gh School Name				
	gh School Addre				
ŝl	iidance Counselo				
c	unselor's Phone				
t	udents Current G	irade Level:	Student's Anticipate		
C	urse Selection				
10	dicate the course	new Dual Enrollment R (s) that you would like he "Course Search" at J	egistration form each sem to enroll in. Our current so https://my.ccbc.edu.	ester, using hedule for o	the section below to credit courses is
	Course Code	Course Title	Scheduled Day	& Time	Course Location
					All Property

1 of 3



High School Authorization (Signature is required)

I approve the course(s) selected and verify that this student has demonstrated adequate academic
preparation and the ability to benefit from advanced scholastic course work. I hereby grant permission
for this student to enroll in the Dual Enrollment Program at Community College of Beaver County.

Signature of High School Principal or Guidance Counselor Date

Parent / Guardian Authorization (Signature is required)

I have reviewed the Dual Enrollment Registration form and approve of my child enrolling in the course(s) stated above. I understand that transportation to and from Community College of Beaver County will not be provided. Furthermore, I understand that my child will be expected to adhere to all student and academic policies of CCBC, including those policies related to dual enrollment and withdrawing from a course. I have been advised if my child withdraws from a course, I will be responsible for the cost of tuition as determined by the college.

Signature of Parent or Legal Guardian Date

Student Certification (Signature is required)

I certify that the above information is complete and accurate. I understand that I am responsible for requesting that my high school forward my official transcript to the college.

I authorize Community College of Beaver County to release any information, including grades, evaluations, and transcripts to the high school named above at any time throughout the enrollment period. I also authorize representatives from the college, including my professor, to discuss course progress with high school officials and/or my parent/guardian at any time. I understand that I will be expected to adhere to all student and academic policies of CCBC, including those policies related to dual enrollment and withdrawing from a course. I have been advised if I withdraw from a course, I will be responsible for the cost of tuition as determined by the college.

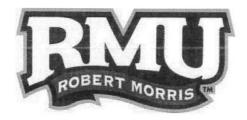
Signature of Student Date

Page 2 of 3



Placement Testing Waiver

l,	, (Signature o	f High School Pr	incipal or Guidance Counselor)
do hereby request a w	aiver of placement testing for t	he following st	tudent
	, for	the	
Insert Year			
FallSemester	SpringSemester	Summer	Semester
) selected and verify that this solity to benefit from advanced		
	dent to enroll in the College in unity College of Beaver County		nd/or the Dual Enrollment
Signature of High School	Principal or Guidance Counselor		Date



Dual Enrollment Robert Morris University - Colonial Hub

6001 University Blvd. Moon Township, PA 15108

3rd floor Patrick Henry, Room 332

colonialhub@rmu.edu - 412-397-5500

__ Gender_

Address	0	
Date of Birth	Social Security# (required)	-
Student phone#	Student email	
High School	Graduation YearCumulative High School G	PA
Name of RMU Course(s)	equested	
Parent/Guardian Name _	And the second s	
Phone	Email	
	DISCIPLINARY HISTORY	
attended from the 9th gr misconduct or behavioral	d responsible for a disciplinary violation at any educational instituted (or the international equivalent) forward, whether related to a misconduct, that resulted in a disciplinary action? These actions cobation, suspension, removal, dismissal, or expulsion from the inst	icademic ould include
Circle Yes or No:		
Yes		
No		

Have you ever been adjudicated guilty or convicted of a misdemeanor, felony, or other crime? Circle Yes or No:

Yes

No

*Note that you are not required to answer "yes" to this question, or provide an explanation, if the criminal adjudication or conviction has been expunged, sealed, annulled, pardoned, destroyed, erased, impounded, or otherwise ordered by a court to be kept confidential.





HOPEWELL HIGH SCHOOL OFFERS

PITT COLLEGE IN HIGH SCHOOL CALCULUS

For Students

College in High School is a concurrent enrollment partnership, which means a registered student earns academic credit from his or her high school and the University of Pittsburgh at the same time. By taking CHS classes, you can get a jump on your future education and earn college credits. You also gain confidence by experiencing college-level course work. And, CHS courses cost a fraction of regular in-state tuition.

Academic research and state data suggest that high school students in concurrent enrollment programs receive other college-related benefits.

These students:

- are more likely to meet college-readiness benchmarks
- achieve a lower likelihood of college placement into remedial English or math
- attain higher four- and six-year college completion rates
- accomplish a shorter average time to bachelor's degree completion for those completing in six years or less





HOPEWELL HIGH SCHOOL OFFERS THE FOLLOWING ADVANCED PLACEMENT COURSES

AP CHEMISTRY

AP BIOLOGY

AP PHYSICS 1

AP PHYSICS 2

AP CALCULUS AB

AP CALCULUS BC

AP ENG LIT

AP ENG LANGUAGE AP US GOVERNMENT

What It Takes to Take AP

You're already using the skills it takes to succeed;

AP challenges you to take them to new levels.

You might think that AP classes are tough, and you might be right. But that doesn't mean that you aren't up to the task. If you are willing to work hard, you'll find that the qualities you use in other parts of your life can help you achieve your goals. AP brings the college experience to your high school with the opportunity to earn college credit at thousands of universities. More students are ready for AP than you'd think. Roll up your sleeves and find out what AP can do for you.