CARLISLE HIGH SCHOOL

EDUCATIONAL PLANNING GUIDE
2022-2023

COMMUNITY - HONOR - SERVICE

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INTRODUCTION

This guide has been prepared to assist students, parents, and school personnel in the complex task of planning an appropriate personal educational program. It contains general information about the academic program of Carlisle High School as well as explanations of subject offerings and graduation requirements.

To plan an effective and realistic educational program, students and parents should take into consideration the student's abilities, career goals, and interests. They should study the entire guidebook looking for all relevant information, and they should carefully read the course descriptions. They should also consider their student's academic records for the past several years. While grades received in middle school should not necessarily dictate the academic program in high school, a review of those report card grades should give a good indication of strengths and weaknesses. Using this information, students can plan a program of studies that meets their needs.

Parents or students who need additional assistance in selecting courses should contact their student's teachers or counselor. All staff members are available to assist in the important task of choosing the right programs for students.

Students and parents will receive a detailed handout, highlighting important dates pertaining to the course selection process. Students and parents will also have access to several videos which will help assist with questions about the process or specific course information.

HIGH SCHOOL ORGANIZATION

Carlisle High School consists of three separate buildings located on one campus. The three buildings are: the Emma Thompson McGowan Building, the Gerald L. Fowler Educational Center, and the David L. Swartz Building. There is a typical enrollment of approximately 1500 students. This organizational structure allows students to enjoy the advantages of a comprehensive educational program by taking courses in any of the four buildings.

COURSE SELECTION CALENDAR

The course selection process for students and parents will start in mid-February, at which time students and parents will receive additional information about the course selection process.

Students (and parents) may change the courses selected providing their abilities and goals demonstrate that the change is necessary and appropriate.

- All requests for changes should be submitted to the student's present counselor.
- The due date for submission of change requests is **Monday, June 20, 2022**.
    - After this date, only requests for changes that indicate extenuating circumstances will be honored.

Course alternates are required for all elective courses. When conflicts occur during the scheduling process, alternates are used as replacements. Therefore, it is imperative that students select alternates carefully, and that they provide at least one alternate for each elective. When irresolvable conflicts occur and selected alternates cannot be scheduled, a school official will attempt to contact the student in order to address the conflicts. Under no circumstances can requests for specific teachers or sections be honored.

Please be aware that when you receive your schedule in the summer, every effort has been made to ensure that you have the classes you requested. However, occasionally errors do occur. If there is an error on your schedule, please contact your school counselor immediately.

Adding or Dropping a course once the school year begins:

- There will be a two week drop/add grace period.
- A drop/add course form must be obtained from the grade level counseling center.
- The form will require a parent/guardian signature, counselor signature and grade level principal signature.
- After the two-week drop/add grace period a student schedule may not change.

Honors / AP courses:

- Honors / AP courses will follow the process outlined within the Honors / AP course contract (see additional requirements on page 7)

GRADE ASSIGNMENTS

All Students

Students in grades 9 through 12 will be placed in grades according to the total number of course credits earned by the end of the year. There are no exceptions to the following criteria:

To be in **9th grade** a student is assigned on the basis of a certification of promotion or assignment by the middle school principal.

To be in **10th grade** a student must have earned at least 5 major credits including one English credit.

To be in **11th grade** a student must have earned at least 10 major credits including two English credits.

To be in **12th grade** a student must have earned at least 16 major credits and be able to complete all graduation requirements by the end of the regular school year.

CHS GRADUATION REQUIREMENTS

Except - Automotive Technology, Culinary Arts, Early Childhood Education, Carpentry

Effective: Class of 2022 - 2025

Units of Credit	Course Area
4.0	English
3.0 or 4.0	Social Studies (see next page)
3.0 or 4.0	Science (see next page)
3.0 or 4.0	Mathematics (see next page)
2.0	Arts & Humanities (see next page)
1.0	Physical Education
0.6	Health I
0.2	Safety Education
0.2	Health II
6.0	Electives

24.0 Minimum Total Credits Required for Graduation

CHS GRADUATION REQUIREMENTS

Automotive Technology, Culinary Arts, Early Childhood Education, Carpentry

Effective: Class of 2022 - 2025

Units of Credit	Course Area
4.0	English
3.0	Social Studies
3.0	Science
3.0	Mathematics
1.0	Arts & Humanities (see next page)
1.0	Physical Education
0.6	Health I
0.2	Safety Education
0.2	Health II
9.0	Electives

25.0 Minimum Total Credits Required for Graduation

CHS GRADUATION REQUIREMENTS

Effective for ALL Programs and Graduating Classes

1. A minimum of ten (10) credits must be earned in the combined social studies, science and mathematics areas. (Except students in approved CTE programs of study).

2. Refer to the Arts & Humanities Electives section of this guidebook for a listing of courses that meet this requirement.

3. All students graduating in the class of 2022 and beyond must take and pass (score proficient or advanced) the Keystone Examinations in Algebra I, English Literature and Biology I.
    - Students who do not pass the above test will:
        - Retest to show proficiency in the respective test and/or
        - Meet requirements outlined in ACT 158 of 2018 (more information will be released to students and parents at a later date).

4. Students who transfer to Carlisle High School enrolling into **grade 12**:
    - May provide out of state end of course test scores to show proficiency
    - Students without end of course exam scores in Literature and Algebra I may need to complete placement tests to allow the high school administration to determine proper course placement *(this could involve remediation courses if necessary*).

5. Students who transfer to Carlisle High School entering **grades 9 - 11**:
    - A transfer student in grades 9 - 11 will **not** be required to complete the following Keystone Exams (Algebra I, English Literature or Biology I) – **if** the student provides documentation that they passed a statewide standardized End-of-Course (EOC) assessment.
    - The student must provide documentation that they achieved a passing/proficient score on the high school statewide assessment in mathematics, literature/language arts or in science required by the state from which the student transferred. This documentation shall satisfy the requirements of the Elementary and Secondary Education Act, 20 U.S.C 6301.
    - The student may also provide documentation they achieved a score of 3 or higher on the following AP exams in the appropriate content area: Calculus AB, AP Calculus BC, AP Statistics, English Language and Composition, English Literature and Biology, in order to gain proficiency status.

6. Students should remediate course failures in summer school in order to graduate with their class.

7. All students must carry a minimum of five (5) major credits at all times. In addition, they should have classes scheduled for at least twenty-eight (28) periods per week.

8. The administration cannot make exceptions to these requirements.

STUDENT COURSE SELECTIONS

Overview by Grade

A basic grade level overview for the vast majority of student schedules is shown in this section (except for CTE students enrolled in an approved program of study). Counselors will advise students wishing to enroll in a CTE program of study of the courses they must take each year in order to meet their graduation requirements.

Grade 9
English I
U. S. History
Mathematics
Honors Biology
Geo-Environmental Science
Elective 1
Elective 2
Physical Education 9
Health I 9

NOTES (Grade 9 only)

- Honors Biology may be taken by ninth grade students; however, a research project may be a class expectation.
- All courses taken through Carlisle Virtual Academy may count as required courses or electives as approved by the Board of Education. Students should check with their counselor to determine the classification of courses taken online.

Grade 10	Grade 11	Grade 12
English II	English III	English IV
World History	Civics/AP Social Studies	Social Studies/Math/Science
Mathematics	Mathematics	Elective 7
Biology I/Science	Science	Elective 8
Elective 3	Elective 5	Elective 9
Elective 4	Elective 6	Elective 10
Physical Education 10	Physical Education 11	Physical Education 12
Safety Education	Health II (11th or 12th grade)	

NOTES (Grades 10-12)

- Students who complete a CTE program of study may not be required to have a fourth credit in the area of Social Studies, Mathematics or Science to satisfy the ten (10) credit total that is required among these content areas for other students.
- All courses taken through Carlisle Virtual Academy may count as required courses or electives as approved by the Board of Education. Students should check with their counselor to determine the classification of courses taken online.

General Information – ALL students

- Course curriculum is reviewed and required courses are established to best prepare our graduates, while meeting district and state standards.
- Students who satisfactorily complete a special education program developed by their Individualized Education Program (IEP) team shall receive a regular high school diploma.
    - This policy applies if eligible students' special education programs do not otherwise meet all the requirements of Chapter 4 (from Section 4.23 of State Curriculum Regulations).
- All students must carry a minimum of 5 major credits plus any necessary minor credits. This applies to all students, including those taking additional virtual courses (CVA).
    - The exception to this requirement would be seniors who may need additional time at CHS to complete graduation requirements (i.e. completing a fifth year of high school).

Arts and Humanities Electives

Arts and Humanities is defined as the study of dance, theatre, music, visual arts, language and literature including forms of expression, historical and cultural context, critical and aesthetic judgment and production, performance and exhibition of work.

The following planned courses will fulfill the Arts and Humanities graduation requirement for the class of 2020 and beyond. All students must pass a minimum of two (2) full credits of Arts and Humanities courses in order to meet the graduation requirement.

PLEASE NOTE: *Career & Technology students in Automotive Technology, Culinary Arts, Early Childhood Education and Carpentry Trades must earn one (1) full credit in the area of Arts and Humanities.*

Art
Art Exploration Digital Media I, II, III
Drawing and Painting I, II, III
Sculpture and Ceramics I, II, III
AP Art History
AP Drawing & 2D Studio Art
AP 3D Studio Art
*Graphic Arts and Design I, II
**(Listed in the Career & Tech. section)*

World Languages
French I, II, Honors III, Honors IV, AP French
Spanish I, II, Honors III, Honors IV, AP Spanish
German I, II, Honors III, Honors IV, AP German
International Languages and Cultures

English
Creative Writing
Shakespeare: Page to Stage

Publications
Periscope
Oracle

Music
Concert Choir
Bel Canto Singers
Chamber Singers
Orchestra
Concert Band
Symphonic Band
Piano/Music Theory I
Advanced Piano
Guitar and History of Rock & Roll
Advanced Guitar
Introduction to Music Technology
Music Technology II
History of Western Music
Perspectives of Music in Pop. Culture

Special Programs
AP Research
AP Seminar
CPYB

STATE ASSESSMENTS / EXAMINATIONS

Effective with class 2022 and beyond

All students graduating in the class of 2022 and beyond must take and pass (score proficient or advanced) on the Keystone Examinations in Algebra I, English Literature and Biology I.

Students who do not pass the above tests will:

- Re-test to show proficiency in the respective test and/or
- Meet requirements outlined in ACT 158 of 2018 (more information will be released to students and parents at a later date).

Students who transfer to Carlisle High School during grades 9-12, see details on page 4 about specific details about state assessments / examinations.

PSAT / NMSQT

Preliminary Scholastic Aptitude Test and National Merit Scholarship Qualifying Test

CASD will fully assume the cost for any 10th or 11th grade student wanting to take the PSAT. Students in grade 11 are strongly encouraged to participate in the PSAT exam as a means to prepare for college entrance exams. Multiple national and local organizations exclusively consider the scores earned in the 11th grade year on the PSAT for scholarship qualification.

ADVANCED PLACEMENT (AP) and HONORS COURSES

- Students who select AP courses are strongly encouraged to take The College Board Advanced Placement examinations in the spring (students will be responsible to pay a fee).
- There are two Grade Point Averages (GPA) calculated for students: a weighted and an un-weighted grade point average. Only courses listed as Advanced Placement (AP) and/or Honors will carry an additional value when calculating the weighted grade point average.
- A weighted grade point average gives 0.5 additional quality point value to each Honors and Advanced Placement (AP) course. Weighted rankings are done based on these grade point averages.

Honors / AP Course Exit Policy

- A student may exit an Honors or AP class ***no later than the mid-point of the first marking period***
- To exit an Honors or AP course:
  - The student must attend a conference with their respective school counselor and/or grade-level principal which parents/guardians are strongly encouraged to attend as well
  - Approval of the grade-level principal is required

NOTE: *When a student drops an Honors or AP course, all grades earned in that course follow the student to the other course, including the summer reading/assignment grades if applicable.*

Honors / AP Course Contract

- A Student & Parent Agreement for Enrollment in Advanced Courses form must be completed online. Students will be directed during the Course Selection process where to find this online form.

DUAL-ENROLLMENT / COLLEGE COURSE OPPORTUNITIES

CHS supports several options for students to take college-level courses. It is important for students who may be thinking about dual-enrollment opportunities or taking college courses to have a discussion with their counselor prior to enrolling into a program.

PLEASE NOTE:

- There may be specific criteria that a student would need to meet prior to being enrolled in either a course or program. Please speak with a counselor prior to enrolling.
- Courses may or may not count for high school credit
- Courses may or may not receive an additional weight value (0.5) as local Honors and AP Courses at CHS
- College courses or programs could require a fee paid by the student.
- Students with the intent to take a college course *(on a college or university campus)* will need to inform their school counselor by June 20, 2022
    - Failure to inform the school counselor prior to the deadline date above could impact their ability to take the college course.
    - The specific college or university may have their own enrollment criteria and protocols
- These opportunities are subject to change at any time and may be denied by the high school administration.

NCAA

NATIONAL COLLEGIATE ATHLETIC ASSOCIATION

When planning their course selection, student athletes should be mindful of the requirements of the **NCAA** (National Collegiate Athletic Association.) The NCAA has strict guidelines to "qualify" a student to receive athletic scholarships and/or participate in NCAA Division I or Division II athletics at the collegiate level. Student athletes should review these criteria carefully at www.eligibilitycenter.org.

Three of the main criteria for eligibility include: the number of "core" courses completed, the earned GPA in those "core" courses, and a sliding scale requirement regarding core course GPA and SAT or ACT scores. To help student athletes, **Carlisle High School courses which have been approved as NCAA core courses will have this icon NCAA next to them in the Educational Planning Guide.** Please see your counselor with any questions related to NCAA requirements and course selection.

LIBRARY

The library department of the Carlisle Area School District includes a comprehensive library in the Fowler Education Center where reading is viewed as a foundational skill for learning, personal growth and enjoyment. The library is fully automated and houses more than 44,000 volumes and 17 different periodical titles. Students have access to 2 networked computer labs and 26 additional computers placed around the facility. Thirty-four e-readers are available for a 7-day checkout and the library owns over 1,400 fiction and nonfiction electronic books available online. The library provides access to multiple forms of educational software and multiple on-line information resources. All students are issued a student ID/library card which allows equitable access to books, reading and information technology. The high school students concentrate on research skills which are integrated into the district educational plan in conjunction with regular classroom activities. Students are welcome to use the library for research, current event reading, career exploration, computer work and/or leisure.

CARLISLE AREA SCHOOL DISTRICT EQUITY STATEMENT

The Carlisle Area School District is an equal opportunity education institution and will not discriminate on the basis of race, color, age, creed, religion, gender, gender-identity, sexual orientation, ancestry, national origin, marital status, pregnancy, disability or any other status protected by law in its activities, programs, or employment practices as required by Title VI, Title IX and Section 504.

No person shall on the grounds of race, color, age, creed, religion, gender, gender-identity, sexual orientation, ancestry, national origin, marital status, pregnancy, disability or any other status protected by law be excluded from participation in or be subjected to discrimination in any program or activity funded in whole or in part by federal funds. Discrimination on the basis of sex or religion is also prohibited in some federal programs.

For information regarding civil rights or grievances procedures, services, activities and facilities that are assessable to and usable by handicapped persons, contact:

Dr. Colleen M. Friend
Title IX Coordinator
Section 504 Coordinator
540 West North Street
Carlisle, PA 17013
717-240-6800 ext. 16805
friendc@carlisleschools.org

TITLE IX STATEMENT

The District does not discriminate in any manner, including Title IX sexual harassment, in any District education program or activity. The District has established Title IX personnel to promptly respond to concerns and reports of sexual harassment and assault. All investigations into reports of sexual harassment and assault will be impartial, free of bias and conflicts, and will not prejudge the facts for either side. The District strives to maintain an environment where all students, staff, and greater community feel safe.

Dr. Colleen M. Friend
Title IX Coordinator
540 West North Street
Carlisle, PA 17013
717-240-6800 ext. 16805
friendc@carlisleschools.org

ASSISTANCE / QUESTIONS

Fowler Building Office – 240-6800, ext. 13805
Dr. Michael Black – Principal, CHS
Dr. Albert Parrillo – Director, Career and Technology Programs

McGowan Building Office – 240-6800, ext. 26835
Dr. Patricia Buffington – Associate Principal, Grade 12
Mr. Jason Beals – Assistant Principal, Grade 11
Mrs. Emily McDonald – Head Counselor
Mrs. Amy Knapp – Counselor
Ms. Amanda Raudabaugh – Counselor
Mrs. Heather Bosnyak – World Language/ELD Program Chair
Ms. Kelly Brent – Mathematics Program Chair
Mrs. Ashley Gogoj – Art and Design Program Chair
Mr. Byron Mikesell – Music Program Chair
Mrs. Samantha Moyer – Science Program Chair
Mr. George Null – Health and Wellness Program Chair
Mr. Kevin Wagner – Social Studies Program Chair

Swartz Building Office – 240-6800, ext. 27805
Mr. Paul Wysocki – Associate Principal, Grade 10
Mr. Joseph Dunn – Assistant Principal, Grade 9
Mrs. Patricia Kreider – Counselor
Mrs. Amy Davidson – Counselor
Mrs. Ginger Rotz – Counselor
Mrs. Keely McGeehan – English Program Chair
Mrs. Malinda Mikesell – Reading Program Chair

Wilson Middle School Office – 240-6800, ext. 19805
Mr. Walter Bond – Principal
Mr. Jake Evans – Assistant Principal
Mr. Harold Travis – Head Counselor
Ms. Mary Hey – Counselor

Lamberton Middle School – 240-6800, ext. 15805
Mr. Keith Colestock – Principal
Mr. Nick Sadvari – Assistant Principal
Mr. Chris Ail – Counselor
Ms. Erin Hughes – Counselor

Administration Office – 240-6800, ext. 17813
Mrs. Jill Condo – Director of Student Services
Mr. Josh Barr – Associate Director of Student Services
Ms. Brittany Sanchez – Assistant Director of Student Services

ART / DESIGN

DEPARTMENT

ART / DESIGN

Art Exploration – Course #021 1 credit
Prerequisite: None 5 pds/wk
Grades 9-12

Do you like to experiment with art-making materials and mediums? Art Exploration is an intro-level course for students who are interested in exploring a variety of art-making approaches and who would like to have more experience in a diverse range of mediums. Students will have the opportunity to explore ceramics, sculpture, drawing, painting, printmaking and more! All ability levels are encouraged to take this class.

Digital Media I – Course #026 1 credit
Prerequisite: None 5 pds/wk
Grades 9-12

Are you considering a career in digital media such as animation, photography, illustration or graphic design? Digital Media I is a course designed to educate students on the ever-changing digital world, as well as to provide hands-on experience with industry standard software and equipment. The curriculum covers a wide range of areas to include animation, digital photography, graphic design, illustration and exploration of traditional drawing mediums.

Digital Media II – Course #027 1 credit
Prerequisite: Digital Media I 5 pds/wk
Grades 10-12

Digital Media II is a course designed for students with experience in digital media. Students will have the opportunity to advance their skill set in a range of digital media. Topics covered in Digital Media II include animation, digital photography, graphic design, illustration and exploration of traditional drawing mediums. Students will have hands-on experience using professional equipment and software. Digital media is a fast-growing industry and students will have opportunities to explore careers. If you are interested in advertising, game design, animation, photography, illustration, interior design or sequential art, this is the class for you!

Digital Media III – Course #020 1 credit
Prerequisite: Digital Media II 5 pds/wk
Grades 11-12

Digital Media III is a course designed for students with experience in digital media and who are interested in advancing their skills further. Topics covered in Digital Media III include animation, digital photography, graphic design, illustration and exploration of traditional drawing mediums. Students will have hands-on experience using professional equipment and software. Digital media is a fast-growing industry and students will have opportunities to explore careers. If you are interested in advertising, game design, animation, photography, illustration, interior design or sequential art, this is the class for you!

Drawing and Painting I – Course #034 1 credit
Prerequisite: None 5 pds/wk
Grades 9-12

Are you interested in improving your skills in drawing and painting? Drawing and Painting I is an introductory course for students interested in exploring a variety of drawing and painting approaches. Students will learn how to paint and draw people, objects, spaces and places. Students will experiment with graphite, charcoal, pen & ink, acrylic paint, watercolor, collage and more! Drawing and Painting I is the first prerequisite for students who want to continue taking art classes in the Drawing and Painting pathway.

Drawing and Painting II – Course #035 1 credit
Prerequisite: Drawing and Painting I 5 pds/wk
Grades 10-12

Drawing and Painting II is a course for students who want to continue advancing their skills in drawing and painting. Students will have the opportunity to explore a variety of drawing mediums and will focus on painting techniques using watercolor, acrylic and oil mediums. Students are provided with opportunities to draw and paint from observation and references. Drawing and Painting II is highly recommended for students interested in taking Drawing and Painting III & AP Studio.

Drawing and Painting III – Course #043 1 credit
Prerequisite: Drawing and Painting II 5 pds/wk
Grades 11-12

Are you considering a career in the fine arts? This course is designed for students who have taken Drawing and Painting I, Drawing and Painting II and for students interested in refining and strengthening their drawing and painting skills. Students will draw and paint using advanced techniques and more experimental approaches. Students are provided with continued opportunities to paint from observation and references. In addition, students will develop a body of work that can be used as a portfolio to apply to college. Students are expected to work on assignments outside of class, keep a sketchbook, research ideas and discuss their work, ideas and inspiration as well as the work of other students and master artists. Drawing and Painting III is required for students who are interested in taking AP Drawing and 2D Studio Art.

AP Drawing and 2D Studio Art (Drawing & Painting IV) – Course #044 1 credit
Prerequisite: Drawing and Painting III or Digital Media III 5 pds/wk
Grade 12

AP Studio Art (Drawing and 2D) is designed for advanced art students who are interested in painting and drawing. Students will create a sustained investigation focusing on a central idea. This course is designed to guide students in preparing a portfolio or body of work equivalent to a college-level studio course for submission to the College Board. Students must be committed to working outside of the classroom and meeting deadlines. Students are expected to work on assignments outside of class, keep a sketchbook, experiment with materials, research ideas and discuss their work, ideas and inspiration as well as the work of other students and master artists.

Sculpture and Ceramics I – Course #037 1 credit
Prerequisite: None 5 pds/wk
Grades 9-12

Are you interested in building sculptures and working with clay? Sculpture and Ceramics I is an introductory level course that focuses on teaching students hand-building and wheel throwing pottery techniques. Throwing techniques will include centering, throwing, trimming, glazing and firing. Hand-building techniques will include pinch, slab construction, additive and subtractive methods. Students will also have the opportunity to create sculptures and three-dimensional projects using other materials.

Sculpture and Ceramics II – Course #045 1 credit
Prerequisite: Sculpture and Ceramics I 5 pds/wk
Grades 10-12

Are you interested in improving your skills in sculpture and ceramics? Sculpture and Ceramics II is a course where students will continue to develop their craft by learning new skills and experimenting with a variety of art-making approaches. Students will become more advanced in their throwing and hand-building techniques. Students will also have the opportunity to create sculptures and three-dimensional projects using other materials.

Sculpture and Ceramics III – Course #042 1 credit
Prerequisites: Sculpture and Ceramics I and II 5 pds/wk
Grades 11-12

Are you interested in learning advanced techniques in sculpture and ceramics? Sculpture and Ceramics III is a continuation and advanced study of concepts which go beyond basic skills learned in Sculpture and Ceramics I and II. Students will become more advanced in their throwing techniques and hand-building techniques. Students will also have the opportunity to work more independently to create sculptures and three-dimensional projects of their choice.

AP 3D Studio Art (Sculpture & Ceramics IV) – Course #028 1 credit
Prerequisite: Sculpture and Ceramics III 5 pds/wk
Grade 12

AP Studio Art (3D) is designed for advanced sculpture and ceramics. Students will create a sustained investigation focusing on a central idea. This course is designed to guide students in preparing a portfolio or body of work equivalent to a college-level studio course for submission to the College Board. Students must be committed to working outside of the classroom and meeting deadlines. Students are expected to work on assignments outside of class, keep a sketchbook, experiment with materials, research ideas and discuss their work, ideas and inspiration as well as the work of other students and master artists.

AP Art History – Course #048 1 credit
Recommendations: B average in English and Social Studies 5 pds/wk
Grades 11-12

Do you enjoy interpreting art? Art History is a course on art throughout history and around the world. The focus will mainly be on Western or European Art History. Students will learn about art history through class discussion, readings, visuals, videos, research and lecture. This course is recommended for students interested in taking the Advanced Placement (AP) Art History Exam. For success in Art History, students should have maintained a B average or higher in English and Social Studies. An understanding of historical events that influenced the ideas, styles and techniques of artists as well as an ability to express this understanding in short answer and essay form is essential for a student to do well in this course and on the AP exam.

CAREERS & TECHNOLOGY

DEPARTMENT

CAREERS & TECHNOLOGY

Since 1938, the Career and Technical Education Programs offered at Carlisle High School's Center for Careers and Technology have prepared students for post-secondary education, military service and employment within their chosen field of interest. Student training focuses on career and technical skills with an emphasis on education and training beyond high school. This combination is necessary to develop a skilled and knowledgeable workforce to meet the needs of employers now and into the future. Students who enroll in a career and technical education program will complete workforce development training. Students can acquire college credits through state and local articulation agreements with post-secondary schools, can earn industry certifications and can participate in work-based learning experiences.

Carlisle High School's Center for Careers and Technology provides opportunities to complete course work in a variety of areas including Accounting, Automotive Technology, Communications and Broadcasting Technology, Computer Networking, Carpentry, Culinary Arts, Early Childhood Education, Engineering, Family and Consumer Sciences, Health Careers, Marketing, and Work-Based Learning. Carlisle High School offers these programs as approved Pennsylvania Department of Education Programs of Study focusing on career pathways. Students may also take some of the career and technical programs as electives.

SOAR Programs of Study College Credit for Career and Technical Programs

SOAR is a statewide program developed through the Pennsylvania Department of Education by the Bureau of Career and Technical Education. SOAR stands for **S**tudents **O**ccupationally and **A**cademically **R**eady.

SOAR Programs of Study are State approved Career & Technical Education Programs that credit skills and tasks learned in high school or a Career and Technical Center (CTC) toward a college degree, diploma or certificate program. All of Carlisle CTE programs are State approved.

Students earn these free college credits while at Carlisle High School by completing the SOAR Program of Study requirements. If you are a high school graduate who enrolls at a post-secondary school in the same technical program, you can start with between 3 to 12 credits already earned, saving yourself time and money!

The main steps you need to take are:

- Sign up for a career and technical education program and finish the program
- Earn a high school diploma
- Earn a minimum Grade Point Average (GPA) of 2.75 (85%) on a 4.0 (100%) scale in the technical core courses
- Complete the secondary school component of the approved PDE Program of Study
- Achieve proficiency on all tasks of the approved PDE Program of Study (POS) Competency Task List with technical teacher signature
- Achieve competent or advanced level on the secondary school end-of-program assessment that is appropriate for the approved PDE Program of Study
- Provide an official student transcript
- Provide industry certifications earned

Automotive Technology

Students in the Automotive Technology Concentration apply technical knowledge and skill in servicing and maintaining automobiles and light trucks. Students completing this program may obtain ASE (Automotive Service Excellence) certification. As a recognized Program of Study by the Department of Education, students can take advantage of many statewide articulation agreements to gain post-secondary credits.

Automotive Technology
Three (3) Year Program – 25 Credits for Graduation
CIP# 47.0604 – Program of Study

Period	9	10	11	12
1	English I	English II	English III	English IV
2	Algebra I	Geometry	Algebra II	Civics
3	Geo-Environmental	Biology I	World History I	Chemistry or Physics
4	PE/Health I	PE/Safety Education	PE Health II (11th or 12th)	PE Health II (11th or 12th)
5	US History I	**Automotive Technology I**	**Automotive Technology II**	**Automotive Technology III**
6	Foundations of Technology	**Automotive Technology I**	**Automotive Technology II**	**Automotive Technology III**
7	Arts & Humanities Credit	**Automotive Technology I**	**Automotive Technology II**	**Automotive Technology III**
CTE Total Hours CATS: 1,080 Carlisle: 1,445.7		**481.90 hours**	**481.90 hours**	**481.90 hours**

- Students must make up failed courses in summer school to complete this program of study.
- Students must pass all required Keystone Exams and/or complete remediation course.
- Students should plan to take the Arts and Humanities requirement in ninth grade.

Automotive Technology I – Course #901 3 credits
Recommended prerequisite: None 15 pds/wk
Grades 10-12
Certification Goal: NATEF Certification & SP2 Certification
REQUIRED EQUIPMENT: BEFORE the start of school, students need to purchase (1) Work boots-*steel toe not required,* (2) Work Uniform (black poly/cotton blend pants and black t- shirt).

This is the first course of a three-year program designed for students to enter the automotive career field. In Level I, students receive an overview of automotive systems, safety, basic hand and power tools, measurements and precision measuring tools. Students learn to navigate computerized service manuals and learn about career choices available in the automotive industry. An extensive emphasis is placed on vehicle suspension, chassis and braking systems.

Automotive Technology II – Course #902 3 credits
Prerequisite: Automotive Technology I minimum competencies 15 pds/wk
Grades 11-12
Certification Goal: NATEF Certification, PA State Inspection License, PA Enhanced Emission Testing License, S/P2 Certification
REQUIRED EQUIPMENT: BEFORE the start of school, students need to purchase (1) Work boots-*steel toe not required,* (2) Work Uniform (black poly/cotton blend pants and black t- shirt).

This is the second course of a three-year program designed for students to enter the automotive career field. In Level II, students study automotive safety, diagnostic and trade repair and specific hand tools, with an extensive emphasis on automotive electrical/electronics, vehicle emissions and engine performance. Students also participate in the PA State Inspection Licensing course.

Automotive Technology III – Course #903 3 credits
Prerequisite: Automotive Technology II minimum competencies 15 pds/wk
Grade 12
Certification Goal: NATEF Certification, PA State Inspection License, PA Enhanced Emission Testing License, S/P2 Certification
REQUIRED EQUIPMENT: BEFORE the start of school, students need to purchase (1) Work boots-*steel toe not required,* (2) Work Uniform (black poly/cotton blend pants and black t-shirt).

The final year of the automotive technology program focuses on safety and advanced diagnostic skills/training. Students learn course work leading to the PA State Safety Inspection License and PA Emission Testing License. Emphasis is on job-seeking skills as well as the skills required to maintain employment. Students may be eligible for employment through Cooperative Education, AYES or an Apprenticeship Training Program. If interested in a work-based learning experience, please see the automotive teacher or cooperative education teacher.

Pennsylvania College of Technology NOW College in the High School Course Brake Systems – Course #904 (AMT112) 3 credits built into Auto II
Recommended prerequisite: Automotive Technology I 15 pds/wk
Enrollment requirement: 75% (C) minimum overall GPA.
Grades: 11-12

In this course, students will learn the fundamentals of brake hydraulics including theory and operation of servo and non-servo drum brakes, disc and drum brake machining, operation of disc brakes, operation of power assist brakes, and overview of electronic anti-skid brakes. 3 Credits (2 Lecture - 3 Lab)

USA Spares Inc. Precision Machining Trade School Sponsorship Program
Course #172
**See Work-Based Learning Program Courses at the end of the CTE section for details*

Business Academy

Business careers are in high demand in today's competitive and global marketplace. Furthermore, an understanding of management, marketing, entrepreneurship, accounting, personal finance and technology are necessary to succeed in any career. All students enrolled in business accounting or marketing courses can learn basic skills as well as career training in accounting, business ownership and marketing strategies. Additionally, business students are eligible to acquire college credits through local and state articulations with state and regional post-secondary schools. Opportunities are available for students to develop skills and competence in business through participation in managing and marketing the high school's Bison Corner – a student-run enterprise – and competing in events sponsored by DECA, an Association for Business Students.

Students with a serious interest in pursuing a business-related career and/or post-secondary opportunities can take courses toward the completion of a Program of Study in Accounting or Marketing. Students who complete the proper scope and sequence of academic and business courses and who also score proficiently on the National Occupational Competency Testing Institute (NOCTI) exam, are eligible for "completer" status in the Accounting or Marketing career and technical education programs. These students receive the Pennsylvania Skills Certificate, a nationally recognized credential issued by the Commonwealth of Pennsylvania, and can take advantage of statewide and local articulation agreements to receive college credit. A Capstone Cooperative Education or Career Exploratory experience is available to seniors who pursue the Accounting or Marketing programs of study.

Business Academy
Four (4) Year Program – 24 Credits for Graduation
Marketing – CIP# 52.1801- Program of Study
Accounting Technology – CIP# 52.0302 - Program of Study

Period	9	10	11	12
1	English I	English II	English III	English IV
2	Algebra I	Geometry	Algebra II	Math *Any advanced Math course*
3	Geo-Environmental	Arts & Humanities Elective	Biology I	Chemistry or Physics
4	PE/Health I	PE/Safety Education	PE Health II (11th or 12th)	PE Health II (11th or 12th)
5	US History I	World History I	Civics	**Marketing II**
6	**Intro to Bus/Comm & Careers**	**Intro to Bus/Comm & Careers *OR* Graphic Comm. II**	**Finance & Investing *OR* Accounting**	**Finance & Investing *OR* Accounting *OR* Marketing I**
7	**Graphics Arts & Design I**	**Intro to Selling/Personal Finance**	**Marketing I**	**Career Experience-Business Focus**
CTE Total Hours based on 183 days: 1320		**305 class hours 55 DECA hours TOTAL: 360**	**305 class hours 55 DECA hours TOTAL: 360**	**457.5 hours**

- Students must earn a minimum of ten (10) credits in the combined social studies, science and mathematics areas.
- Students must make-up all failed classes in summer school to complete this program of study.
- Students must pass all required Keystone Exams and/or complete remediation courses.
- Students should plan to fulfill the Arts and Humanities requirement in 9th and 10th grade.

Accounting – Course #119 1 credit
Prerequisites: Intro to Bus/Personal Finance & Bus Mgt/Global Econ Mkts 5 pds/wk
Grades 11-12

The problem solving and financial analysis skills learned in Accounting are applicable to any career field. Eventually, all people manage money and time as part of family and job responsibilities. Doctors, entrepreneurs, government leaders and even artists or technicians moving into management positions need financial training. Accounting students learn the fundamentals needed to track and analyze financial information for a Sole Proprietorship, including making important business and personal financial decisions based on accounting reports. In addition, students will learn about financial statement preparation, analysis of merchandisers and corporations, and business income taxation. Students will also learn about Intuit QuickBooks. Students will apply their knowledge and skill towards managing the school store, the Bison Corner.

Intro to Business/Business Communications and Careers – Course #141
Prerequisite: None 1 credit
Grades 9-10 5 pds/wk

This course is a two-teacher course divided by semester. The first semester students will start with either the Introduction to Business part of the course or the Business Communication and Careers part of the course. The second semester students will finish the part of the course that they did not complete in the first semester. Details for each part is below. The course is one full credit and students need to complete the whole course to earn the credit.

In the **Introduction to Business** part of the course, students will learn about and explore career opportunities in business. Students will learn about all aspects of business and its role in the nation's economic system. Units covered include the economic system, economic role of business, the role of consumers, banking, office practices, business technology and communication, and human resource management. Students also learn about business law, finance and management and learn about topics covered in the other business courses offered at the high school. Business simulations and projects are an integral part of the course. Students benefit from the expertise of guest speakers from all aspects of the business world.

Business Communications and Careers will allow students to explore the career landscape they will enter after high school. Students will explore their career interests, hear from people in their desired field and do job shadow opportunities in that field. Career exploration will occur through work force education resources including industry aptitude tests, podcasts, video, etc. Students will access career tools they will need on their career journey. Each student will leave the course with a resume and cover letter they can use when applying for jobs. Students will also learn how to search for careers using online job boards and other resources. Finally, students will explore the basics of business communication, which will allow them to understand the best way to communicate in the ever-expanding technological landscape of business and beyond. Communications will focus on electronic and in-person communication methods that will enhance student abilities in the subject.

Intro to Selling/Personal Finance – Course #150 1 credit
Prerequisite: Intro to Bus/Personal Finance 5 pds/wk
Grades 10-12

This course is a two-teacher course divided by semester. The first semester students will start with either the Introduction to Selling part of the course, or the Personal Finance part of the course. The second semester students will finish the part of the course that they did not complete in the first semester. Details for each part is below. The course is one full credit and students need to complete the whole course to earn the credit.

In the **Personal Finance** part of the course, students will learn about the impact of individual choices on occupational goals and future earning potential. The Personal Finance part of the course provides a foundational understanding for making informed financial decisions. Relevant topics covered include career planning, managing money, saving and investing, spending wisely, financial risk management, identify theft, buying a car and using debit and credit cards. Students learn to solve real-life problems, and use documents and forms from today's consumer-oriented culture. Activities include designing personal and household budgets, using checking and savings accounts, investing for retirement, managing debt and credit and completing insurance and tax forms. Hands-on simulations are an integral part of the course.

In **Intro to Selling** we explain that Sales is at the heart of modern business. Understanding and using aspects of sales in order to improve business performance and students' career prospects is critical. Intro to Selling will include several topics such as principles of selling, consumer and business buying behavior, the sales process and customer relationship management.

Marketing I: Sales, Sports, and Entertainment Management and Marketing Basics – Course #157 1 credit
Prerequisite: Intro to Bus/Personal Finance 5 pds/wk
Grades 10-11

This course focuses on product and service marketing functions. Students will learn the fundamental elements needed to design and promote a retail store or service entity. Students will study market research strategies and consumer behavior and buying patterns. Major areas of study include advertising, visual merchandising and display and selling. In addition, the course examines basic concepts of employee/employer relationships, leadership models and fundamental management skills. Students will apply these concepts in our student-run store, the Bison Corner.

In the Sports & Entertainment Marketing part of the course, students will learn about the sport and entertainment industries and their impact on local communities and products. In addition, instruction includes distribution systems and strategies, pricing considerations, marketing-information management, selling, product-service management and promotion. Students acquire an understanding and appreciation of the need for planning and problem-solving current issues in the sport and entertainment markets. Potential marketing events such as students attending a DECA Marketing Career Day with the 76ers in November or working with sports organizations such as the Hershey Bears or others will be part of completing the course.

Marketing II: Advanced Marketing Principles and Business Planning – Course #158
Prerequisite: Marketing I 1 credit
Grade 12 5 pds/wk

This course builds upon the principals taught in Marketing I and is an advanced course for students interested in taking their marketing skills to the next level. Students will develop an action plan for marketing a company. This course focuses on students learning about advanced marketing principles, learning about careers in marketing and learning about the importance of

entrepreneurship in our economy. A major emphasis is on the following: marketing principles, economics, market research, sales, marketing career pathways and entrepreneurship. As part of the course, students will take part in DECA. This organization offers many benefits and exciting activities for marketing students including competitions, awards, scholarships, job opportunities and travel. Students will apply the skills they are learning in the course to managing and marketing our school store, the Bison Corner.

Finance and Investing – Course #178 1 credit
Prerequisites: Intro to Bus/Personal Finance & Bus Mgt/Global Econ Mkts 5 pds/wk
Grades 11-12

This course will focus on students as investment managers and provide them with the information and background knowledge to act in the market, rather than focus solely on the principles and theories. Students will engage in the stock market through projects, simulations, and portfolio management opportunities. Class will build upon many of the principles discussed in Personal Finance, and look to prepare students for future career opportunities. This class will also provide students with the tools necessary to have their own investment portfolio when they are legally able. This will be a hands-on approach to the world of finance and investing that will put students in scenarios they may encounter in the real-world as they move forward with their investment journeys.

BELCO Community Credit Union Work Based Learning Experience 2-3 credits
Course codes vary by program and number of class periods. 10-15 pds/wk
Please see your counselor for information.
Prerequisite: Marketing I or Accounting
Grade 12

This work-based learning experience is for Business Academy seniors. This is an entry-level member service position as a branch teller in the BELCO sales and service department.
Primary duties include but are not limited to handling member deposits and withdrawals, processing loan payments, night drop deposits and ATM transactions. For more details, students need to see their business teacher.

Careers and Technology Elective Courses
Family & Consumer Science

The Family and Consumer Science (FCS) courses are yearlong 4 days/week courses open to grades 9 –12, except where indicated. All courses stress an outcome-based philosophy with an emphasis placed on practical, hands-on experiences, projects, labs and activities. Students do not need to pay for supplies and can keep their finished project. Students cannot enroll in more than one (1) foods class (Foods and Baking / Foods and Nutrition) per school year, but they may enroll in more than one FCS course.

Child Development – Course #615 1 credit
Prerequisite: FCS - Skills for Success recommended 4 pds/wk
Grades 9-12

Students will learn the decisions and responsibilities involved in parenting and in working with children. The course explores child growth and development from conception to 6 years old and provides an in-depth study of the physical, social, emotional and intellectual development of infants, toddlers and preschool children. Students study the relationship of play, safety, healthcare and discipline to a child's growth and development. Students who are interested in pursuing careers in human services, nursing, pediatrics, care of the physically and/or mentally challenged or elementary education should consider this course. Opportunities are available to complete observations and assignments in the high school's Early Childhood Education program. ***This course is highly recommended for students planning to enter the Early Childhood Education program in 10th grade or the Health Careers Academy in 11th grade.***

Contemporary Living Skills – Course #616 1 credit
Prerequisite: None 4 pds/wk
Grades 11-12

Students will learn to think about independent life after high school. Aspects of contemporary life such as personality development, career exploration, communication, relationships with family and friends and significant others, marriage, parenthood, decision-making, crisis management, budgeting and personal finance are explored. In this experiential course, practical learning activities enhance student preparation for adult life.

Family and Consumer Science: Skills for Success – Course #617 1 credit
Prerequisite: None 4 pds/wk
Grades 9-10

This FCS course is for students who desire to make the most of themselves and improve their ability to achieve success in life. Hands-on projects and lab opportunities focus on the areas of child development and family relations, foods and nutrition, clothing and textiles, housing and interior design and consumer awareness. These experiences also help students to select additional FCS courses that focus on one of the above areas. Students develop skills in caring for children, interpersonal relationships, nutrition and meal preparation, constructing and caring for clothing, determining the costs involved in renting and furnishing an apartment, evaluating housing options and making careful consumer decisions to maximize standard of living. ***This course is highly recommended for students planning to enter the Early Childhood Education program in 10th grade or the Health Careers Academy in 11th grade.***

Foods and Baking – Course #622 1 credit
Prerequisite: None 4 pds/wk
Grades 9-10

This course focuses on studying the basics of baking and food preparation. Students gain knowledge and understanding of functions of ingredients in recipes, while learning skills that increase their success in the kitchen. Students will learn the proper uses of equipment and consumer skills. Students will need to apply time management, team work, and the ability to follow directions during course lab work. Students will make cakes, cookies, pies and other desserts, as well as soups, salads and casseroles. ***This course is highly recommended for students planning to enter the Culinary Arts program in 10th grade.***

Foods and Nutrition – Course #623 1 credit
Prerequisite: None 4 pds/wk
Grades 10-12

This course invites students to experience food preparation techniques with an increased skill level. Through labs, students demonstrate time management and organizational skills along with the ability to plan and prepare meals with culinary appeal. They also develop an appreciation for the importance of nutrient contributions in foods and the dietary impact on good health. Students learn to make appetizers, soups and salads, countless baked goods and main dish buffets with chicken, pork and beef dishes as well as meatless entrees. An emphasis is on using kitchen appliances such as steamers, woks, fondue pots, microwave ovens and more. Join FCS for that gourmet touch to creative cooking and be the one that creates a terrific smell of apple pie, chocolate baked goods, teriyaki from a stir-fry or the aroma of homemade bread!

CPARC, the Arc of Cumberland & Perry Counties Career Internship
Course codes vary by program and number of class periods. Please see your counselor or the Cooperative Education Coordinator for information.

Prerequisite: CTC Program Teacher or Cooperative Edu. Teacher recommendation .5-3 credits
Requirements: Students must provide transportation 15 pds/wk
Grade 12

Have you ever considered the post-graduation pathway of your special needs peers? Did you know there are exciting and rewarding career paths working with adults who have intellectual and developmental disabilities?
The mission of CPARC is to empower, inspire and educate adults with intellectual disabilities. Through a partnership with CPARC, students will have the opportunity for an immersive spring experience. You will enjoy a blend of online and in-person trainings and the chance to job shadow a variety of positions. Whether you plan to work upon graduation or continue your education, there are career pathways for you to consider! Journal activities and a reflective presentation at the conclusion of the program are essential elements of the experience.
Certifications received include: Individual Rights, Person Centered Practices, Human Rights and Community Participation Supports.

Carpentry

Students enrolled in the Carpentry program learn the fundamentals of residential and commercial construction. The program enables students to earn a variety of industry related certifications including Associated Builders and Contractors, Bobcat Safety, Forklift Operator, Scissors Lift and OSHA safety. **Students must purchase boots, work clothes and a tape measure.** As a recognized Program of Study by the Department of Education, students can take advantage of many statewide articulation agreements to gain post-secondary credits.

Carpentry
Three (3) Year Program – 25 Credits for Graduation
CIP# 46.0201- Program of Study

Period	9	10	11	12
1	English I	English II	English III	English IV
2	Algebra I	Geometry	Algebra II	Civics
3	Geo-Environmental	Biology I	World History I	Chemistry or Physics
4	PE/Health I	PE/Safety Education	PE Health II (11th or 12th)	PE Health II (11th or 12th)
5	US History I	**Carpentry I**	**Carpentry II**	**Carpentry III**
6	Foundations of Technology	**Carpentry I**	**Carpentry II**	**Carpentry III**
7	Arts & Humanities Credit	**Carpentry I**	**Carpentry II**	**Carpentry III**
CTE Total Hours CATS: 1,080 Carlisle: 1,445.7		**481.90 hours**	**481.90 hours**	**481.90 hours**

- Students must make up failed classes in summer school to complete this program of study.
- Students must pass all required Keystone Exams and/or complete remediation courses.
- Students should plan to take the Arts and Humanities requirement in ninth grade.

Carpentry Trades I – Course #905 3 credits
Prerequisite: None 15 pds/wk
Certification goal: ABC Credential (Assoc. Builders and Contractors)
Required equipment: Boots, work clothes & tape measure
Grades 10-12

Carpentry Trades I is the first course in a three-year sequence. Students learn the fundamentals of both the residential and commercial construction occupations. Much of the instructional time is spent working on assigned projects designed so the fundamental operations of construction are learned, including use of hand and power equipment, safety, construction styles, craftsmanship, blueprint reading basics, trade mathematics and team-building skills.

Pennsylvania College of Technology NOW College in the High School Course Construction Hand and Power Tools – Course #923 (BCT103)
Prerequisite: None 1 credit built into Carpentry
Enrollment requirement: 75% (C) minimum overall GPA 15 pds/wk
Grades 10-12

Survey of hand and power tools typically used to perform construction work. Emphasis on the development of skills needed to effectively perform layout, measurement, cutting, fastening and finishing operations. Study also includes maintenance of tools and equipment, safe use of hand and power tools and emerging tool technology. 1 Credit (0 Lecture – 3 Lab).

Carpentry Trades II – Course #906 3 credits
Prerequisite: Carpentry Trades I – minimum competencies 15 pds/wk
Certification goal: ABC Credential
Required equipment: Boots, work clothes & tape measure
Grades 11-12

Carpentry Trades II continues with instruction in the Associated Builders and Contractors curriculum. Classroom instruction builds upon the competencies mastered in the previous year and provides broad experiences in the areas of carpentry, masonry, cabinetry, heavy construction and interior systems. This course emphasizes safety, artisanship and professionalism.

Carpentry Trades III – Course #907 3 credits
Prerequisite: Carpentry Trades II – minimum competencies 15 pd/wk
Certification goal: ABC Credential, Bobcat Safety, OSHA Safety, Forklift Operators Certificate, Scissor Lift Operators Certificate
Required equipment: Boots, work clothes & tape measure
Grade 12

Instruction targets the more advanced areas of construction. Students pursue commercial or residential specialties. In the commercial area, instruction includes form construction, finish construction, reinforced concrete, metal framing and advanced blueprint reading. Theory emphasizes commercial construction methods; practical work consists of specialized work/projects. Those students selecting residential construction will concentrate primarily on residential framing construction techniques. Theory relates to the practical experience acquired through numerous lab and field experiences. Basic instruction includes advanced floor, wall, ceiling and roof framing. Instruction also centers on materials, fasteners and tools. Students focus on learning trade ethics, safety, cooperation and leadership. Students demonstrating trade and professional competencies may be eligible for a Capstone Cooperative Education experience in the carpentry-construction trades industry. *If interested in a worked-based learning experience please see the carpentry teacher or cooperative education teacher.*

Central PA Independent Electrical Contractors (IEC) Pre-apprenticeship – Course #168
See Work-Based Learning Program Courses at the end of the CTE section for details

Communications Technology

Courses in the Communications Technology program provide opportunities for students to apply knowledge and skills in the field of multimedia technology. Instruction in the program includes audio/visual technology, troubleshooting techniques, data transmission and management, oral and written communication, concept development, layout and design, computer graphics, image capture, audio, video, web-related technologies and animation. Students utilize state-of-the-art computers, cameras, software and CASD's television studio to produce a daily television program called HERD TV. Opportunities exist for students to create video projects for a variety of internal school needs. There are also video production opportunities with on-location production in the form of live streams of school events of several kinds. Students can also create banners, signs, paper products and other promotional items using state-of-the-art digital press technology available in the high school's Graphics Arts lab. The program follows the Pennsylvania Department of Education's approved scope and sequence for Communications Technology; therefore, a capstone cooperative education experience is available to students in their senior year. As a recognized Program of Study, students can take advantage of numerous statewide and local articulation agreements to gain post-secondary credits.

Communications Technology
Four (4) Year Program – 24 Credits for Graduation
CIP# 10.9999 - Program of Study

Period	9	10	11	12
1	English I	English II	English III	English IV
2	Math	Math	Math	Math *Any advanced Math course*
3	Geo-Environmental	Biology I	Chemistry or Physics	Psychology or Sociology (recommended)
4	PE/Health I	PE/Safety Education	PE Health II (11th or 12th)	PE Health II (11th or 12th)
5	US History I	World History I	Civics	Arts & Humanities Credit
6	**Graphic Arts I**	**Broadcasting I**	**Broadcasting II**	**Graphic Arts II**
7	**Exploring Video Production**	**Broadcasting I**	**Broadcasting II**	**Capstone: 2-3 credits**
CTE Total Hours: 1,320	**305 hours 55 Skills hours**	**317.2 class hours 55 skills hours 372.2 total hours**	**317.2 class hours 55 skills hours 372.2 total hours**	**Between 481 to 633 hours**

- Students must make-up failed classes in summer school to complete this program of study.
- Students must pass all required Keystone Exams and/or complete remediation courses.
- Students need a minimum of ten credits in the combined social studies, science and mathematics areas.

Exploring Video Production – Course #943 1 credit
Prerequisite: None 5 pds/wk
Grades 9-12 (*Grade 9 enrollment is subject to seat availability)*

Exploring Video Production is an introductory course that provides students with experiences to enhance communication skills and further their knowledge of broadcasting. Students learn about careers in the broadcasting and television production industry by operating professional equipment utilized in the trade to create introductory projects associated with video production. Students provide minimal support to Carlisle High School's daily news program, HERD-TV.

Broadcasting I – Course #944 2 credits
Prerequisite: Exploring Video Production 10 pds/wk
Projects will require filming AFTER SCHOOL events
Grades 10-12

Broadcasting I is an in-depth course in which students learn broadcasting terminology and the skills necessary to use the broadcasting equipment. Students also learn the basics of producing shows including videography, editing, graphics and other essential production skills; all while executing projects designed to serve the needs of HERD-TV. Students are prepared to pursue post-secondary educational goals toward careers in the communications industry and produce and direct HERD-TV. Adobe Certified Associate-Video Design: Vouchers for exams in Photoshop, Premiere Pro, and After Effects, along with online training. *If interested in completing then please see the communications teacher for details.*

Broadcasting II – Course #945 2 credits
Prerequisite: Broadcasting I 10 pds/wk
Projects will require filming AFTER SCHOOL events
Grades 11-12

Broadcasting II further develops the skills acquired in Broadcasting I by providing in-depth exposure to studio operations. Students explore creative film styles and integrate this knowledge with new theories of production. This hands-on learning experience allows the self-starting student to explore new ideas in television production. Broadcasting II students learn this through projects designed to please an external third party. With guidance, they will source a customer or client, negotiate a contract, conduct themselves publicly in a professional manner and deliver a product that pleases the client. The course further prepares students for the pursuit of careers in communications, television and film by completing the SkillsUSA Career Essentials Certification. In addition, students can focus on earning the following certifications: Adobe Certified Associate-Video Design: Vouchers for exams in Photoshop, Premiere Pro and After Effects, along with online training. FAA 107 Drone Pilot's License: Online training course through Drone Pilot Ground School, and voucher for the exam. Opportunities for airtime and practice with school-owned drones.

Graphic Arts and Design I – Course #949 1 credit
Prerequisite: None 5 pds/wk
Required equipment: apron
Grades 9-12

This course focuses on an in-depth study of graphic design, photo editing, digital illustrations and screen print technology. Projects include photo retouching, designing and developing animated graphic ad, and creating advertising brochures using Adobe software such as Photoshop, Illustrator and InDesign. Students will also investigate post-secondary education options and career opportunities in graphic communications and design.

Graphic Arts and Design II – Course #951 1 credit
Prerequisite: Graphic Arts and Design I or the consent of the teacher 5 pds/wk
Required equipment: apron
Grades 10-12

This course continues an in-depth study of Adobe Photoshop, Illustrator and InDesign building upon skills learned in Graphic Arts and Design I. Students will create designs appropriate for a variety of printing types such as digital printing, bindery operations and single and multi-color screen-printing on fabric. Student projects include photo manipulation, packaging designs, posters and illustrations. The course includes exploration of employment and career opportunities in the field of graphic design.

Computer Systems Networking

With the advent of the Internet and the related increase in the use of computers in the world, individuals with skills in computer technologies are in great demand. Support in the form of computer networking, operating systems, troubleshooting, and repair is in particularly high demand. Carlisle High School offers the training to earn certifications in the following areas: networking (Cisco-CCNA), PC operations, maintenance and repair (A+), and workstation and server operating systems (MCSE). Students may take classes with or without certification goals in mind or complete the entire Information Technology sequence in preparation for a career or post-secondary education in an information technology related major or entry level IT positions. Regardless of the choice, students entering these courses will experience instruction and hands-on training that is "cutting edge" and "state-of-the-art". As a recognized Program of Study by the Department of Education, students can take advantage of many statewide articulation agreements to gain post-secondary credits. *NOTE: These courses are also recommended if a student is interested in E-sports and/or participating in the E-Sports club. The program is also incorporating network gaming as it aligns to the program's task list.*

Computer Systems Networking
Four (4) Year Program – 24 Credits for Graduation
CIP# 11.0901 - Program of Study

Period	9	10	11	12
1	English I	English II	English III	English IV
2	Algebra I	Geometry	Algebra II	Math *Any advanced Math course*
3	Geo-Environmental	Biology I	Chemistry or Physics	Science *Any advanced Science course*
4	PE/Health I	PE/Safety Education	PE Health II (11th or 12th)	PE Health II (11th or 12th)
5	US History I	World History I	Civics	**AP Computer Science *OR* Raspberry Pi**
6	**Foundations of Technology *OR* Honors Intro to Engineering *OR* AP Computer Science Principles**	**Honors Intro to Engineering *OR* AP Computer Science Principles**	**AP Computer Science *OR* Honors Intro to Engineering *OR* Computer Integrated Manufacturing**	**Capstone Cooperative Education *OR* Capstone IT Intern: 2 credits**
7	**IT 1 = IT Essentials**	**IT 2 = Cisco Networking Part I**	**IT 3 = Cisco Networking Part II**	**IT 4 = Workstation / Server Operating Systems**
CTE Total Hours: 1,320	**305 hours 55 Skills hours**	**317.2 class hours 55 skills hours 372.2 total hours**	**317.2 class hours 55 skills hours 372.2 total hours**	**469.5 hours**

- Students need a minimum of ten (10) credits in the combined social studies, science and mathematics areas.
- Students must make-up all failed classes in summer school to complete this program of study.
- Students must pass all required Keystone Exams and/or complete remediation courses.

AP Computer Science Principles and AP Computer Science A
See the Math Department section for course descriptions
Satisfies Computer System Network Hours and qualifies as a Math Credit

Raspberry Pi
See the Math Department section for course description
Satisfies Computer System Network Hours and qualifies as a Math Credit

IT I - Essentials – Course #7025 1 credit
Prerequisite: None 5 pds/wk
Certification Goal: A+ Computer Technician
Grades 9-12 (*Grade 9 enrollment is subject to seat availability)*

The IT Essentials course focuses on the content and skills needed for the A+ computer hardware and software certification. Students learn information technology and data communications in an exploratory format. Students will develop the necessary skills to enter the IT field by building a computer, installing the operating system, adding peripherals and receiving an overview of networking. The course is both a content and lab-oriented course that stresses laboratory safety, working in a team environment and strategies to provide effective technical training and support.

NOTE FOR COURSES BELOW:

The following Cisco Networking Academy Program courses are one-year options, yet provide the ability for a student to earn their CCNA (Cisco Certified Networking Associate). After the completion of the Cisco Networking Part I course, students can sit for their INTRO exam and upon successful completion of the Cisco Networking Part II course can sit for their ICND exam. After achieving successful scores on both the INTRO and ICND exams, students will earn their CCNA certification.

IT II - Cisco Networking Part I – Course #7000 1 credit
Recommended prerequisites: IT Essentials, Algebra skills 5 pds/wk
Certification goal: INTRO exams towards CCNA (Cisco Certified Networking Associate)
Grades 10-12

This course provides students with classroom and lab experience in current and emerging networking technology. Students will configure computers for networking, build small home-based networks and install wireless networks. Instruction includes safety, network terminology and protocols, standards, Open Systems Interconnect (OSI), cabling, Transmission Control Protocol/Internet Protocol (TCP/IP) addressing, dynamic routing, router configuration, network design and the functions of a network administrator. This course is a prerequisite to Cisco Networking Part 2.

IT III - Cisco Networking Part II – Course #7020 1 credit
Prerequisite: Cisco Networking Part I 5 pds/wk
Certification goal: ICND Exam towards CCNA
Grades 11-12

This course provides students with additional classroom and lab experience in current and emerging networking technology. Students will focus on preparing for their CCNA certificate. This course also prepares students to acquire a position in the networking field and/or to continue with post-secondary educational goals in the field. The course covers advanced topics related to the previous Cisco Networking Part I course with an emphasis on troubleshooting. The course includes advanced network design, configuration and installation.
NOTE: To obtain CCNA Certification, a student must successfully complete both Cisco Networking Part I and Part II over a two-year period.

IT IV - Workstation/Server Operating Systems – Course #7029 1 credit
Prerequisite: None 5 pds/wk
Certification goal: Microsoft Certified Professional
Grades 10-12 *(Current IT students will be given priority)*

This course prepares students for certifications as Microsoft Certified Professionals (MCP's) in both desktop PC's and Server operating systems. This operating system is for computer networking. Professionals with these certificates are in high demand.

IT Internship Program 1-3 credits
Course codes vary by program and number of class periods. 5-15 pds/wk
Please see your counselor for information.
Prerequisites: IT I, II, & III complete, IT IV completed or enrolled.
Grade 12

The in-house IT intern position is available to a limited number of IT students who have completed or are in their final year of the IT program. The intern will be responsible for assisting the IT students as they proceed through the program. This will include:

- PC assembly and repair, configuration, maintenance and troubleshooting
- Cisco router and switch configuration and trouble shooting
- Network design, construction, troubleshooting and repair

The successful candidate will be required to have knowledge of all of the above topics and needs pre-approved by the instructor. ** *Some interns may be required to take part in the student run helpdesk for the student population***

Capstone Internship with Information Technology Program 2 credits
Course codes vary by program and number of class periods. 10 pds/wk
Please see your counselor for information.
Prerequisite: Instructor Permission
Grades 11-12

This internship experience is available to students to intern with the Information Technology Program providing technical and training assistance. A meeting with both the IT program instructor and the Cooperative Education Coordinator is required prior to enrollment.

Culinary Arts

The expanding hospitality industry continues to provide an increasing job market for individuals with training in the culinary field. The Culinary Arts program is a three (3) year program, certified by the American Culinary Federation and designed to provide students with a current and practical view of the culinary workplace. Students learn industry-level theory and skills to become a food service, bakery/pastry chef or culinary professional. Students cater special functions, participate in selected community events, complete the ServSafe industry certification and work in the student-run café.

Culinary Arts
Three (3) Year Program – 25 Credits for Graduation
CIP# 12.0508 - Program of Study

Period	9	10	11	12
1	English I	English II	English III	English IV
2	Algebra I	Geometry	Algebra II	Civics
3	Geo-Environmental	Biology I	World History I	Chemistry or Physics
4	PE/Health I	PE/Safety Education	PE Health II (11th or 12th)	PE Health II (11th or 12th)
5	US History I	**Culinary Arts I**	**Culinary Arts II**	**Culinary Arts III**
6	Arts & Humanities Credit	**Culinary Arts I**	**Culinary Arts II**	**Culinary Arts III**
7	Foods & Baking (recommended)	**Culinary Arts I**	**Culinary Arts II**	**Culinary Arts III**
CTE Total Hours CATS: 1,080 Carlisle: 1,445.7		**481.90 hours**	**481.90 hours**	**481.90 hours**

- Students must make-up failed courses in summer school to complete this program of study.
- Students must pass all required Keystone Exams and/or complete remediation courses.
- Students should plan to take the Arts and Humanities requirement in ninth grade.

Culinary Arts I – Course #930 3 credits
Required equipment: chef uniform (2), pocket thermometer, hat 15 pds/wk
Cost to student: approximately $85.00 for equipment listed above
Grades 10-12

All first-year students learn about the safe service of food. Students learn basic nutrition, customer service, dining room and banquet service, and the proper use of commercial equipment and small wares.

Culinary Arts II – Course #931 3 credits
Prerequisite: Culinary Arts I 15 pds/wk
Required equipment: chef uniform, pocket thermometer, hat
Grades 11-12

Second-year students review and build on skills introduced in the first year such as knife skills, food preparation, cooking techniques and safety and sanitation practices. Students rotate positions throughout the kitchen and learn culinary mathematics.

Culinary Arts III – Course #932 3 credits
Prerequisite: Culinary Arts II 15 pds/wk
Required equipment: chef uniform, pocket thermometer, hat
Grade 12

Third-year students receive practical experience by managing all aspects of a 60-seat school restaurant to include menu planning, the use of standardized recipes to control food costs, ordering and receiving practices, recognition and use of various types of table service. Students also receive industry certification by taking the ServSafe course and exam. *If interested in a work-based learning experience please see the culinary teacher or cooperative education teacher.*

Pennsylvania College of Technology NOW College in the High School Course Sanitation – Course #933 (FHD118)
Recommended prerequisite: Culinary I and II 1 credit built into Culinary III
Enrollment requirement: 75% (C) minimum overall GPA 15 pds/wk
Grade 12

Food safety standards, practices and strategies of implementation for the prevention of foodborne illness in the hospitality industry are taught in this course, as well as hazard analysis and allergens. Completion of a national certification exam with a 75% or higher as a graduation requirement.

Early Childhood Education

The Early Childhood Education program is for students who are interested in pursuing careers working with infant through elementary school-aged children. Students in this program will also work in the program's pre-school. As a recognized Program of Study by the Department of Education, students can take advantage of many statewide articulation agreements to gain post-secondary credits.

Child Care and Early Childhood Education
Three (3) Year Program – 25 Credits for Graduation
CIP# 19.0708 - Program of Study

Period	9	10	11	12
1	English I	English II	English III	English IV
2	Algebra I	Geometry	Algebra II	Civics
3	Geo-Environmental	Biology I	Chemistry	Social Studies *(Psychology or Sociology is recommended)*
4	PE/Health I/Family Living	PE/Safety Education	PE	PE/Health II
5	U.S. History	**Early Childhood Education I**	**Early Childhood Education II**	**Early Childhood Education III**
6	Arts and Humanities credit	**Early Childhood Education I**	**Early Childhood Education II**	**Early Childhood Education III**
7	Elective: FCS recommended	**Early Childhood Education I**	**Early Childhood Education II**	**Early Childhood Education III**
CTE Total Hours CATS: 1,080 Carlisle: 1,445.7		**481.90 hours**	**481.90 hours**	**481.90 hours**

- Students must make-up failed courses in summer school to complete this program of study.
- Students must pass all required Keystone Exams and/or complete remediation courses.
- Students should plan to meet the Arts and Humanities requirement in ninth grade.

Early Childhood Education I – Course #919 3 credits
Prerequisite: None 15 pds/wk
Grades 10-12

This course introduces students to the field of childcare and early childhood education. The focus is on the development of children from infancy through school age. Students will learn the basics of teaching – from writing lessons and creating materials to arranging the classroom

and designing bulletin boards. During the spring, students will spend several days in an infant and toddler program to gain hands-on experience. The students will enhance these skills by participating in the laboratory preschool program.

Early Childhood Education II – Course #920 3 credits
Prerequisite: Early Childhood Education I 15 pds/wk
Grade 11-12

The second year of the program builds on the skills learned during the first year. Students will learn advanced strategies to teach children, designing a classroom and utilizing interactive lessons with and without technology. Year two also focuses on developing the Child Development Associate Professional Resource File where they have the opportunity to earn their CDA Ready Certificate at the end of their senior year. During the spring, students will spend time in an elementary school classroom to gain hands-on experience. Students continue to enhance their skills by participating in the laboratory pre-school program.

Early Childhood Education III – Course #921 3 credits
Prerequisite: Early Childhood Education II 15 pds/wk
Grade 12

The third year continues building on the foundational skills learned previously. Students will gain a deeper understanding of how children develop, how to teach all students and the importance of effective communication. Third year students also have the opportunity to participate in a capstone experience where they will spend the majority of the year in a childcare or elementary school setting off campus. By the end of their senior year, students will have earned their Infant and Toddler First Aid and CPR Certificate, the Mandatory Reporter Certificate, the Health and Basic Safety Certificate and the CDA Ready Certificate. During the spring, students will participate in a special education pre-school classroom as well as take the NOCTI assessment.

Engineering Technology

This program prepares individuals to apply knowledge and skills in the engineering field. Instruction includes but is not limited to, safety, ethics, power, problem solving, teamwork, engineering graphics, automated systems, fundamentals of electronics and manufacturing systems as well as adhering to the Science, Technology, Engineering and Mathematics (STEM) Initiative. Courses marked with PLTW are part of the Project Lead the Way program for Science, Technology, Engineering and Mathematics (STEM).

The Engineering Technologies courses are full year courses open to students in grades 9-12. All courses emphasize an outcome-based philosophy, providing students with hands-on experiences while offering valuable preparation for post-secondary opportunities in engineering related career fields. Instruction focuses on the emerging technologies found in business and industry. Some courses may have a project fee ($10-$20) for students who want to keep their course projects.

Engineering Technology/Technicians
Four (4) Year Program – 25 Credits for Graduation
CIP# 15.9999

Period	9	10	11	12
1	English I	English II	English III	English IV
2	Math	Math	Math	Civics
3	Geo-Environmental	Biology I	World History I	Chemistry or Physics
4	PE/Health I	PE/Safety Education	PE Health II (11th or 12th)	PE Health II (11th or 12th)
5	US History I	**Honors Civil Engineering and Architecture**	**Honors Principles of Engineering**	**Cooperative Education Experience in Engineering *OR* ACE Program *OR* IEC *OR* USA Spares**
6	**Honors Intro to Engineering *OR* Foundations of Technology**	**Honors Intro to Engineering *OR* Foundations of Technology *OR* Aerospace Engineering**	**Honors Principles of Engineering**	**Honors Engineering Design and Development**
7	**E-CAD *OR* Architectural Engineering and Design**	**E-CAD *OR* Architectural Engineering and Design**	**Honors Computer Integrated Manufacturing *OR* Honors Civil Engineering and Architecture**	**Honors Engineering Design and Development**
CTE/CATS Total Hours: 1,320 Carlisle: 1,701	**305 hours**	**457.5 hours**	**469.7 hours**	**469.7 hours**

- Students need a minimum of ten (10) credits in the combined social studies, science and mathematics areas.
- Students must make-up all failed classes in summer school to complete this program of study.
- Students must pass all required Keystone Exams and/or complete remediation courses.

Aerospace Engineering (PLTW)
See course description in the Science section
Satisfies Engineering Hours and qualifies as a Science Credit

Architectural Engineering and Design – Course #612 1 credit
Prerequisite: None 5 pds/wk
Grades 9-12

Architectural Engineering and Design includes the study and design of residential structures. Students explore various types of home designs and construction methods. AutoCAD and Revit drafting and design software is used by students to develop three-dimensional computer models to create physical models, plans and virtual walk-throughs of their designed structures. Students will experience the architectural and engineering design process from conception to finished product using 3D modeling and prototyping technologies.

Central PA Independent Electrical Contractors (IEC) Pre-apprenticeship – Course #168
See Work-Based Learning Program Courses at the end of the CTE section for details

Foundations of Technology – Course #601 1 credit
Prerequisite: None 4 pds/wk
Grades 9-12

Foundations of Technology is an introductory course for students who have an interest in engaging in problem solving and engineering activities using tools, materials and equipment. Students work with wood, metal, plastic composites and other materials while learning to use various woodworking and metal working tools such as table saws, lathes and welders. Equipment and materials are used, along with mathematical and scientific concepts, to solve technological problems. Students complete projects in the area of manufacturing, fabrication, robotics and electronics. *We recommend this introductory course for students planning to enter the Engineering, Automotive Technology or Carpentry programs.*

Honors Introduction to Engineering (PLTW) – Course #146 1 credit
Prerequisite: Algebra I 5 pds/wk
Grades 9-12

Are you naturally curious? Do you enjoy math and science? Are you interested in pursuing a career in an engineering related occupation? If so, the Project Lead the Way Pathway (PLTW) to Engineering Program can help you meet your goals. The PLTW Pathway to Engineering Program is a sequence of courses which follows a proven hands-on, real world, problem-solving approach to learning. Students learn and apply the design process, acquire strong teamwork and communication skills, and develop critical thinking and problem-solving skills. Students explore various career opportunities, learn the steps and principles of the design process and use computers to design and analyze products, systems and structures. In addition, students build and test models and prototypes, experiment with 3D technologies, and earn college credits while attending high school.

E-CAD (Engineering CAD Design) – Course #607 1 credit
Prerequisite: None 4 pds/wk
Grades 9-12

We recommend that students who ***have not taken Algebra I*** take this course in place of Honors Introduction to Engineering (PLTW). Students who complete this course will take Honors Principles of Engineering as the next step in the Engineering course sequence. This course is taught at a slower pace than Honors Introduction to Engineering because students will first need to learn some of the math concepts taught in Algebra I for use in Engineering. This course provides students with a broad view of the product development process, including basic skills in sketch techniques and understanding the importance of design as well as study of STEM principles. They will learn CADD practices including 3D modeling and will participate in design and problem solving in the construction and testing of several project-based activities. Students will learn and be able to describe the product development process and account for its conditions and terms. Students will learn and be able to use basic sketching techniques to communicate ideas, plan, implement and present design projects. Students will use Autodesk Inventor to design products with moving parts, create solid models, produce realistic rendering, working drawings and simple animations of a product. *We recommend this course for students planning to enter the Engineering and Carpentry programs in 10th grade.*

Honors Principles of Engineering (PLTW) – Course #147 2 credits
Prerequisite: Honors Intro to Engin. or E-CAD or teacher recommendation 10 pds/wk
Grades 11-12

Students will explore a wide range of engineering topics including mechanisms, the strength of structures and materials, and automation. A focus will be on developing skills in problem solving, research, and design, while learning strategies for design process documentation, collaboration, and presentation. Students, with teacher recommendation, will work in the Carlisle Engineering Learning Lab (CELL), to design and develop products for students and teachers. Working in CELL can also be set up as a work base learning experience separate from this or other engineering courses. Note this course is two periods so students have time to complete projects.

Honors Civil Engineering and Architecture (PLTW) – Course #148 1 credit
Prerequisite: None 5 pds/wk
Grades 10-12

Students will learn important aspects of building and site design and development. Students will apply math, science and standard engineering practices to design both residential and commercial projects and document their work using 3D architectural design software. Students will also develop essential skills such as collaboration, problem solving, creative and critical thinking, communication and perseverance.

Honors Engineering Design and Development (PLTW) – Course #149 2 credits
Prerequisites: At least two (2) Engineering courses and instructor approval 10 pds/wk
Grade 12

The knowledge and skills students acquire throughout PLTW Engineering come together in Engineering Design and Development capstone course as students identify an issue and then research, design and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards. Completing Engineering Design and Development prepares students to take on any post-secondary program or career. Students, with teacher recommendation, will work in the Carlisle Engineering Learning Lab (CELL) to design and develop products for students and teachers. Working in CELL can also be set up as a work-based learning experience separate from this or other engineering courses. *NOTE: this course is two periods so students have time to complete projects.*

Honors Computer Integrated Manufacturing (PLTW) – Course #145 1 credit
Prerequisite: Honors Introduction to Engineering 5 pds/wk
Grades 10-12

In this course, students will work in small groups in order to complete a product utilizing the manufacturing process. Students will utilize jigs/fixtures to speed up the production process. Students will use mass production techniques in the manufacturing of the product. Students will apply engineering principles during all phases of production. Students will use problem-solving techniques and work in a team process in all phases of production. This course will have students learn industry safety standards upon passing an OSHA certification test. Students will use the safety information during the course while utilizing the hand tools, power hand tools and machines in the manufacturing lab.

Architecture-Construction-Engineering (ACE) – Course #151 .5 credit
Prerequisite: Internship Application through Work-Based Learning 2 pds/wk
Requirements: Students must provide transportation
Grades 10-12

ACE is an **after-school program** that introduces you to careers in architecture, construction management, engineering and other disciplines. The ACE Mentor Program is driven by the committed and enthusiastic participation of volunteer mentors who are practicing professionals in their respective field. Students will visit professional offices, job sites and other relevant locations. Students will discuss the same issues and perform the same tasks as if they worked in the industry. ACE gives students a practical hands-on view of how abstract concepts are transformed into the buildings that make up our everyday reality. As a participant, students will join a team of other students led by adult mentors who are practicing industry professionals. ACE is not about merely describing specific professions; it is about immersing students in the profession by engaging them in actual building projects.

To enroll in the ACE Program, students must see the Cooperative Education Coordinator and complete an application, due in September. The ACE program begins in October and meetings are held one time per week from 4:30-6:30 at Cumberland Area Vocational Technical School in Mechanicsburg. Credit is based on completion of the program. *Transportation to and from Cumberland Perry ACTC in Mechanicsburg is the responsibility of the student.*

USA Spares Inc. Precision Machining Trade School Sponsorship Program
Course #172
See Work-Based Learning Program Courses at the end of the CTE section for details

Health Careers Academy

Courses in the Health Careers Academy are for juniors and seniors who plan to pursue further study and/or employment in the medical field. Students may take the classes as electives or complete the entire scope and sequence of academic and technical classes as approved by the Pennsylvania Department of Education. A series of one credit and multiple credit courses explore such topics as career opportunities in health careers, medical terminology, infection control, aseptic techniques, body mechanics, nutrition, anatomy and physiology, laboratory procedures, OSHA regulations and basic clinical skills. Clinical education is an integral part of the program during the senior year as students can choose to experience career medical interests in the Health Careers lab and through internships with local health care organizations, including UPMC and Penn State Health Holy Spirit Medical Center. As a recognized program of study by the Pennsylvania Department of Education, students can earn college credit and industry certifications in CPR, first aid and medical technology while still attending high school.

Health Related Occupations
Two (2) Year Program – 24 Credits for Graduation
CIP# 51.9999 - Program of Study

Period	9	10	11	12
1	English I	English II	English III	English IV
2	Algebra I	Geometry	Math	Any higher-level math course recommended
3	Geo-Environmental	Biology I	**Honors Anatomy & Physiology**	Chemistry or Physics (Biology II if not taken in 11th grade)
4	PE/Health I	PE/Safety Education	PE Health II (11th or 12th)	PE Health II (11th or 12th)
5	Social Studies	Social Studies	Social Studies	**Medical Terminology and Procedures II**
6	Elective: FCS Skills for Success	Elective: Child Development *OR* Special Children/Adults	**Introduction to Medical Careers**	**Allied Health Practicum *OR* Capstone**
7	Arts & Humanities Elective	Arts & Humanities Elective	**Medical Terminology and Procedures I**	**Allied Health Practicum *OR* Capstone**
CTE Total Hours: CATS: 720 Carlisle: 913			**456 hours**	**456 hours**

- Students should consider taking four (4) years of math and science.
- Students must make-up all failed classes in summer school to complete this program of study.
- Students must pass all required Keystone Exams and/or complete remediation courses.

Introduction to Medical Careers – Course #640 1 credit
Prerequisite: Biology I 5 pds/wk
Grades 11-12

Introduction to Medical Careers provides students with a comprehensive overview of the career opportunities available in the healthcare industry. Students gain an understanding of the academic and technical aptitudes, as well as the professionalism needed to work in a health-related occupation. A focus on human development and body systems are key focus areas covered in the course. Visits to healthcare organizations and instruction from health science and medical professionals supplement course content. The expectation is that students participate in job shadowing experiences as they become available.

Medical Terminology and Procedures I – Course #650 1 credit
Prerequisite: Biology I 5 pds/wk
Grades 11-12

Medical Terminology and Procedures I is an introduction to the essential practices relevant to every career pathway in the healthcare industry. Topics include medical terminology, aseptic techniques, infection control, body mechanics, body structure and function, therapeutic diets and nutrition, skin care, vital signs and clinical assessments. Instruction involves theory and clinical practice within the classroom laboratory. An in-depth study of the legal and ethical issues unique to the medical profession along with instruction in HIPAA, OSHA regulations and communication procedures is part of the curriculum. Students complete the first aid, CPR and AED certifications. Visits to area healthcare settings and instruction from medical professionals supplement course content. The expectation is that students participate in job shadowing experiences as they become available.

Medical Terminology and Procedures II – Course #651 1 credit
Prerequisites: Medical Terminology & Procedures I and Honors Anatomy & Physiology 5 pds/wk
Grade 12

Medical Terminology and Procedures II is a continuation of the essential practices relevant to every career pathway in the medical profession. Students use the skills learned in the level one course to advance their understanding of medical terminology and essential procedures. Greater in-depth knowledge is gained in the areas of clinical assessments, pharmacology, injury management and normal function, as well as pathophysiology (disease) associated with the eleven body systems.

Health Careers Work-Based Learning Experiences

Emergency Medical Services Academy – Course #645 3 credits
Prerequisites: Teacher Approval / Interview 15 pds/wk
Requirements: Students must provide transportation
Grades 11-12

Through a partnership with Cumberland Goodwill Emergency Services, students will participate in a semester-long program providing certifications as an Emergency Medical Technician. This course includes CPR and AED use, the foundations of emergency medical response and treatment of the sick and injured, incident command basics, and introduces the basic concepts of emergency management and emergency operation centers. Students will participate in internships with emergency medical service agencies to complete their knowledge.

Upon completion of the program, students are eligible to test for Pennsylvania Department of Health and National Registry of EMT certifications as an Emergency Medical Technician-Basic. This certification is required for employment as an EMT throughout the Commonwealth and can transfer to many states. EMT certification is useful for those who seek further careers in medicine, nursing, occupational health and safety and local government services. Meeting times are from 12:00-3:00pm. *NOTE: Current cost for this course, including textbook, is $1,100.*

Certified Nursing Assistant (CNA) Program – Course #652 3 credits
Prerequisites: Teacher Approval / Interview 15 pds/wk
Requirements: Students must provide transportation
Grade 12 ONLY

***This program might not be available due to lack of Registered Nursing Instructors. See Dr. Parrillo for details.*

Through a partnership with UPMC Carlisle and Harrisburg Area Community College (HACC), students can complete the 120-hour course in preparation for the state's CNA exam at Carlisle High School. Students begin the program by exploring the different departments at UPMC Carlisle to gain insight about their medical science interests. Then, the five-week intensive study explores the role of the nursing assistant and provides training in the essentials of patient care. Students can expect to complete clinical hours at local nursing homes during after school and weekend hours. Daily homework assignments are an essential part of the course. Students who successfully pass the state exam and are 18 years of age can expect to be gainfully employed CNAs while still attending high school.

Students must bring documentation of the following requirements to the first class: Physical exam, PPD tests, Criminal History Record Information, FBI Report (if you have NOT been a resident of PA for the past 2 years), Influenza Vaccination Record, appropriate scrubs, and two (2) forms of identification. Students are responsible for all tuition and fees, estimated at approximately $1,268.00 (includes textbooks). Often, there is scholarship money available through the Center for Careers and Technology to offset the direct costs of the program. The class runs Monday-Friday from 12:30pm to 4:00pm most days. Students will receive a calendar the first day of class and the expectation is for all students to attend all scheduled classes and clinical experiences. Upon completion of the course, the expectation is that all students will register for and take the State registry exam.

Penn State Holy Spirit Medical Center Exploration Program – Course #653 2 credits
Prerequisites: Teacher Approval / Interview 10 pds/wk
Requirements: Students must provide transportation
Grade 12 ONLY

Through a partnership with Penn State Holy Spirit Medical Center, students can complete a medical science career exploratory program in a hospital setting. This intensive nine-week program affords students an in-depth look at health careers through job-shadowing assignments in the different departments of Penn State Holy Spirit Medical Center. Journal activities and a reflective presentation at the conclusion of the program are essential elements of the experience. Once finished at the medical center, students pursue internships related to their medical science interests. *Please see the Cooperative Education teacher or CTE Director for more information.*

UPMC Health Care Career Exploration Program – Course #657 3 credits
Prerequisites: Teacher Approval / Interview 15 pds/wk
Requirements: Students must provide transportation
Grades 11-12

Through a partnership with UPMC Carlisle, students can complete the medical science career exploratory program as a junior or senior in a hospital setting. Starting in the Spring Semester, students will have an in-depth look at health careers through job-shadowing assignments in multiple hospital departments of UPMC Carlisle. The class runs from 8:00am to 10:00am for approximately 18 weeks. In addition, students can also complete the Volunteer program that provides students with experiences in the hospital setting to explore healthcare careers. In the summer, students who complete the career exploration and volunteer programs will be eligible for employment at UPMC. During senior year or post-graduation, students can do a paid work/study program while working around their school schedule. Areas for students to explore are food services, nursing units, ancillary services and hospital services. See the health career or cooperative education teacher for details and guidelines. Journal activities and a reflective presentation at the conclusion of the program are essential elements of the experience. Note students must be 15 to enter the program and 17 for employment.

Work-Based Learning Programs

The Center for Careers and Technology offers additional experiences outside of the school setting for students interested in learning about careers. Work-based learning is a structured method of instruction combining school-based classroom learning with productive work-based learning in an occupation matching the student learner's academic and career objectives. Work-based learning involves a planned partnership with specified connecting activities and responsibilities among students, parent/guardians, schools, employers, labor organizations and government. Carlisle High School has many different types of programs – some are specific to career and technical program areas, so make sure to check with your career and technical program as well for worked-based learning experiences.

In this section, the work-based programs offered are capstone cooperative experience, capstone internship experience, career internship experience, diversified occupations, Central PA Independent Electrical Contractors (IEC) Pre-apprenticeship, USA Spares INC. program, and PA Career Link Equus Workforce 101 Program. To be eligible, students need to attain a grade of "C" or higher in all of their academic, career and technical, and elective courses.

Application Process for All Work-Based Learning Programs

1. The student needs to identify a specific area appropriate for career training and complete an application for admission for any of the work-based learning programs.
2. Parents/guardians sign the application, then the student needs to turn it in to the Cooperative Education Coordinator.
3. The Cooperative Education Coordinator reviews the application.
4. The student's school counselor reviews the student's schedule and credits to ensure they have the amount of credits needed for graduation.
5. The student needs to locate a suitable training site for their experience. The Cooperative Education Coordinator is available to assist or consult in the search for a training site.
6. The Cooperative Education Coordinator notifies the student, parents/guardians, principals, counselors and the Director of Careers and Technology of the training arrangements.
7. The Cooperative Education Coordinator meets with the student to complete all necessary arrangements including the signing of a cooperative education (diversified or capstone) contract and a list of (tasks) competencies to be achieved through the training.
8. The student will receive notice from the CTE office on their acceptance.

General Requirements for All Work-Based Learning Programs

- Students will sign a training agreement outlining the rules of the program.
- Students must maintain passing grades during their work-based learning experience. The Cooperative Education Coordinator reviews grades every three (3) weeks; students who have failing grades will be placed on probation for three (3) weeks.
- Students who fail to maintain passing grades after this probationary period will be removed from the program.
- Students' schedules will be based on their training site work schedule and the flexibility of the educational schedule.
- Students are required to submit weekly logs of activities relative to agreements and training plans.
- Students complete school-based learning activities including career awareness, career exploration and counseling, and a career objective.

Work-Based Learning Program Courses

Capstone Cooperative Education Experience 2-3 credits
Course codes vary by CTE program and number of class periods. 10-15 pds/wk
Please see your counselor for information.
Prerequisites: Approval by CTE instructor, Cooperative Ed Coordinator and CTE Director
Requirements: Students must provide transportation
Grade 12

Students who are seniors and who have met all of the required competencies in their Career and Technical Program can do a cooperative education experience. Through cooperative education, students "cap off" their formal in-school career and technical education with a related employment experience at a school-approved, work-based learning site. Students need approval from their CTE instructor, Cooperative Education Coordinator and Director of CTE. Students receive school credit and wages for their experiences. Students must attend school in order to go to work on any given day.

Capstone Internship Experience 1-3 credits
Course codes vary by program and number of class periods. 5-15 pds/wk
Please see your counselor for information.
Prerequisites: Approval by CTE instructor, Cooperative Ed Coordinator and CTE Director
Requirements: Students must provide transportation
Grade 10-12 *(grades 10 & 11 require teacher recommendation)*

This is similar to the Cooperative Education Experience with the exception that it is an unpaid experience. Students who are seniors and who have met all of the required competencies in their Career and Technical Program can do an internship experience. Students need approval from their CTE instructor, the Cooperative Education Coordinator and the Director of CTE. Students must attend school in order to go to work on any given day.

Career Internship Program 1-2 credits
Course codes vary by program and number of class periods. 5-10 pds/wk
Please see your counselor for information.
Prerequisites: Proposal submission and approval by the Cooperative Education Coordinator, Counselor, & Grade Level Principal
Requirements: Students must provide transportation
Grades 10-12 (grades 10 & 11 require teacher recommendation)

Are you interested in working with a teacher within the district to learn about a teaching career in a particular subject area? Are you interested in Law? Or working with a local business? This program gives you the opportunity to explore different career paths. This program is for students who are planning to enter higher education in anticipation of preparing for a professional career. Students interested in this program will submit a proposal indicating how participation in an internship would benefit them in reaching their career objectives. Students will submit weekly reports of the activities in which they participated at their site. A year-end summary report is also required. Students who select this course will need to find a suitable school-to-work site within their chosen profession; however, the Cooperative Education Coordinator, if requested, can provide assistance. The Cooperative Education Coordinator must approve all internship sites. *NOTE: Seniors who want to enroll in this program must make sure they are able to meet all requirements for graduation.*

Diversified Occupations 2-3 credits
Course codes vary by program and number of class periods. 10-15 pds/wk
Please see your counselor for information.
Prerequisite: Successful application to the Cooperative Education Coordinator
Concurrent enrollment: Workforce Education
Requirements: Students must provide transportation
Grades 11-12

This work-based program is for students with an interest in an occupation not currently offered by the Center for Careers and Technology, or programs who are at capacity or hardship for students who need work. Students can work in any occupation; students need to be receiving a wage with minimum working hours of 15 hours per week. This work-based learning program allows students to work in a variety of occupations such as warehousing, hospitality services and retail stores.

Workforce Education – Course #133 1 credit
Concurrent: Diversified Occupations 5 pds/wk
Grades 11-12

Workforce Education prepares students for experiences in the world of work. Students receive instruction in career exploration, consumer education and employability skills. Other areas covered include banking, credit, insurance, taxes and money management. Students learn job seeking skills. The course also incorporates topics and concepts needed to help students deal with all aspects of their work-based learning assignments. As a requirement of the program students will complete the OSHA CareerSafe 10 Certification. Enrollment in this course is limited to students enrolled in the Diversified Occupations program.

Central PA Independent Electrical Contractors (IEC) Pre-apprenticeship 3 credits
Course #168 15 pds/wk
Prerequisite: CTC Program Teacher or Cooperative Education Teacher recommendation
Grade 12

This course is in partnership with the Central PA IEC. This is an opportunity for students to learn about the electrical industry through both theory and hands on learning with an electrical employer. Students learn a national curriculum in an online format and hands-on labs. Participating learners will complete the related technical instruction portion of the first-year apprenticeship program during their senior year, earning 144 hours. The pre-apprenticeship program is an example of the high-value industry recognized credentialing in the Future Ready PA index. Additionally, IEC and its member companies offer hands-on labs as well as field experiences and mentoring to students. Students will also learn soft skills, technical writing and communication skills. *Students will need to apply for this program at the end of their junior year. Please see the cooperative education teacher or you career and technical program teacher for more information.*

USA Spares Inc. Precision Machining Trade School Sponsorship Program 3 credits
Course #172 15 pds/wk
Prerequisite: CTC Program Teacher or Cooperative Education Teacher recommendation
Requirements: Students must provide transportation
Grades 11-12

This is an opportunity for students to learn about the industrial engineering and manufacturing fields through both theory and hands-on learning at USA Spares Inc. Students learn how to do mold making, graphite milling, welding, CNC machining building and design and custom machining. *Students can apply at the end of their sophomore year or after. Please see the cooperative education teacher or you career and technical program teacher for more information.*
NOTES: A student accepted into the USA Spares, Inc. Sponsorship Program will receive the following: $5,000.00 per semester for a total of 4 semesters ($20,000.00) that can be used towards tuition, books, room and board, meal plans, tools, etc.

A student enrolled in the USA Spares, Inc. Sponsorship Program must comply with the following requirements:

- The student is required to sign and abide by the USA Spares, Inc. Trade School Sponsorship Program contract.
- The student is required to maintain a 3.0 GPA at all times.
- The student is required to work at USA Spares, Inc. during all semester and yearly breaks.
- The student will earn the following wages during the sponsorship program:
    - After high school graduation, the student will earn $14.00 per hour.
    - After successfully completing their first year of trade school, the student will earn $16.00 per hour.
    - After graduation from trade school, the student will become a full-time employee of USA Spares, Inc. with a starting wage of $18.00 per hour. They will earn a $1.50 per hour minimum raise each year for the first four years of employment.

PA Career Link Equus Workforce 101 Program .5-3 credits
Course codes vary by CTE program and number of class periods. 2-15 pds/wk
Please see your counselor for information.
Prerequisite: Teacher, School Counselor or Cooperative Education Teacher recommendation
Grades 10-12

This course is offered in both the fall and the spring through partnership with PA Career Link Equus. This program serves youth/young adults ages 15-24 years of age in providing career exploration, case management, supportive services, work experience/internship opportunities, incentives and MORE! Students who are unsure of what they want to do can enroll in this program to help them discover more about themselves and careers that best fit their interests, skills, abilities and values. Part of this course is completing a 20-hour Workforce 101 course. You will learn about goal setting, job searches, colleges and trade schools, applications, resumes, interviews, financial literacy and community resources. Students who complete the course will receive a $250 stipend. After completion of the course, students can look for employment in the areas that fit them best and will receive help from a case manager from PA Career Link. *Students can get an application from their school counselor or at the CTC office.*

Non-Profit Career Internship – Course #179 3 credits
Prerequisite: CTC Program Teacher or Cooperative Edu. Teacher recommendation 15 pds/wk
Requirements: Students must provide transportation
Grade 12

The goal of the Non-Profit Career Internship is to introduce students to career pathways in the non-profit world. Through a partnership with the Carlisle Chamber and several non-profit organizations in the community, this program is intended to create a more comprehensive understanding of careers in the nonprofit world.
During the first nine weeks of the program, students will meet from 12:00-2:30pm each weekday. Students will rotate through each of our local non-profits for a week. This rotation will include shadowing individuals but may also include the opportunity to participate in a variety of daily tasks.
At the conclusion of the course, students will have the opportunity to select a non-profit and then continue with that non-profit as an internship for an additional nine weeks. As an intern, individuals could be expected to assist the non-profit with tasks such as event planning, social media/website engagement, marketing, fundraising, basic research and administrative tasks. Interns should have strong communications skills, be flexible and be willing to participate in hands-on learning. Interns will be required to complete daily assignments and a reflective presentation at the conclusion of the program. *For more detailed information about this program, please see the Cooperative Education Coordinator or the Director of CTE.*

ENGLISH

DEPARTMENT

ENGLISH

Students in grades 9-12 will select the English program that is most appropriate for their post-high school plans.

Option I is a challenging curriculum designed for students planning to pursue technical school degrees or technical or vocational careers upon graduation from high school.

Option II is designed for those students needing a rigorous academic background in order to attend a four-year college upon graduation.

Honors and/or Advanced Placement (AP) – Freshman, sophomores, juniors and seniors who elect Honors or AP courses should possess strong self-motivation, the ability to manage a rigorous and increased workload and the willingness to encounter challenges similar to college-level courses.

English Language Development (ELD) is designed for those students who are non-native speakers of the English language. In order to elect one of these courses, students must be tested and recommended by an ELD teacher.

Summer Reading

Summer reading lists will be available in the library, from English teachers and on the district website at the beginning of May. The summer reading program is optional; however, students are strongly encouraged to participate. Students who participate in the optional Summer Reading Program must demonstrate to their English teacher that they have read the chosen book. Students have the opportunity to choose both the book and the manner in which it will be assessed. Students who have demonstrated that they have read the book may receive up to 2 percentage points towards their first marking period grade. Students who complete two (2) summer reading projects may earn up to 4 percentage points. Percentage points may be applied to the first or second marking period but may not exceed the 2% district-wide extra credit limit for either marking period. A student may not earn over 100% for any class in any marking period. Assessments may be turned in to English teachers from the first day of the new school year until the first Friday of September. Any project deemed to be plagiarized will not be accepted. Students who plagiarize will be subject to disciplinary action according to school district policy.

NOTE: *Advanced Placement (AP) and Honors English classes have* ***required*** *summer reading and assignments that must be completed prior to the opening of school. Book lists and assignments are posted on the district website.*

English I

1 credit
Grade 9
5 pds/wk

Ninth grade English utilizes the writing process to focus upon thesis development, organization and revision. Students study essay structure and write narrative, informational, persuasive and informal pieces. The study of literature includes analysis of short stories, novels, drama and poetry. Students will have opportunities to share information and gain confidence speaking as part of a learning community. Students will review grammar, usage and mechanics, and they will develop academic, domain-specific and text-driven vocabulary.

Option I – Course #201
Although the content for both options is similar, the instructional emphasis and approach in Option I stresses practical application.

Option II – Course #202
Although the content for both options is similar, the instructional emphasis and approach in Option II focuses on preparation for college work.

Honors – Course #200
❖ Requires completed Honors/AP contract

Honors English I is designed for self-motivated students with a passion for English. Course objectives are taught in more depth and at a faster pace. Students in Honors English I are expected to be extremely organized, ready to take their thinking to the next level on a daily basis and willing to encounter challenges beyond the Option II classroom. This course advances grammar, mechanics, and usage skills, essential writing skills, critical thinking skills, and reading skills to promote success in future English study. Writing instruction explores narrative, research-based, persuasive, and analytical styles of writing. The reading list extends from contemporary, thematically-accessible works to structurally more complex and demanding literature. *Honors English I is recommended for students who may want to elect AP courses in their 11th and 12th grade years. Students should expect to complete up to 60 minutes of homework per night.*

English II

1 credit
5 pds/wk

Prerequisite: English I
Grade 10

Responding to literature is the major focus of this course. Reinforcement of writing skills is continued through essays of narration, literary analysis, comparison/contrast, journal entries and composition of a three to five-page research paper. In the study of literature, students recognize author's style through application of literary elements to various genres from different cultures. Presentation of the persuasive speech is introduced.

Option I – Course #204
Although the content is similar, the instructional emphasis and approach in Option I stresses practical application.

Option II – Course #205
Although the content for both options is similar, the instructional emphasis and approach in Option II focuses on preparation for college work.

Honors – Course #207
❖ Requires completed Honors/AP contract

Honors English II is designed for self-motivated students with a passion for English. Course objectives are taught in more depth and at a faster pace. Students in Honors English II are expected to be extremely organized, ready to take their thinking to the next level on a daily basis and willing to encounter challenges beyond the Option II classroom. This course focuses on academic writing in response to literature and research. Students will strengthen a position by examining literature and secondary sources and by integrating textual evidence. Each student will develop and refine his/her own writing process in both academic and creative writing. Classic and contemporary fiction and narrative non-fiction will be examined with a critical eye. *Honors English II is strongly recommended for students who may wish to elect AP courses in their eleventh and twelfth grade years. Students should expect to complete up to 60 minutes of homework per night.*

English III

1 credit
5 pds/wk

Prerequisite: English II
Grade 11

As in the preceding years, students will select Option I or Option II programs based upon their post high-school plans. Students who do not score Proficient or Advanced on the Keystone Literature Test in grade 10 will be required to complete supplementary instruction within their eleventh grade English courses.

Option I – Course #220
English III Option I is a full-year American literature course designed to help students to develop professional communication and writing skills. Students study short stories, essays, poetry, nonfiction, novels and plays from American literature and make connections between their lives and American literature. In addition, students also develop an appreciation of the varied components of their American heritage by examining recurring themes within works written by many American authors. Teachers of this course place special emphasis upon relating literature to skills students need in their workplaces or careers. They also emphasize practical writing and editing skills. In addition, students will be required to create an in-depth research project.

Option II – Course #230
English III Option II is a full-year American literature course designed for those students who are planning to attend a four-year college after graduation. Students study short stories, essays, poetry, nonfiction, novels and plays from the various periods in American literature and make connections between their lives and American literature. In addition, students also develop an appreciation of the varied components of their American heritage by examining recurring themes within works written by many American authors. Writing skills and oral communication are an integral part of this course. An emphasis is placed on persuasive, narrative, descriptive, explanatory and research writing.

AP Language and Composition – Course #240
❖ Requires completed Honors/AP contract

Juniors with a passion for English, strong self-motivation, the ability to read and learn rapidly, and the willingness to encounter challenges beyond the regular Option II classroom may wish to elect AP Language and Composition. Critical reading with emphasis on rhetorical techniques, purpose, audience, and writing with attention to those same elements are the focus areas in this challenging course. American literature from Puritanism to the present is the primary source of reading material. In addition to writing persuasive, narrative, descriptive and explanatory papers, students develop oral communication skills. Students will be strongly encouraged to take the AP examination in May. Students should expect to complete up to 60 minutes of homework per night.

English IV

1 credit
5 pds/wk

Prerequisite: English III
Grade 12

As in the preceding years, students will select Option I or Option II programs based upon their post-high school plans. Students who do not score Proficient or Advanced on the Keystone Literature Test in grade 11 will automatically be assigned to English IV Option I – Course #251 by counselors after receiving the scores over the summer. Students may simultaneously enroll in English IV Option II – Course #260 if they wish to do so and their schedules allow for this.

Option I – Course #251
This course emphasizes critical reading and writing skills. Students are required to synthesize materials from a variety of sources and original ideas and to engage in reading, writing, and speaking as an interconnected process. Students will study literary works to gain knowledge of specific genres, world authors, history, critical approaches and ideological content. In addition to world literature units, students will analyze and evaluate poetry, short stories and novels, as well as a variety of pieces of “real world” non-fiction.
Throughout the year, students will increase, improve and refine their communication skills. As well as responding to literature, students will write in a variety of forms including reflective, analytical, critical argument and short research-based papers. Students will improve their abilities to express themselves in small and large group settings, practice and apply active listening skills, participate productively in self-directed work teams, and individually prepare and deliver presentations.

Option II – Course #260

This course provides challenging writing and speaking experiences which will prepare a student for college work. Writing experiences include a literary criticism paper, reflective essays, persuasive papers, and creative work. In addition, students prepare and present speeches to their class as well as participate in other speaking situations.
Students study the literature of a variety of cultures from throughout the world in this course. Various genres are examined, and a variety of responses to the readings will be required. One Shakespearean play also is studied. Special emphasis is placed on the written and oral analyses of the literature studied to prepare students for college work. The use of technology will support and enhance the learning.

AP English Literature and Composition – Course #270

❖ Requires completed Honors/AP contract

In this rigorous Advanced Placement (AP) course, students will study the literature of a variety of cultures and writers from around the world, learning to read and comprehend works written at various times in various cultures. Students will learn to discover meaning in literature by being attentive to language, images and devices; they will also be introduced to various techniques and strategies authors use to evoke responses from readers. Students will be expected to justify their interpretations by references to details and patterns in the texts, to compare their interpretations with those proposed by others, and to be prepared to modify their own interpretations as they learn. Students should learn about the times in which some texts were written so they can see a historical work in its original context as well as in the context of human life today.
Another component of the Advanced Placement (AP) class will be to sharpen speaking and communication skills; both informal and formal situations will be provided. Instruction in creative writing in the form of poetry, journals, stories and essays will also give students insight into constructing worlds and works of their own.
Extensive independent work in reading and writing helps many students accumulate a body of knowledge about topics in which they are especially interested. Students will be strongly encouraged to take the AP examination in May. Students should expect to complete up to 60 minutes of homework per night.

Creative Writing – Course #290 1 credit
Prerequisites: Recommendation from English teacher and approval of course instructor at course selection time. 5 pds/wk
Grades 11-12

This course will explore the writing process from inception to polished final products in a number of genres and mediums. Students will find inspiration from both modern day and classic authors who pioneered various techniques and genres. Through emulation and students' own invention, they will create work in the categories of fiction, creative nonfiction, drama, and poetry. Students will be expected to participate in daily writing exercises, submit weekly writing assignments, maintain personal writing portfolios, produce an anthology of their work suitable for publication and participate in an end of the year gallery show of their writing to include readings at the students' discretion. Students in this course must be willing to work collaboratively both in and out of class and accept serious critiques of their work in preparation for future hobby, college and career writing.

Shakespeare: Page to Stage – Course #280 1 credit
Prerequisites: Recommendation from English teacher and approval of course instructor at course selection time. 5 pds/wk
Grades 10-12

Shakespeare: Page to Stage is a full-year course designed for students who have demonstrated a sincere interest in Shakespeare and in performance and who have been successful in their English classes. In this course students will have the opportunity to develop

their thinking skills, to develop their performance skills, and to study several texts in depth through the use of literary criticism, film, writing, performance, attendance at professional performances, and participation in several festivals/outreach programs. The students will have access to lectures and workshops with professors and artists who are experts in the areas of Shakespeare, performance, film, speech, art and research. This course will further develop the students' thinking skills through a variety of activities such as developing promptbooks, acting, directing, collaborating on production design, working as a team, and providing leadership for the Shakespeare Troupe.

Oracle (Yearbook) – Course #460 1 credit
Prerequisite: Recommendation from English teacher and approval of course instructor at course selection time. 5 pds/wk
Grades 9-12

This course is designed as a hands-on laboratory experience, with students actively engaged in the production of the high school yearbook, *Oracle*. If you have an aptitude in writing, photography, research, interviewing, and/or computer design and are interested in preserving the history of Carlisle High School, please consider joining our staff. Preference will be given to students who have shown cooperation, dependability and an aptitude in one of the skill areas mentioned. Students will work on various other school publications after production of the yearbook is completed. As a member of the staff, students should expect to have individual and group assignments, which may include afterschool activities. *Please see Mrs. Muir for more information and application.*

Periscope (News Magazine/Website) – Course #470 1 credit
Prerequisite: Recommendation from English teacher and approval of course instructor at course selection time. 5 pds/wk
Grades 9-12

This course is designed as a hands-on laboratory experience, with students actively engaged in the production of *Periscope,* both a print school news magazine and a news website. Students should expect to spend time outside of the regular school day working on activities related to the production of these publications. This course explores journalism form and function including: journalistic style and elements of a news story, interviewing, writing news, features, editorials and sports stories, writing headlines and captions, copy-editing, layout and web design, advertising, photojournalism, and press law and ethics. *Please see Mrs. Muir for more information and application.*

English Language Development (ELD)

The following courses are for English Learners only. In order to elect one of these courses, students must be tested and recommended by an ELD teacher.

ELD I - Entering – Course #2000 1 credit
Prerequisites: Testing and recommendation of ELD teacher 5 pds/wk
Grades 9-12

This class is for English Learners at the *Entering* level of English language proficiency. This course emphasizes the core aspects/skills of the English language: listening, speaking, reading and writing. Vocabulary and the fundamentals of grammar are learned through drills, dialogues, writing and other activities. There is a strong emphasis on oral communication and survival skills. Cultural aspects of life in the United States are a major part of this course. Particular attention is paid to understanding American holidays, customs and values. This ELD course follows the content standards of secondary English Language Arts with an instructional emphasis and approach stressing practical application.

ELD II - Emerging – Course #2001 1 credit
Prerequisites: Testing and recommendation of ELD teacher 5 pds/wk
Grades 9-12

This class is for English Learners at the *Emerging* level of English language proficiency. This course continues to emphasize the core aspects/skills of English language acquisition: listening, speaking, reading and writing. Vocabulary and the fundamentals of grammar are practiced through drills, dialogues, writing and other activities. There is a continued emphasis on oral communication and cultural aspects of life in the United States. This ELD course follows the content standards of secondary English Language Arts with an instructional emphasis and approach stressing practical application.

ELD III - Developing – Course #2003 1 credit
Prerequisites: Testing and recommendation of ELD teacher 5 pds/wk
Grades 9-12

This class is for English Learners at the *Developing* level of English language proficiency. This course emphasizes the four skill areas of language acquisition: listening, speaking, reading and writing. Vocabulary, grammar and an introduction to American literature are part of this course. There is a strong emphasis on oral and written communication and understanding of American culture. This ELD course follows the content standards of secondary English Language Arts with an instructional emphasis and approach stressing practical application.

ELD IV - Expanding – Course #2004 1 credit
Prerequisites: Testing and recommendation of ELD teacher 5 pds/wk
Grades 9-12

This class is for English Learners at the *Expanding* level of English language proficiency. This course emphasizes the four skill areas of language proficiency: listening, speaking, reading and writing. The study of both world and American literature are important aspects of this course with special focus on advanced vocabulary, grammar and writing skills. Critical thinking skills are encouraged through cultural discussions, self-reflection, and group and individual projects. This ELD course follows the content standards of secondary English Language Arts and will prepare English Learners to transition to a non-sheltered English course the following year.

ELD Academic Support – Course #2007 1 credit
Prerequisite: Recommendation of ELD teacher 5 pds/wk
Grades 9-12

This course is for English Learners at the *Entering* to *Developing* level of English language proficiency. Students who are recommended for this course will receive tiered language support from an ESL teacher on content area homework and projects. Additional introductory language and cultural support for newcomer students will also be provided.

HEALTH AND WELLNESS

DEPARTMENT

Health and Wellness

Physical Education 0.25 credits
Required of all students 2 pds/wk
Grades 9-12

Physical Education provides students with an opportunity to learn physically, socially and emotionally through physical activity. The objectives of the Physical Education program are to develop physical fitness, knowledge and theory of individual and team sports; and to learn new skills and concepts that lead to healthy, productive lives as adults. Each student must complete four (4) years of Physical Education during high school.

Students will be given options between team sports, lifetime activities and fitness activities. Fitness and flexibility related components will be incorporated into all Physical Education units. All students will be required to take a pre- and post-physical fitness test each year. Students will have the opportunity to participate in multiple activities each marking period. Students in grades 10-12 who wish to enrich their high school experience by adding additional courses or a student who needs to take seven credits (plus PE/Health) to graduate or be promoted can take a Physical Education course online.

Please note:

- ***There is an approval process to be eligible to enroll in P.E. / Health online***

Activities

Grades 9-10

Fall (MP1): Team Sports: Soccer, Ultimate Frisbee, Flag Football, Volleyball
Fitness: Introduction to Fitness Center, Pre-testing, Goal setting

Winter (MP2): Team Sports: Basketball, Team Handball, Floor Hockey
Fitness: Design and engage in personal fitness plan
Adventure Based Education/Cooperative Games

Winter (MP3): Leisure Activities: Pickleball, other lifetime sports
Fitness: Continued work on personal fitness plan

Spring (MP4): Team Sports: Lacrosse, Softball, Aerial ball
Fitness: Continued work on Personal fitness plan, post-testing
Adventure Based Education/Cooperative Games

Grades 11-12

Fall (MP1): Team Sports: Football, Soccer, Ultimate Frisbee
Lifetime Activities: Disc Golf, Tennis
Fitness: Introduction to Fitness Center, Pre-testing, Goal setting

Winter (MP2): Team Sports: Basketball, Volleyball, Floor Hockey, Mat ball
Fitness: Design and engage in personal fitness plan

Winter (MP3): Team Sports: Team Handball, Wiffleball
Lifetime Activities: Badminton, Table Tennis
Fitness: Weight Training, Aerobic Activities, continued work on Personal fitness plan

Spring (MP4): Team Sports: Softball, Speed Ball
Lifetime Activities: Archery, Golf
Fitness: Continued work on Personal fitness plan, post-testing

Safety Education – Course #530 0.2 credit
Required of all students 1 pd/wk
Grade 10

Safety Education is designed to create an awareness of the needs and problems involved in operating a motor vehicle safely and efficiently. The focus of this course includes: developing knowledge, skill and positive attitudes in relation to laws, decision making, visual habit, and safe driving practices.

Please note:

- ***There is an approval process to be eligible to enroll in Safety Ed online***

Health I – Course #510 0.6 credit
Required of all students 2 pds/wk
Grade 9

Health I increases awareness and understanding of the impact of heredity, culture, environment, behavior and choice on physical, social, and mental wellness. Key topics include: health skills, nutrition and weight management, disease prevention, social health issues and first aid/CPR.

Health II – Course #541 0.2 credit
Required of all students 1 pd/wk
Grade 11-12

Health II enhances student understanding of health issues that will impact their lives as adults. The focus of this course includes: growth and development, disease prevention, first aid, nutrition and weight management, and violence prevention. *Students in grades 11th-12th who wish to enrich their high school experience by adding additional courses or a student who needs to take seven credits (plus PE/Health) to graduate or be promoted can take Health II enrichment online.*

MATHEMATICS

DEPARTMENT

MATHEMATICS

The curriculum offered in mathematics is loosely structured into two paths.

PATH 1: These courses are intended for students who are planning to go directly into the work force from high school or who plan to attend post-high school education but not in a field requiring extensive mathematics or science.

PATH 2: These courses are designed for the students who need a thorough and theoretical mathematical preparation for advanced study and an eventual career in mathematics or science.

It is suggested that students consult their mathematics teacher in selecting the courses best suited to their individual situations. Students are encouraged to select a challenging schedule to keep as many educational and career options open as possible. AP Computer Science Principles and Raspberry Pi may be taken any time after Algebra I in the paths below. The Pennsylvania Mathematics Standards clearly emphasize the importance of Algebra, Geometry and Statistics for all students. The high school mathematics curriculum has been tailored to meet those standards.

PATH 1a	PATH 1b	PATH 2:
Algebra IA	Algebra I	Algebra I
Algebra IB	Geometry	Honors Geometry
Essential Mathematics	Algebra II	Honors Algebra II
Algebra II	Pre-calculus	Honors Pre-calculus
Probability and Statistics	Probability and Statistics	Calculus or AP Calculus AB
	AP Computer Science Princ.	AP Statistics
	AP Computer Science A	AP Calculus BC
		AP Computer Science Principles
		AP Computer Science A

Algebra IA – Course #415 ***Worth .5 towards NCAA*** 1 credit
Grades 9-12 5 pds/wk

This course is designed for students who struggled with middle school Math and/or were not proficient or above on the 8th grade PSSA assessment. This course is part 1 of a 2-year sequence of Algebra. In this course, the topics from the first half of Algebra I are covered and therefore more time is allocated for activities, discovery-learning and differentiation. The course is arranged in a way that helps students make connections between the Algebra they are learning and real-life applications. After successful completion of this course, students will take Algebra IB which will cover the second half of Algebra I.

Algebra IB – Course #416 ***Worth .5 towards NCAA*** 1 credit
Prerequisite: Algebra IA 5 pds/wk
Grades 9-12

Algebra IB covers the second half of Algebra I. The first half of Algebra I will be reviewed in the first marking period. With three marking periods devoted to the second half of Algebra I, more time is available for inquiry-based learning and differentiation. The course is arranged in a manner that allows students the time needed to obtain a deeper level of understanding. After successful completion of Algebra IA and this course, students will have completed all of the Algebra I concepts to the same depth as in our Algebra I course.

Essential Mathematics – Course #417 1 credit
Prerequisite: Algebra IB or Algebra I 5 pds/wk
Grades 9–12

This course offers a real-world approach to learning Geometry and Algebra. Students will learn essential Geometry and Algebra II content through solving problems encountered in every day adult life. These problem-solving opportunities include many financial applications.

Algebra I – Course #411 1 credit
Grades 9-12 5 pds/wk

The goals of this course include (1) solving applied problems by writing and solving one and two-variable equations, (2) graphing and analyzing linear data and writing the equation for the line of best fit and (3) the manipulative skills necessary for adding, subtracting, multiplying, dividing and reducing algebraic fractions. Students will prepare for and take the Pennsylvania Keystone Algebra I Assessment. Proficiency on this exam is a graduation requirement. Students who take Algebra I in 8th grade and who are not proficient on the Keystone Algebra I exam are strongly encouraged to re-take Algebra I in 9th grade.

Geometry – Course #422 1 credit
Prerequisite: Algebra I or Algebra IB 5 pds/wk
Grades 9-12

This course is similar to the Honors Geometry course but with a more applied approach. The emphasis is on the study of geometric facts and their applications. It is recommended that students with an interest in eventually studying calculus take the Honors Geometry course. This course may not be selected if Honors Geometry has been successfully completed.

Honors Geometry – Course #418 1 credit
Prerequisite: Algebra I or Algebra IB 5 pds/wk
❖ Requires completed Honors/AP contract
Grades 9-12

Honors Geometry is concerned with two major areas of study. The first is the study of geometric facts. These facts deal with the relationship in space of points, lines and planes and essentially treat geometry as a mathematical model of the physical world. The second area is the study of the nature of proof and of geometry as a system of postulates dealing with precise definitions, correct reasoning and logical attitude. This course is similar to Geometry but is a more theoretical treatment of geometry and is intended for students who will likely pursue a mathematics or science-related career. This course may not be selected if Geometry has been successfully completed.

Algebra II – Course #432 1 credit
Prerequisites: Algebra I and Geometry or Integrated Math III or Honors Geometry 5 pds/wk
Grades 10-12

Algebra II is designed for students who need to extend the algebraic skills begun in Algebra I or Integrated Math 1 and 2 in a more practical and less theoretical setting than in Honors Algebra II. The course studies inequalities, algebraic fractions, fractional and negative exponents, radicals, solving systems of equations and the complex numbers. Students are introduced to the concept of a function in general and specifically to polynomial, rational, exponential, logarithmic and trigonometric functions. This course may not be selected if Honors Algebra II or Accelerated Algebra II has been successfully completed.

Honors Algebra II – Course #419 1 credit
Prerequisites: Algebra I and Geometry or Honors Geometry 5 pds/wk
(Exception: Students with an Algebra I average of B or higher may take Honors Algebra II concurrently with Honors Geometry)
❖ Requires completed Honors/AP contract
Grades 10-12

Honors Algebra II deals with the same concepts as Algebra II but in more depth and in a more abstract setting. Students planning to pursue a mathematics or science-related major should select Honors Algebra II rather than Algebra II. This course may not be selected if Algebra II has been successfully completed. **NOTE:** A TI graphing calculator is recommended for home use.

Pre-calculus – Course #441
Prerequisites: Algebra II or Accelerated Algebra II or Honors Algebra II and Geometry or Honors Geometry 1 credit 5 pds/wk
Grades 11-12

Pre-calculus expands the study of functions, including polynomial, exponential, logarithmic and trigonometric functions introduced in Algebra II and prepares students for Calculus but not for AP Calculus. The course also includes topics from analytic geometry and includes a heavy emphasis on trigonometry. Students are expected to have either a scientific or graphing calculator available for class and at home for use in assignments. This course may not be selected if Honors Pre-calculus has been successfully completed.

Honors Pre-calculus – Course #424 1 credit
Prerequisites: Algebra II or Accelerated Algebra II or Honors Algebra II and Geometry or Honors Geometry 5 pds/wk
❖ Requires completed Honors/AP contract
Grades 11-12

Honors Pre-calculus further explores the study of functions, including polynomial, exponential, logarithmic and trigonometric functions. The course includes topics from analytic geometry and some of the basic initial topics of calculus. There is more emphasis on theory and proof than in Pre-calculus. Students are expected to have either a scientific or graphing calculator available for class and at home for use in assignments. It is recommended that students planning to study calculus elect Honors Pre-calculus rather than Pre-calculus. This course may not be selected if Pre-calculus has been successfully completed.

Probability and Statistics – Course #443 1 credit
Prerequisite: Integrated Math III or students must have completed or be taking concurrently either Algebra II or Accelerated Algebra II or Honors Algebra II 5 pds/wk
Grades 11-12

This course is recommended for every student not taking or planning to take AP Statistics. The course is devoted primarily to the study of probability and statistics. Late in the course additional attention is given to the mathematics used in the world of information processing such as logic, mathematical induction and matrix algebra. Students are expected to have either a scientific or graphing calculator available for class and at home for use in assignments. This course may not be selected if AP Statistics has been successfully completed.

Calculus – Course #451 1 credit
Prerequisite: Pre-calculus or Honors Pre-calculus 5 pds/wk
Grades 11-12

Calculus has two complementary aspects. It is a mathematical discipline in which through logic, postulates and definitions a body of theorems is developed. It is also a powerful instrument for obtaining useful solutions to a wide variety of problems in science, technology and industry. Because of the level of difficulty, it is recommended that students who elect this course have an excellent background in mathematics, a strong desire to continue studies in mathematics or science, the ability to work independently and the willingness to complete daily assignments that may be lengthy. Students are expected to have either a scientific or graphing calculator available for class and at home for use in assignments. This course may not be selected if AP Calculus has been successfully completed.

Raspberry Pi – Course #8584 1 credit
Prerequisite: Geometry 5 pds/wk
Grades 11-12

This course serves as an introduction to computer science and physical computing using Raspberry Pi microcomputers. Students will learn and apply various programming and physical computing techniques through laboratory practice. Programming topics are explored using terminal commands, Scratch and Python coding languages as applied to problems in simple game design, the Sense HAT, GPIO controlled components, camera modules, AIY Voice, and robotics. This is a hands-on, project-based course.

Through a partnership with Harrisburg University, students could also receive 3 college credits for the completion of the course as well. To earn the college credits students will need to pay a fee of $100 per credit to Harrisburg University. More information can be obtained from the course teacher.

ADVANCED PLACEMENT (AP) COURSE OFFERINGS

Five (5) Advanced Placement (AP) courses are offered by the mathematics department. Due to their nature and the amount of material covered, students are advised to carefully consider their mathematical background, career goals and willingness to engage themselves with difficult material before electing these courses.

AP Statistics – Course #455 1 credit
Prerequisite: Algebra II, Pre-calculus, Honors Pre-calculus 5 pds/wk
(Students may take AP Statistics concurrently with Pre-calculus or Honors Pre-calculus)
❖ Requires completed Honors/AP contract
Grades 11-12

This course follows the syllabus provided by The College Board in preparation for the Advanced Placement (AP) Statistics examination. The topics for AP Statistics are divided into four major themes: exploratory analysis, planning a study, probability and statistical inference. Additional details on the course and its content can be found at http://apcentral.collegeboard.com/article/0,3045,151-165-0-2151,00.html. Students are encouraged to take the AP exam in May, bit it is not a requirement for enrollment in the course and the decision concerning exam registration need not be made until March. Students are expected to have a scientific calculator or preferably a graphing calculator available for class and at home for use in assignments. This course may not be selected if Probability and Statistics has been successfully completed.

AP Calculus AB – Course #456 1 credit
Prerequisite: Honors Pre-calculus or Pre-calculus 5 pds/wk
❖ Requires completed Honors/AP contract
Grades 9-12

This course is intended for students who have a thorough knowledge of analytic geometry and elementary functions as well as geometry, algebra and trigonometry. Students will follow the AP syllabus provided by The College Board in preparation for the Calculus AB examination. Additional details on the course and its content can be found at http://apcentral.collegeboard.com/article/0,3045,151-165-0-2178,00.html. Students are encouraged to take the AP exam in May, but it is not a requirement for enrollment in the course and the decision concerning exam registration need not be made until March. Students are expected to have a scientific calculator or preferably a graphing calculator available for class and at home for use in assignments. This course may not be selected if Calculus has been successfully completed.

AP Calculus BC – Course **#426** 1 credit
Prerequisite: Honors Pre-calculus or Calculus or AP Calculus AB 5 pds/wk
❖ Requires completed Honors/AP contract
Grades 10-12

Calculus BC begins with a review and extension of the methods of differentiation and integration learned in AP Calculus AB. Additional topics are infinite sequence and series including Taylor Series, three-dimensional vectors, partial derivatives, multivariable integration and an introduction to differential equations. Successful completion of AP Calculus BC should be adequate preparation for the BC Advanced Placement Calculus test in May.

AP Computer Science Principles – **Course #428** 1 credit
Prerequisite: Algebra I 5 pds/wk
❖ Requires completed Honors/AP contract
Grades 9-12

AP Computer Science Principles will introduce students to the broad field of Computer Science. Students are not expected to have any prior computer programming knowledge or experience. The course will cover the creative aspects of programming, the Internet, cybersecurity concerns, abstractions, algorithms, large data sets and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in Computer Science.

AP Computer Science A – **Course #427** 1 credit
Prerequisite: Honors Algebra II or Algebra II 5 pds/wk
❖ Requires completed Honors/AP contract
Grades 9-12

The goals of the AP Computer Science A course are comparable to those in the introductory course for computer science majors offered in many college and university computer science departments. It is not expected that all students in the AP Computer Science A course will major in computer science at the university level. The AP Computer Science A course is intended to serve both as an introductory course for computer science majors and as a course for people who will major in other disciplines and want to be informed citizens in today's technological society.

The following goals apply to the AP Computer Science A course. Students should be able to:

- design, implement and analyze solutions to problems
- use and implement commonly used algorithms
- use standard data structures
- develop and select appropriate algorithms and data structures to solve new problems
- write solutions fluently in an object-oriented paradigm

COLLEGE IN THE HIGH SCHOOL MATH COURSES

HARRISBURG AREA COMMUNITY COLLEGE (HACC)

Prerequisite for both courses is Algebra II. Students will need to pass HACC's entrance exam to receive college credit. For more information on these courses, please contact the Mathematics Department Chair at brentk@carlisleschools.org.

Cost per credit: $100.00 / Course Total: $300.00

Course Descriptions

HACC College Algebra – Course #439 Semester One / 1 credit
5 pds/wk

College Algebra is a "College in the High School" course that is offered in partnership with Harrisburg Area Community College. It is taught by Carlisle High School mathematics teachers who are also adjunct professors at HACC. Successful completion of the course will earn the student 1 high school credit and/or 3 college credits. The course description is the same as the description in HACC's guide:

MATH103 – College Algebra
Fundamental Algebraic operations, exponents and radicals, systems of equations, higher degree equations, logarithms, matrices, inequalities.

HACC College Trigonometry – Course #440 Semester Two / 1 credit
5 pds/wk

Trigonometry is a "College in the High School" course that is offered in partnership with Harrisburg Area Community College. It is taught by Carlisle High School mathematics teachers who are also adjunct professors at HACC. Successful completion of the course will earn the student high school credit and/or 3 college credits. The course description is the same as the description in HACC's guide:

MATH104 – College Trigonometry
Trigonometric functions, relationships and graphs; identities and trigonometric equations; composite, multiple, and half-angle formulas; complex numbers; DeMoivre's theorem.

MUSIC

DEPARTMENT

MUSIC

Concert Band – Course #050 1 credit
Grades 9-12 5 pds/wk

Enrollment in Concert Band is open to band instrumentalists. In this course, band literature is studied and performed throughout the school year. Skill-building techniques are emphasized during class periods. Students receive grades in relation to their abilities and progress in the study of various musical compositions and required skill-building techniques. Attendance is required for all performances held outside of the school day.

Symphonic Band – Course #052 1 credit
Prerequisite: Approval of instructor, Mr. Mikesell, at course selection time 5 pds/wk
Grades 9-12

Symphonic Band is an advanced performing ensemble. Enrollment is open to band instrumentalists who meet specified requirements demonstrated through an audition. Advanced band literature is studied and performed throughout the school year. Students receive grades in relation to their abilities and progress in the study of various musical compositions and required skill-building techniques. Attendance is required for all performances held outside of the school day.

Concert Choir – Course #054 1 credit
Grades 9-12 5 pds/wk

Enrollment in Concert Choir is open to all interested singers. Objectives of the Concert Choir are centered on building the fundamentals of choral singing with emphasis upon tone quality, music reading, ear-training, rhythm, diction and phrasing. The Concert Choir repertoire will cover a wide range of musical styles including folk songs, spirituals and popular tunes, as well as more serious selections from various historical periods and cultures around the world. Attendance at all performances is required, including those outside of the school day. Students who select this course should expect to attend three or four rehearsals outside of the regular school day during the school year.

Bel Canto Singers – Course #056 1 credit
Prerequisite: Approval of instructor, Mr. Schade, at course selection time 5 pds/wk
Grades 10-12

Bel Canto Singers is an advanced performing ensemble. Enrollment is open to singers who meet specified requirements demonstrated through an audition. Advanced choral literature for treble voices with sub-division of voice parts will be studied and performed throughout the year. Development of singing technique, tuning accuracy and part independence are areas of focus for the ensemble. Students receive grades in relation to their abilities and progress in the study of various choral compositions and required skill-building techniques. Attendance is required for all performances held outside of the school day. Three or four rehearsals will be held during the school year beyond the regular school day.

Chamber Singers – Course #057 1 credit
Prerequisite: Approval of instructor, Mr. Schade, at course selection time 5 pds/wk
Grades 10-12

Chamber Singers is an advanced choral ensemble. Emphasis will be placed on singing and rehearsing a cappella for at least part of every rehearsal or performance. Singers will be expected to sing in mixed quintets. Students must demonstrate an ability to read musical

notation, hear and reproduce a series of pitches accurately and sing with an advanced level of vocal development. Students will be selected for this ensemble by audition. The ensemble will rehearse and perform advanced level choral works of many historical periods, styles and cultures. Students will receive grades in relation to their abilities and progress in the study of various compositions and development of musicianship skills. Attendance is required for all performances/rehearsals held outside of the school day.

Orchestra – Course #059 1 credit
Prerequisite: None 5 pds/wk
Grades 9-12

The orchestra consists of all interested and qualified string instrument students (violin, viola, cello and bass). Woodwind, brass and percussion instrumentalists are selected from the high school Symphonic Band membership. Music of various styles and periods of music history are studied and performed. The orchestra performs in public concerts, school exchange concerts and special assemblies during the school term. Attendance is required for all performances, including those outside of the school day.

Concert Band/Concert Choir – Course #061 1 credit
Prerequisite: Approval of instructors, Mr. Mikesell and Mr. Schade, at course selection time 5pds/wk
Grades 9-12

This course is designed for students who want to elect both Concert Band and Concert Choir. Students must have the permission of both instructors before enrolling in this course. Students will divide their time, based on teacher recommendation, between the two performing groups. All course requirements as listed under Concert Band and Concert Choir will apply to this course.

Orchestra/Concert Choir – Course #064 1 credit
Prerequisite: Approval of instructors, Mr. Kuehrmann and Mr. Schade, at course selection time 5 pds/wk
Grades 9-12

This course is designed for students who want to elect both Orchestra and Concert Choir. Students must have the permission of both instructors before enrolling in this course. Students will divide their time, based on teacher recommendation, between the two performing groups. All course requirements as listed under Orchestra and Concert Choir will apply to this course.

Concert Band/Orchestra – Course #062 1 credit
Prerequisite: Approval of instructors, Mr. Mikesell and Mr. Kuehrmann, at course selection time 5 pds/wk
Grades 9-12

This course is designed for students who play both a string and a band instrument and want to participate in both programs. Students will divide their time, based on teacher recommendation, between the two performing groups. All requirements listed under Concert Band and Orchestra will apply to this course.

Symphonic Band/Orchestra – Course #063 1 credit
Prerequisite: Approval of instructors, Mr. Mikesell and Mr. Kuehrmann, at course selection time 5pds/wk
Grades 9-12

This course is designed for students who play both a string and a band instrument and want to participate in both programs. Students will divide their time, based on teacher recommendation, between the two performing groups. All requirements as listed under Symphonic Band and Orchestra will apply to this course.

Symphonic Band/Chamber Singers – Course #069 1 credit
Prerequisite: Approval of instructors, Mr. Mikesell and Mr. Schade, at course selection time 5 pds/wk
Grades 10-12

This course is designed for students who wish to elect both Symphonic Band and Chamber Singers. Students must have the permission of both instructors before enrolling in this course and must have auditioned and been accepted into both ensembles. Students will divide their time, based on teacher recommendation, between the two performing groups. All course requirements as listed under Symphonic Band and Chamber Singers will apply to this course.

Symphonic Band/Concert Choir – Course #070 1 credit
Prerequisite: Approval of instructors, Mr. Mikesell and Mr. Schade, at course selection time 5 pds/wk
Grades 10-12

This course is designed for students who wish to elect both Symphonic Band and Concert Choir. Students must have the permission of both instructors before enrolling in this course and must have auditioned and been accepted into both ensembles. Students will divide their time, based on teacher recommendation, between the two performing groups. All course requirements as listed under Symphonic Band and Concert Choir will apply to this course.

Orchestra/Chamber Singers – Course #072 1 credit
Prerequisite: Approval of instructors, Mr. Kuehrmann and Mr. Schade, at course selection time 5 pds/wk
Grades 10-12

Students who register for this section will fulfill all course requirements for both Orchestra and Chamber Singers courses and rehearsal time will be evenly divided between the two ensembles. Please reference course #059 and #057 for the full course description.

Orchestra/Bel Canto – Course #073 1 credit
Prerequisite: Approval of instructors, Mr. Kuehrmann and Mr. Schade, at course selection time 5 pds/wk
Grades 10-12

Students who register for this section will fulfill all course requirements for both Orchestra and Bel Canto courses and rehearsal time will be evenly divided between the two ensembles. Please reference course #059 and #056 for the full course description.

Symphonic Band/Bel Canto – Course #074 1 credit
Prerequisite: Approval of instructors, Mr. Mikesell and Mr. Schade, at course selection time 5 pds/wk
Grades 10-12

Students who register for this section will fulfill all course requirements for both Symphonic Band and Bel Canto courses and rehearsal time will be evenly divided between the two ensembles. Please reference course #052 and #056 for the full course description.

Piano/Music Theory I – Course #089 1 credit
Prerequisite: None 5 pds/wk
Grades 9-12

This course incorporates all the fundamental music theory elements of music reading, chords, melody writing, rhythm, harmonization and solfege, along with piano playing. This is a great course to take if you want to learn how to play the piano. It is also intended for students who have piano background already and want to continue to develop their skills on the instrument. This course may be taken more than once for credit. Students who register a second time for this course will continue their piano work on more challenging repertoire and will complete varied theory assignments that continue into harmonic analysis, four-part writing and melodic dictation. No pre-requisite is required for entry into this course. This course fulfills one (1) credit towards the Arts and Humanities graduation requirement. Access to a school laptop or other device with Audacity or other readily available multi-track recording software is essential. Students must have a functioning set of headphones in class at all times. This course will fulfill the prerequisite for Advanced Piano.

Advanced Piano – Course #101 1 credit
Prerequisite: Piano/Music Theory I 5 pds/wk
Grades 10-12

Advanced Piano is for the student who plays piano, has developed some music reading skills and who is motivated to practice and develop their skills. This course builds on the skills taught in Piano/Music Theory I. Students will have access to piano resources to practice and develop performance skills and will have the option of live performances at different points in the school year.

Introduction to Music Technology – Course #091 1 credit
Prerequisite: None 5 pds/wk
Grades 9-12

The Introduction to Music Technology course is designed for students who have a strong interest in music or who may be considering a career in a music-related field – especially music education, music performance, music recording, composition, music industry, music therapy, television/radio industry, audio engineering, music arranging, recording editing and virtual reality sound environments (internet games and programs).
The course will cover basic skills in the following areas: music reading, music notation, composition, editing and arranging, CD creation, MIDI sequencing, audio recording and mixing, audio mastering and production and related software.
Much of the course will involve hands-on application of the major course concepts while a portion of the learning will be theory and conceptually based. Students will explore ways in which technology is used in today's music industry through practical applications in individual and group projects throughout the year. Students in the course will need to have access to their own recording media, i.e. thumb drives, recordable CD's, etc. to store and transport their projects to and from school.

Music Technology II – Course #99 1 credit
Prerequisite: Introduction to Music Technology 5 pds/wk
Grades 10-12

Music Technology II is for the student who has developed music tech/composing skills and who is motivated to continue developing their creative skills. This course builds on the skills taught in Music Technology. Students will have access to software and hardware resources to create and develop digital musicianship skills and will have the option of presenting and sharing their music for live performances at different points in the school year.

Guitar and the History of Rock and Roll – Course #088 1 credit
Prerequisite: None 5 pds/wk
Grades 9-12

This course incorporates Rock and Roll music, its history and popular musicians from the genre along with class guitar instruction. This course will afford students an opportunity to learn and develop playing skills on guitar along with developing an understanding of the history of one of the most familiar popular genres of music – Rock and Roll. We will explore rock music from its origins through the present day. Students will share music from the genre to analyze and evaluate as a class. We will analyze performances and recordings to afford students the option to play some of the music we are learning about after guitar skills have been sufficiently developed. Students will use Nylon string guitars that are provided for in-class use. Students are encouraged to have a guitar available at home for use in this course, but should not purchase an instrument before speaking with the course instructor.
This course may be taken more than once for credit. Students who register a second time for this course will continue their guitar work on more challenging repertoire and will complete varied assignments for the Rock and Roll history portion of the course. No pre-requisite is required for entry into this course. This course fulfills one (1) credit towards the Arts and Humanities graduation requirement. Access to a school laptop or other device with Audacity or other readily available multi-track recording software is essential. Students must have a functioning set of headphones in class at all times.

Advanced Guitar – Course #102
Prerequisite: Guitar and the History of Rock and Roll 1 credit
Grades 10-12 5 pds/wk

Advanced Guitar is for the student who plays guitar, has developed some music reading skills and who is motivated to practice and develop their skills. This course builds on the skills taught in Guitar/History of Rock and Roll. Students will have access to guitar and guitar ensemble resources to practice and develop performance skills and will have the option of live performances at different points in the school year.

History of Western Music – Course #092 1 credit
Prerequisite: None 5 pds/wk
Grades 9-12

This course is a survey of music and musicians from the middle ages through the present day that have contributed to what is commonly called “classical” music. The course reviews and evaluates music of many great classical composers as this music is the origin for present-day composition. The course is organized into time periods beginning with music from the Middle

Ages, baroque, classical, romantic, and 20th century to present-day styles and literature. Musical compositions for choir, orchestra, band and other smaller ensembles to include solo repertoire will all be a part of the music-listening environment for this class. The study of musical form is a significant piece of the course, as we will compare how music of different styles, genres and time periods became organized differently. This course is perfect for students who enjoy

listening to classical music, studying about the music of the great composers like Bach, Beethoven, Mozart, Brahms, Debussy and – yes, John Williams and other present-day classical composers!
This course may be taken once for credit. No prerequisite is required for entry into this course. This course fulfills one (1) credit towards the Arts and Humanities graduation requirement. Access to a school laptop or other device with Audacity or other readily available multi-track recording software is essential. Students must have a functioning set of headphones in class at all times.

Perspectives of Music in Popular Culture – Course #093 1 credit
Prerequisite: None 5 pds/wk
Grades 9-12

This course is a survey of music and musicians from the early 1900's through the present day that have contributed to popular culture and its music. The course reviews and evaluates different genres and styles of music through the decades. It also explores the influence and development of music over time and through a parallel study of popular culture and impacting events that are affiliated with the music and musicians. Students will be expected to listen to a variety of music throughout this course, including but not limited to the genres of music they most prefer. Instruction on the concepts surrounding critical listening of music is a key to this class and "opens up the ears" in a different way than they have previously approached music listening.
This course may be taken once for credit. No pre-requisite is required for entry into this course. This course fulfills one (1) credit towards the Arts and Humanities graduation requirement. Access to a school laptop or other device with Audacity or other readily available multi-track recording software is essential. Students must have a functioning set of headphones in class at all times.

Concert Band – <u>Non-Credit</u> – Course #065 0 credit
Prerequisite: Approval of instructor, Mr. Mikesell, at course selection time 1-3 pds/wk
Grade 9-12

This course is designed for 9th-12th grade students who cannot schedule Concert Band as a class but can participate one, two or three times each week for no credit. Students must have the approval of the instructor and must be able to demonstrate specified playing technique and music reading ability. All course requirements as listed under Concert Band will apply to this course. **Students who elect Concert Band Non-Credit, must be capable of and personally responsible for learning all performance music with limited rehearsal time.** ***All students are strongly encouraged to register for the credited course if possible.***

Symphonic Band – <u>Non-Credit</u> – Course #066 0 credit
Prerequisite: Approval of instructor, Mr. Mikesell, at course selection time 2-3 pds/wk
Grades 10-12

This course is designed for 10th-12th grade students who cannot schedule Symphonic Band as a class but can participate two or three times each week for no credit. Students must have the approval of the instructor and must be able to demonstrate specified playing technique and music reading ability. All course requirements as listed under Symphonic Band will apply to this course. **Students who elect Symphonic Band Non-Credit, must be capable of and personally responsible for learning all performance music with limited rehearsal time.** ***All students are strongly encouraged to register for the credited course if possible.***

Orchestra – Non-Credit – Course #071 0 credit
Prerequisite: Approval of instructor, Mr. Kuehrmann, at course selection time 2-3 pds/wk
Grades 9-12

This course is designed for 9th-12th grade students who cannot schedule Orchestra as a class but can participate two or three times each week for no credit. Students must have the approval of the instructor and must be able to demonstrate specified playing technique and music reading ability. All course requirements as listed under Orchestra will apply to this course. **Students who elect Orchestra Non-Credit, must be capable of and personally responsible for learning all performance music with limited rehearsal time.** ***All students are strongly encouraged to register for the credited course if possible***

Concert Choir – Non-Credit – Course #081 0 credit
Prerequisite: Approval of instructor, Mr. Schade, at course selection time 2-3 pds/wk
Grades 10-12

This course is designed for 10th-12th grade students who cannot schedule Concert Choir as a class but can participate two or three times each week for no credit. Students must have the approval of the instructor and must be able to demonstrate specified vocal technique and music reading ability. All course requirements as listed under Concert Choir will apply to this course. **Students who elect Concert Choir Non-Credit must be capable of and personally responsible for learning all performance music with limited rehearsal time.** ***All students are strongly encouraged to register for the credited course if possible.***

Bel Canto Singers – Non-Credit – Course #083 0 credit
Prerequisite: Approval of instructor, Mr. Schade, at course selection time 2-3 pds/wk
Grades 10-12

This course is designed for 10th-12th grade students who cannot schedule Bel Canto Singers as a class but can participate two or three times each week for no credit. Students must have the approval of the instructor and must be able to demonstrate specified vocal technique and music reading ability. All course requirements as listed under Bel Canto Singers will apply to this course. **Students who elect Bel Canto Singer Non-Credit must be capable of and personally responsible for learning all performance music with limited rehearsal time.** ***All students are strongly encouraged to register for the credited course if possible.***

ADVANCED PLACEMENT (AP) COURSE OFFERINGS

AP Music Theory – Course #100 1 credit
Prerequisite: Participation in a music ensemble or recommendation from the teacher 5pds/wk
Grades 10-12

The Advanced Music Theory course is designed for all student musicians, not exclusively students who will major in music at the collegiate level. Advanced Music Theory will teach music from the viewpoint of composition, allowing students to explore the fundamentals of music and appreciate the elements of music which are expressed through history and style. Students will also learn musicianship skills such as score reading, aural skills, sight-singing, playing the piano and the advantages of using music technology. Additional concepts will be taught such as music history, composition and four-part writing. Students should have a keen ability to read and write musical notations along with basic performance skills (instrument and/or voice). It is recommended that students who enroll in this course register for the AP Music Theory Exam which is usually held in May.

SCIENCE

DEPARTMENT

SCIENCE

Welcome to the Science Program! We are proud of the variety of science courses that are offered at CHS. As a general guideline, the science program is structured into three (3) different pathways of study based on students' post-secondary plans.

Option I is a challenging curriculum that is designed to meet the needs of students who plan to enter into a career directly following high school, or enroll in a two-year post-secondary program.

Option II provides a rigorous, in-depth science experience to meet the needs of students who are interested in attending a two or four-year college program. Students in Option II are strongly encouraged to take four (4) or more courses in science during their high school years.

Honors and/or **Advanced Placement (AP)** courses are designed for the accelerated math/science student. The Honors/AP curricula are designed for those students demonstrating exceptional interest and ability in the sciences. In this option, students will be strongly encouraged to take at least five (5) courses in science during their high school career.

IN ORDER TO SATISFY THE SCIENCE GRADUATION REQUIREMENT SET FORTH BY THE CARLISLE AREA SCHOOL DISTRICT, ALL STUDENTS **MUST** TAKE THE FOLLOWING SCIENCE COURSES:

- ONE GEO-ENVIRONMENTAL BASED SCIENCE
  (Geo-Environmental Science, Honors Geo-Environmental Science, and/or Advanced Placement (AP) Environmental Science)
- BIOLOGY I
- ONE PHYSICAL SCIENCE COURSE
  (Chemistry OR Physics OR Aerospace Engineering)

GRADE 9 COURSE OPTIONS

Geo-Environmental Science - Option I – Course #711 1 credit
Prerequisite: None 5 pds/wk

This course is newly designed to discuss the relevancy and applicability of the Earth and its processes. Students will also learn about how humans alter and change the Earth. Hands on activities, labs and projects are designed to further enhance student understanding and mastery of the content.

Geo-Environmental Science - Option II – Course #712 1 credit
Prerequisite: None 5 pds/wk

This course familiarizes students with planet Earth. This course is newly designed to discuss the relevancy and applicability of the Earth and its processes. Geo-Environmental Science Option II also stresses human impact on Earth with a unit on energy and the environment, placing specific emphasis on current environmental issues and trends. The course includes some independent project and report work coupled with indoor and outdoor laboratory investigations.

Honors Biology – Course #723 1 credit
Prerequisite: 8th grade Physical Science 5 pds/wk
Concurrent: Geo-Environmental Science if room in the schedule allows
❖ Requires completed Honors/AP contract

This course of study is an extremely rigorous, hands-on, first year of biology *typically* for ninth grade students. Course objectives are taught in more depth and at a faster pace. Additionally, extra units, projects and labs may be embedded within the curriculum. Honors Biology allows for acceleration in the high school science program. Students enrolled in this course will be required to complete ***at least*** one research-based project. Students in Honors Biology are expected to be self-motivated, extremely organized and ready to take their thinking to the next level on a daily basis.

This course of study provides an in-depth understanding of Biology through hands-on activities and investigations. The year starts looking at the general characteristics of ALL life, then dives into the bedrock of our planet with plants and their life sustaining processes. This builds into an *intense* focus on ecological relationships, energy transfers and population dynamics in ecosystems.

Biochemistry will have a major focus on understanding, analyzing and exploring the properties of different carbon containing macromolecules, water characteristics, enzymatic processes and how materials move into and out of the cell membranes. Bioenergetics will address how organisms acquire energy for all their processes. It will then further explore form and function with the remaining cellular organelles as well as cellular division. Genetic inheritance will be investigated at the phenotypic (physical traits) and genotypic (DNA) levels, with a substantial amount of time focusing on the Central Dogma of Genetics and implications it can have on individuals and their offspring. The course concludes with a look at natural selection and how genetics and environmental conditions drive changes in populations, along with modern classification.

These units of study will require ***significant*** student involvement through laboratory investigations dealing with scientific problem-solving, scientific inquiry, independent student work and the development of sound student reasoning. It is expected that students will be able to make connections between and among the biological concepts all year long. A required Keystone Exam will be given at the end of the course.

GRADE 10, 11 AND 12 COURSE OPTIONS

Biology I - Option I – Course #720 1 credit
Prerequisite: Geo-Environmental Science 5 pds/wk

This course of study provides an in-depth understanding of Biology through many hands-on activities and investigations. The year starts looking at the general characteristics of ALL life, then dives into the bedrock of our planet with plants and their life sustaining processes. This builds into an emphasis on ecological relationships, energy transfers and population dynamics in ecosystems. Biochemistry will have a focus on carbon containing macromolecules, water and how materials move into and out of the cell membranes. Bioenergetics will address how organisms, both plants and animals, get energy for all their processes. It will then further explore form and function with the remaining cellular organelles as well as cellular division. Genetic inheritance will be investigated at the phenotypic (physical traits) and genotypic (DNA) levels. The course concludes with a look at natural selection and how genetics and environmental conditions drive changes in populations, along with modern classification.

These units of study will require student involvement through laboratory investigations dealing with scientific problem-solving, scientific inquiry, independent and/or partner work and the development of sound student reasoning. A required Keystone Exam will be given at the end of the course.

Biology I - Option II – Course #721 1 credit
Prerequisite: Geo-Environmental Science 5 pds/wk

This course of study provides an in-depth understanding of Biology through hands-on activities and investigations. The year starts looking at the general characteristics of ALL life, then dives into the bedrock of our planet with plants and their life sustaining processes. This builds into an intense focus on ecological relationships, energy transfers, and population dynamics in ecosystems.

Biochemistry will have a focus on carbon containing macromolecules, water and how materials move into and out of the cell membranes. Bioenergetics will address how organisms, both plants and animals, get energy for all their processes. It will then further explore form and function with the remaining cellular organelles as well as cellular division. Genetic inheritance will be investigated at the phenotypic (physical traits) and genotypic (DNA) levels. The course concludes with a look at natural selection and how genetics and environmental conditions drive changes in populations, along with modern classification. These units of study will require student involvement through laboratory investigations dealing with scientific problem-solving, scientific inquiry, independent student work and the development of sound student reasoning. A required Keystone Exam will be given at the end of the course.

Applied Chemistry – Course #733 1 credit
Prerequisite: Biology I, Algebra I or Algebra IA *(formerly known as Integrated Math I)* 5 pds/wk

Emphasizing student experimentation, this course presents the basic principles of chemistry and relates them to conditions in today's world. Mastery of the language of chemistry (memorization of symbols, ionic and covalent compound formulas and equation writing) is required of all students. The course is designed primarily for students who want exposure to the concepts of chemistry and their relationships to everyday life with mathematic assistance.

Chemistry – Course #732 1 credit
Prerequisites: Biology I, Algebra I and Geometry 5 pds/wk
Concurrent: Geometry

Chemistry covers basic chemistry concepts using both descriptive and mathematical skills. Laboratory experimentation is an integral part of the learning process. This course includes many equations and formulas that require a mastery of basic Algebra I skills. Algebra and equation problem solving using algebraic techniques are found throughout the course.

Honors Chemistry – Course #725 1 credit
Prerequisite: Biology I, Geometry and Algebra II 5 pds/wk
Concurrent: Algebra II
❖ Requires completed Honors/AP contract

This course is designed for science students with strong mathematical backgrounds. This course will take advantage of students' stronger mathematical skills and apply these skills to more challenging problems than those found in Chemistry. Honors Chemistry emphasizes an experimental approach to chemistry, and therefore involves extensive laboratory work. It is important that students have strong writing and communication skills as Honors Chemistry students are required to submit a formal, written laboratory report for each experiment that they conduct. The basic subject material of the curriculum is the same as Chemistry; however, the depth and the complexity of the topics encountered will be explored in greater detail and at a faster pace. This course is recommended for students considering a career in engineering, science or medicine.

Aerospace Engineering (PLTW) – Course #749 1 credit
Prerequisite: Algebra I or Algebra IA 5 pds/wk

Aerospace engineering is the study of the engineering discipline, which develops new technologies for use in aviation, defense systems and space exploration. This course propels students' learning in the fundamentals of atmospheric and space flight. As they explore the physics of flight, students bring the concepts to life by designing an airfoil, a propulsion system and rockets. They learn basic orbital mechanics using industry-standard software. They also explore robot systems through projects such as remotely operated vehicles. This is a project-based, hands-on course appropriate for all levels of students.

This course satisfies the physical science graduation requirement and satisfies Engineering Program hours. This course counts as a Project Lead the Way course; however, previous enrollment in a PLTW course is not necessary.

Honors Geo-Environmental Science – Course #726 1 credit
Prerequisites: Biology and Chemistry 5 pds/wk
Concurrent: Chemistry or Honors Chemistry
❖ Requires completed Honors/AP contract

***Note**: This course is designed for students who have not had Geo-Environmental Science in ninth grade. This is **not** a second-year course.*

Designed as a challenging science course for upper classmen, Honors Geo-Environmental Science focuses on the comprehension, application, and evaluation of some general principles in the geologic, geographic, and environmental science fields. This course is newly designed to focus on the relevancy and application of the Earth and its processes. An emphasis is placed on reading assignments outside of the scheduled class period so that students may apply learned concepts to labs and project work.

Physics – Course #734 1 credit
Prerequisites: Geometry and Algebra II 5 pds/wk

Physics is the study of matter, energy and the interaction between them. The goal of this course is to expose students to physics concepts that they would encounter in a post- secondary physics course. During the first semester, the first students will learn about waves and harmonic motion, which include sound, light and color. In the second half of the year students will study mechanics, which is essentially the study of motion. Class time is primarily devoted to problem solving, laboratory investigation and collaborative learning activities. This course culminates with an amusement park physics project.

Honors Physics – Course #728 1 credit
Prerequisite or Concurrent: Pre-calculus or Calculus 5 pds/wk
❖ Requires completed Honors/AP contract

This course is for high ability students who are interested in pursuing careers in science, technology, engineering or mathematics (STEM). Topics studied include the following: sound, light, electricity, magnetism, motion, force and energy. The course assumes a strong mathematical background. Investigative-style laboratory exercises are of major importance. This course culminates with an amusement park physics project.

Honors Anatomy and Physiology – Course #724 1 credit
Prerequisite: Biology I 5 pds/wk
Concurrent: Chemistry
❖ Requires completed Honors/AP contract

This course is for students who have found success in Biology I and would like to study the biology of the human body. Honors Anatomy and Physiology is highly recommended for students considering a post-secondary education in any life science, medical, or healthcare-related field. Anatomy and physiology is a core course in the Health Careers Academy program of study. Students taking this course will gain an in-depth understanding of the human body. Areas of study will include mechanisms of body homeostasis, tissue physiology, organ system anatomy and physiology, and a study of many diseases of the human body. A fetal pig dissection is completed for comparison with human anatomy. Students will also dissect a sheep brain and a sheep eye. Additional dissections may be completed in this course. A sound understanding of Biology I terminology, concepts and laboratory techniques, as well as good study skills are essential for success in this course. This is a pre-requisite course for Medical Terminology II. It is recommended, but not required, to consider taking Honors Anatomy & Physiology prior to or at the same time as Advanced Placement (AP) Biology, as it provides a foundation of information for several parts of the AP Bio curriculum.

ADVANCED PLACEMENT (AP) COURSE OFFERINGS

Please note:

- ***These courses require an Honors/Advanced Placement contract to be completed.***
- ***Please look at each course offering to determine the prior and/or concurrent science and/or math courses that are required prior to taking the Advanced Placement (AP) course.***

AP Physics – Course #745 1 credit
Prerequisites: Physics and Calculus (may be concurrent) 5 pds/wk

This rigorous, calculus-based physics course is for highly motivated, exceptional science students considering a career in physical science or engineering. The course will be devoted to the study of mechanics. Emphasis will be on problem solving and developing a deep understanding of physics concepts. A research project will be required of each student.

AP Chemistry – Course #743 1 credit
Prerequisites: Chemistry and Algebra II 5 pds/wk

This course is for students who, after excelling in science and mathematics, may be considering a career in science, medicine or engineering. The course involves extensive and challenging laboratory work. Topics include thermodynamics, kinetics, equilibrium, advanced bonding theories, electrochemistry, organic chemistry, coordination chemistry, atomic theory and analytical chemistry. Students will follow the AP Chemistry syllabus provided by The College Board in preparation for the AP Chemistry examination. Each student is expected to have at least a scientific calculator or preferably a graphing calculator available for class and at home for use in assignments.

AP Biology – Course #729 1 credit
Prerequisites: Biology I, Chemistry and Algebra II 5 pds/wk

This course is designed for students who, after excelling in science and mathematics, may be considering a career in science, technology, research, engineering and/or medicine. This course involves extensive and rigorous laboratory work, and subsequent coursework will focus on curriculum set forth by The College Board. Students enrolled in this course will develop advanced inquiry and reasoning skills such as designing a plan for collecting data, analyzing data, applying mathematical routines and connecting concepts in and across domains of study. The student-directed laboratory investigations used throughout the course allow students to apply the six science practices defined in the AP Biology Curriculum Framework. This course is equivalent to a two-semester college introductory biology course and will prepare students to take the Advanced Placement Exam at the end of the course. It is recommended that students taking this course are enrolled in an upper level math course.

AP Environmental Science – Course #739 1 credit
Prerequisites: Biology I, Physical Science (Chemistry or Physics) and Algebra I 5 pds/wk
Concurrent: Geo-Environmental Science

The goal of this course is to provide students with the scientific principles, concepts and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems and to examine alternative solutions for resolving or preventing them. Major themes that will be discussed and taught in detail include the following: Earth systems & resources, the living world, population, land & water use, energy resources & consumption, pollution, as well as global change. This course includes a strong laboratory AND field study component. Based on the prerequisites listed, this course is designed for juniors and seniors.

This course is equivalent to a one-semester, introductory environmental science course and will prepare students to take the Advanced Placement Exam at the end of the course. The AP Environmental Science course is an excellent option for any interested student who has completed two years of high school laboratory science, with one year of Life Science (Biology), and one year of a Physical Science (Chemistry or Physics). Also desirable, but not necessary prior to enrollment, is a course in Earth Science (Geo-Environmental Science). It is recommended that students taking this course are enrolled in an upper level math course due to the quantitative analysis that is required in the course.

SOCIAL STUDIES

DEPARTMENT

SOCIAL STUDIES

The three years of required Social Studies are divided into three (3) programmatic options that are geared toward students' post-secondary plans.

Option I is designed to address the needs of vocationally-minded students. These students may be planning to go directly into a vocation after graduation or they may enroll in a technical or trade school. This curriculum will provide an essential background into our heritage, as well as our governmental and economic systems that will help students become useful and productive citizens.

Option II curriculum has been developed with four-year college-bound students in mind. It provides a rigorous academic background that lays the foundation for college-level work in history and civics.

Honors curriculum is also available in 9th and 10th grades for students who demonstrate exceptional interest and ability in social studies and who wish to pursue topics in a more rigorous academic setting. Also, juniors and seniors will have the option of choosing certain electives that allow them to explore more concentrated aspects of social studies. Advanced Placement courses in U.S. and European history and U.S. Government & Politics are also available.

Please note:

- ***These courses require an Honors/Advanced Placement contract to be completed.***
- ***Honors level courses are intended for their respective grade levels (9th & 10th grades), and cannot be used by upper classmen (11th & 12th grades) to take the place of an Advanced Placement (AP) course.***

United States History II: 1890-2001

1 credit

Grade 9

5 pds/wk

U.S. History II, which covers the Industrial Era to the New Millennium, is a graduation requirement for all CHS students. It examines the political, economic, social and international issues that shaped our nation from the bridge to the Twentieth Century to the New Millennium. Units of study include the bridge to the Twentieth Century, imperialism, progress of the new century, World War I, roaring twenties, the Great Depression and New Deal, World War II, the beginning of the Cold War, civil rights and the struggle for equality, Vietnam and the counterculture, and the end of the Cold War and the new millennium.

Option I – Course #811

This course is geared toward the vocationally-oriented students. While these students will acquire a core of historical information, the content selection and presentation will have a more practical application. Current issues and problems will be analyzed and discussed in the context of the historical roots of these topics. Fundamental social studies skills that are useful before and after graduation will be emphasized.

Option II – Course #812

This course is intended to provide college-bound students with a broad and in-depth analysis of the key people and events of United States history. The course will progress chronologically, but it will examine broad themes that link history to the present. The course will give students the academic background for work in college-level courses including historical analysis, critical thinking and writing.

Honors – Course #829
❖ Requires completed Honors/AP contract

This course is intended to provide students who demonstrate exceptional interest and ability in social studies the opportunity to pursue topics on a more collegiate level. The course is designed for students with superior verbal skills, strong self-motivation, the ability to read and learn rapidly and the willingness to encounter challenges beyond the regular Option II classroom. A special focus is placed on the interpretations of primary sources. Additionally, the course will highlight various relevant historical skills that are necessary for Advanced Placement (AP) courses and the study of history at the post-secondary level. Students will be required to participate in the National History Day program as part of their major research project for the year. This course is strongly recommended for students who may want to elect AP courses in their 11th & 12th grade years.

World History: 1500-1950

1 credit
Grade 10 5 pds/wk

World History is a graduation requirement for all CHS students. This course begins with a review of ancient and medieval history. This introduction is followed by a survey of world history and includes units on the Renaissance and Reformation, Empires of Asia, the Age of Absolutism, the Enlightenment, the Age of Industry, Imperialism, World War I, Nationalism in Asia, Africa, and Latin America, and World War II. The Cold War is introduced in this course from a world history perspective.

Option I – Course #826
This course is geared toward vocationally-oriented students. While these students acquire a core of historical information, the content selection and presentation will have a more practical application. Current issues and problems will be analyzed and discussed in the context of the historical roots of these topics. Fundamental social studies skills that are useful before and after graduation will be emphasized.

Option II – Course #827
This course is intended to provide college-bound students with an in-depth analysis of the key people and events of European history. The course will progress chronologically, but it will examine broad themes that link history to the present. The course will give students the academic background for work in college-level courses, including critical thinking and writing. It will also serve as a foundation for the Advanced Placement (AP) courses.

Honors – Course #830
Prerequisites: U.S. History – Option II or Honors and meeting specified criteria
❖ Requires completed Honors/AP contract

This course is intended to provide students who demonstrate exceptional interest and ability in social studies the opportunity to pursue topics on a more collegiate level. The course is designed for students with superior verbal skills, strong self-motivation, the ability to read and learn rapidly and the willingness to encounter challenges beyond the regular Option II classroom. A special focus is placed on the interpretations of primary sources. Additionally, the course will highlight various relevant historical skills that are necessary for Advanced Placement (AP) courses and the study of history at the post-secondary level. Students will be required to participate in the National History Day program as part of their major research project for the year. This course is strongly recommended for students who may want to elect AP courses in their 11th and 12th grade years.

Civics 1 credit
Grade 11 5 pds/wk

Civics is a graduation requirement for all CHS students not enrolled in an AP social studies course in their junior year. This course is designed to meet the Pennsylvania Standards in Civics and Economics. It is intended to promote good citizenship through a study of the inner workings of our political and economic systems. Specifically, the course will explore the historical roots of Pennsylvanian and American government and their Constitutional foundations as well as provide an in-depth look at the institutions of government, the lawmaking process, campaigns and elections and the nature of civic participation. The course will also examine the development of public policy. This public policy part of the course will allow students to study basic economic concepts such as supply and demand, financial markets and fiscal and monetary policy.

Please note that all students enrolled in Civics are required to complete six (6) hours of community service with an approved service organization.

Option I – Course #839
This course is designed with vocationally-oriented students in mind. It examines the economic and governmental issues noted above from a real-world perspective. Since many of these students will be entering the work force after they graduate, practical lessons in active citizenship will be stressed.

Option II – Course #840
This course is designed with college-bound students in mind. The concepts and pace will provide a solid academic background in American government and public policy, preparing students for more advanced studies at the college-level, as well as helping them to become intelligent decision-makers and active participants in our current political and economic world.

ELECTIVE / ADVANCED PLACEMENT (AP) COURSE OFFERINGS

NOTE: *All graduates must take four (4) credits of social studies, mathematics or science. Although the social studies department does not require a fourth course, it does offer a number of electives that could meet this graduation requirement. These electives are not organized by options, and any junior or senior may select them. Note: Advanced Placement (AP) courses have admissions criteria.*

AP European History – Course #853 1 credit
❖ Requires completed Honors/AP contract 5 pds/wk
Grades 11-12

European History deals in-depth with the Renaissance, the Reformation, the Enlightenment, the French Revolution, Nationalism 1859-1871, the advent of the "isms," Balance of Power, the World Wars and Europe after 1945. Students will gain a factual basis for interpreting selected problems in European history. Although much of class time will be devoted to discussion, lecture, and analysis, students will be expected to read extensively outside of class and to write book reports, essays and major papers. Students will be taught the tools and techniques of scholarship. This course prepares students interested in taking the Advanced Placement (AP) examination.

AP United States History – Course #852 1 credit
❖ Requires completed Honors/AP contract 5 pds/wk
Grades 11-12

United States History deals in depth with the Colonial Period, the American Revolution, the New Republic, the Jacksonian Period, Civil War and Reconstruction, Populism and Progressivism, the New Deal, the global crisis of 1921-45 and international and domestic change up to the present. Students will gain a factual basis for interpreting selected problems in American history. Although much of the class time is devoted to discussion, lecture, and analysis, students will be expected to read extensively outside of class. Students will learn to assess historical materials (their relevance to a given interpretive problem, their reliability and their importance) and to weigh the evidence and interpretations presented in historic scholarship. This course prepares students interested in taking the Advanced Placement (AP) examination.

AP U.S. Government and Politics – Course #854 1 credit
❖ Requires completed Honors/AP contract 5 pds/wk
Grades 11-12

Government and Politics is a college-level introduction to key political concepts, ideas, institutions, policies, interactions, roles and behaviors that characterize the Constitutional system and political culture of the United States. Students will read and analyze 9 or more U.S. foundational documents, dozens of Supreme Court decisions and other texts and visuals to gain an understanding of the relationships and interactions between political institutions and behavior. **NOTE**: As required by the College Board, students will need to complete a research project or investigation relating to a political problem or current issue to the course content.

AP Seminar – Course #1000 1 credit
❖ Requires completed Honors/AP contract 5 pds/wk
Grades 10-12
See Special Programs section for course description

AP Research – Course #1001 1 credit
Prerequisite: Students must have successfully completed the AP Seminar course prior to taking AP Research. 5 pds/wk
❖ Requires completed Honors/AP contract
Grades 11-12
See Special Programs section for course description

Psychology – Course #850 1 credit
Grades 11-12 5 pds/wk

This introductory psychology course could be called “The Brain: A User’s Guide” or “How to Use Your Brain to Run Your Life.” This course will provide students with new and innovative techniques of common-sense psychology to enhance performance in school, athletics and life. The core curriculum for the course centers on developmental psychology, sensory perception, altered states of consciousness and mental illness. Numerous activities including role-play, reading, self-tests, projects, experiments, original research and others are used to transfer theory to practical application. Guest speakers are also part of the course.

Sociology – Course #851 1 credit
Grades 11-12 5 pds/wk

This course is an introduction to the discipline of sociology. The primary goal of the course is to help students better understand human behavior and the contexts in which it occurs.

Students will first be introduced to the theoretical perspectives that provide the foundation for most sociological inquiry. Then students will learn how culture affects human interaction and personality development. In addition, the course will explore how social forces shape education, racial and ethnic relations, religious organization and politics. Additional areas of study will include topics such as crime and deviance, dating and marriage, the mass media, and social movements.

Anthropology – Course #862 1 credit
Grades 11-12 5 pds/wk

This course is an examination of human beings and their culture, both past and present. Anthropology looks at the characteristics and origins of the cultural, social and physical development of humans. The course will present students with a broad introduction to the study of anthropology, but will focus on the fields of cultural anthropology and archaeology. Students will be introduced to a variety of activities to gain an understanding of what this field of study can offer and learn to apply their observational skills to real-life studies, both in the classroom setting and "in the field".

World Geography – Course #823 1 credit
Grades 11-12 5 pds/wk

The purpose of this course is to provide a physical and cultural geographic background for events that have shaped the boundaries and territories of the world since 1945. The course will begin with a reintroduction to key geographical concepts and terms. The main focus of the course will be on how physical and cultural geography have shaped and impacted the ever-changing political landscapes of the world around us. The course will conclude with an examination of how cultural/ethnic groups and international organizations may further shape the political landscapes of the 21st century.

Law and Modern Issues – Course #820 1 credit
Grades 11-12 5 pds/wk

This course provides students with an overview of tort, criminal, consumer and family law. Some of the topics include the values underlying the law, lawmaking, legal protections within the Bill of Rights. The course will also include the judicial process from arrest to sentencing, prisons and correction, the death penalty, types of tort law and individual responsibilities, and tort reform. Students will examine specific court cases to help them better understand how the terms and concepts of the legal system are applied to the real world. The goal of this course is to help students gain an understanding and appreciation for the judicial process and its struggle to balance the rights of the individual with the preservation of social order.

Comparative Study of World Religions – Course #824 1 credit
Grades 11-12 5 pds/wk

Through the study of the history, central beliefs, texts and practices of world religions, students will grow in their own religious literacy and understanding of religion's role in the human experience. Students will also use the case study method to analyze religions in context through the lens of current issues, events and themes. The study of religion helps you learn how to think critically, listen empathetically, speak thoughtfully and write clearly – all skills that will be of great use no matter what you go on to do in life. It will also help you to better live and work in our increasingly diverse society and global world.

SPECIAL EDUCATION

DEPARTMENT

SPECIAL EDUCATION

Basic English 9 – Course #800 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

This class is designed for students who have not mastered basic skills in the language arts area. Students will acquire appropriate skills in reading, writing, spelling and vocabulary related to state academic standards and their Individual Educational Program Plan goals. Students are introduced to the purposes of writing to include narrative, informative, persuasive, informal and creative selections. The instructional approach emphasizes encouragement and confidence in student abilities. A multi-modality instructional approach is used.

Basic English 10 – Course #802 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

This class is designed to provide reinforcement of Basic English 9 skills. Topics include a review of grammar, mechanics and usage. Students will acquire appropriate skills in reading, writing, spelling and vocabulary related to state academic standards and their Individual Educational Program Plan goals. Students are expected to write at the mastery level of several purposes including but not limited to narrative, informative, persuasive, informal and creative selections. Students also study vocabulary and literature. Emphasis is placed on practical application skills in school and elsewhere. The instructional approach emphasizes encouragement and confidence in student abilities. A multi-modality instructional approach is used.

Basic English 11 – Course #805 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

This class is designed to provide reinforcement of basic skills in writing, grammar, usage, spelling, critical reading and organizational skills. Literature is a major component of this course with an emphasis on novels that are relative to lives of high school students.

Basic English 12 – Course #807 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

This class is designed to provide reinforcement of basic skills in writing, grammar, usage, spelling, critical reading and organizational skills. Literature is a major component of this course with an emphasis on fiction and non-fiction works. Students will develop a personal resume along with researching, note-taking and writing a research paper about their chosen career.

Reading A – Course #885 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk
Grades 9-12

Reading A is designed for students who are lacking in phonemic awareness, phonics, fluency, vocabulary and comprehension and are not functional readers. Time will be spent ensuring that students have mastery of the sounds in English and the ability to pair those sounds with the corresponding letters or spelling patterns that represent them. Instruction in syllable types will further students' understanding of how letters and sounds build words. Students will practice decoding and encoding words with studied patterns. As students become more proficient at decoding and encoding the course will continue to develop their fluency in both reading and writing. Vocabulary and comprehension instruction are additional components of the lesson plan that teach students to use visualization as they are reading text. Placement in Reading A is based on staff recommendations.

Reading B – Course #886 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk
Grades 9-12

Reading B is designed for students who are strong in phonemic awareness and have mastery of basic phonics skills but need additional instruction in advanced phonics skills, fluency, vocabulary and comprehension. Time will be spent acquiring mastery of spelling patterns, and advanced phonics skills that will enable students to proficiently decode and encode text with minimal errors. Students will apply the skills learned to become fluent readers of text. Vocabulary and comprehension are additional components of this course that will enable students to apply the learned phonics skills to text. Placement in Reading B is based on staff recommendations.

Reading C – Course #888 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk
Grades 9-12

Reading C is designed for students who are strong in phonemic awareness and have mastery of basic phonics skills but need additional instruction and automaticity in advanced phonics skills, fluency, vocabulary and comprehension. Time will be spent reviewing spelling patterns and advanced phonics skills, however the focus of the course will be to become automatic and fluent reading text. Vocabulary development and application of acquired fluency and vocabulary skills to comprehend text of greater length and difficulty will be a focus. Placement in Reading C is based on staff recommendations.

Reading D – Course #889 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk
Grades 9-12

Reading D is designed for students who are strong in phonemic awareness, phonics and fluency but need additional instruction in vocabulary development and comprehension. Time will be spent building fluency and automaticity of text; however, the focus of instruction will be on the development of vocabulary and comprehension strategies. Placement in Reading D is based on staff recommendations.

Reading E – Course #879 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk
Grades 9-12

Reading E is designed for students who are strong in phonemic awareness, phonics and fluency but need additional instruction in vocabulary development and comprehension. Time will be spent building fluency and automaticity of text; however, the focus of instruction will be on the advanced development of vocabulary and comprehension strategies.

Algebra IA-LS – Course #790 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

This course is designed for students who struggled with middle school Math and/or were not proficient or above on the 8th grade PSSA assessment. This course is part 1 of a 2-year sequence of algebra. In this course, the topics from the first half of Algebra I are covered and therefore, more time is allocated for activities, discovery-learning and differentiation. The course is arranged in a way that helps students make connections between the Algebra they are learning and real-life applications. After successful completion of this course, students will take Algebra IB which will cover the second half of Algebra I.

Algebra IB-LS – Course #791 1 credit
Prerequisites: Algebra IA and recommendation of the IEP team 5 pds/wk

This course will focus on the basic mathematical operations associated with algebra with a learn-by-doing approach. Time will be spent developing more advanced concepts such as strategies to solve problems involving percent, ratio and proportion problems, motion problems, age problems, money and time problems, and work-related problems. Time will also be spent developing skills related to personal finance (bank accounts, consumer finance, best buys and property/income taxes). The major focus of the class is solving everyday problems using algebraic problem-solving strategies.

Integrated Math IV-LS – Course #793 1 credit
Prerequisite: Integrated Math III and recommendation of the IEP team 5 pds/wk

This course will focus on the basic mathematical operations associated with geometry with a learn-by-doing approach. Time will be spent developing skills and concepts related to understanding angles and angle-distance relationships, calculating real life quantities such as perimeters, areas and volumes, and understanding how to read maps and charts.

Connected Math I – Course #896 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk
Grades 9-12

Connected Math provides a thorough understanding of basic skills, shows how mathematical concepts are linked together and builds sophisticated problem-solving strategies. Students move forward in small steps, knowing that what they learn has utility because they will use it again and again. Detailed explanations and guided practice move students toward independent work, ensuring that students gain success and confidence as mathematical thinkers. Students are pre-tested for proper placement. Instruction is based on the individual goals and objectives of each student's Individual Education Plan (IEP), in combination with state-district standards for each grade level.

Connected Math II – Course #897 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk
Grades 9-12

Connected Math provides a thorough understanding of basic skills, shows how mathematical concepts are linked together and builds sophisticated problem-solving strategies. Students move forward in small steps, knowing that what they learn has utility because they will use it again and again. Detailed explanations and guided practice move students toward independent work, ensuring that students gain success and confidence as mathematical thinkers. Students are pre-tested for proper placement. Instruction is based on the individual goals and objectives of each student's Individual Education Plan (IEP), in combination with state-district standards for each grade level.

English 9S – Course #3009 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will learn English as per Individual Educational Program goals and objectives.

English 10S – Course #3010 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will learn English as per Individual Educational Program goals and objectives.

English 11S – Course #3011 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will develop English skills and concepts as per Individual Educational Program Plan goals and objectives.

English 12S – Course #3012 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will develop English skills and concepts as per Individual Educational Program Plan goals and objectives.

Mathematics 9S – Course #3109 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will learn Mathematics as per Individual Educational Program goals and objectives.

Mathematics 10S – Course #3110 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will learn Mathematics as per Individual Educational Program goals and objectives.

Mathematics 11S – Course #3111 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will learn Mathematics as per Individual Educational Program goals and objectives.

Mathematics 12S – Course #3112 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will learn Mathematics as per Individual Educational Program goals and objectives.

Science 9S – Course #3309 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will learn general science as per Individual Educational Program goals and objectives.

Science 10S – Course #3310 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will learn general science as per Individual Educational Program goals and objectives.

Science 11S – Course #3311 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will develop science skills and concepts as per Individual Educational Program Plan goals and objectives.

Science 12S – Course #3312 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will develop science skills and concepts as per Individual Educational Program Plan goals and objectives.

Social Studies 9S – Course #3209 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will learn U.S. History as per Individual Educational Program Plan goals and objectives.

Social Studies 10S – Course #3210 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will learn World History as per Individual Educational Program Plan goals and objectives.

Social Studies 11S – Course #3211 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will develop social studies skills and concepts as per Individual Educational Program Plan goals and objectives.

Social Studies 12S – Course #3212 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

Students will develop social studies skills and concepts as per Individual Educational Program Plan goals and objectives.

Basic Studies 9/10 – Course #3700 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

This is a course that allows students to receive teacher assistance on homework, projects, and test taking. They will be expected to do assigned work at this time. Additional work will be assigned by the teacher to assist in the development of study skills.

Basic Studies 11/12 – Course #3701 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

This is a course that allows students to receive teacher assistance on homework, projects, and test taking. They will be expected to do assigned work at this time. Additional work will be assigned by the study skills teacher to assist in the development of study skills.

Academic Support – Course #3706 1 credit
Prerequisite: Recommendation of the IEP team 5 pds/wk

A highly structured one-credit class in which students are given the opportunity to complete individual assignments and projects under the direct supervision and guidance of a special education teacher. Students would be able to utilize the academic environment to access school resources and complete work that is required. The expectation for all students would include coming to class with all the necessary work and materials, using the academic time effectively and adhering to behavioral and academic expectations. Student enrollment in the class would be based upon the decision of the IEP team.

Career Education/Work Experience – Course #881 1-3 credits
Prerequisite: Recommendation of the IEP team 5-15 pds/wk
Grades 11-12

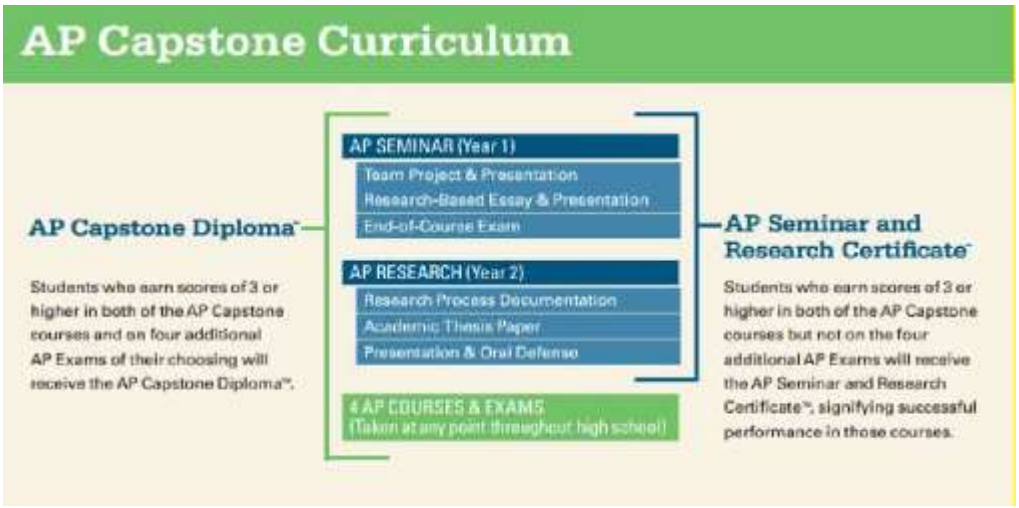
Career Education provides secondary students with an understanding of job-seeking skills, employer practices and the positive worker characteristics necessary to retain employment. Employability of students improves through occupational skill training and on-the-job work experience. Daily follow-along support services provided by local program staff greatly increase the potential for employment success. Job sites are developed by the school district in cooperation with local businesses.
The Work Experience Education portion of the program combines paid employment or unpaid volunteer experiences. It is expected that the student will find employment or a volunteer position that will last the entire school year. Weekly follow-along support services provided by local program staff greatly increase the potential for employment success.

SPECIAL PROGRAM OFFERINGS

SPECIAL PROGRAMS

AP Capstone Program

Students are able to participate in an innovative diploma program that helps them stand out in the college admissions process by developing the critical skills needed to succeed in college and in life. Two courses – AP Seminar and AP Research allow students to immerse themselves in topics that matter to them while developing the analytic, research, problem-solving and communication skills that colleges seek in their applicants. This challenging program helps students deepen their passion for learning, gives them greater confidence in their academic skills and provides a broader perspective in their world. Students take AP Seminar in 10th or 11th grade followed by AP Research. Students who earn scores of 3 or higher on the AP Seminar and AP Research Exams and on four (4) additional AP Exams of their choosing will receive the AP Capstone Diploma, which signifies outstanding academic achievement and attainment of college-level academic research and skills. Students are not required to take both AP Capstone programs, but it is highly recommended.



AP Seminar – Course #1000 1 credit
❖ Requires completed Honors/AP contract 5 pds/wk
Grades 10-12

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research based written essays and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

AP Research – Course #1001 1 credit
Prerequisite: Students must have successfully completed the AP Seminar course prior to taking AP Research. 5 pds/wk
❖ Requires completed Honors/AP contract
Grades 11-12

AP Research allows students to deeply explore an academic topic, problem or issue of individual interest. Through this exploration, students design, plan and conduct a year-long research-based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology, employing ethical research practices and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of approximately 4000–5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.

Central Pennsylvania Youth Ballet (CPYB)

1 credit
5-10 pds/wk

The Central Pennsylvania Youth Ballet (CPYB) has grown from a small, local dance studio to an internationally renowned classical ballet school and performing arts company. CPYB leadership provides exceptional dance training for beginning to pre-professional dancers and enhances the cultural climate of the region through ballet performances. CPYB has *recognized status* with the Carlisle Area School District which offers an early-dismissal program for CPYB dancers in grades 9-12. Dancers who are part of this program receive credit for physical education and for their study at CPYB. Students in CPYB's programs must take a minimum of 15 hours of ballet classes per week. In addition, dancers must be enrolled in five (5) full 1-credit courses at CHS. Dancers in this program must maintain a good academic standing and their required number of ballet classes to continue participation in this special program.

Carlisle Virtual Academy (CVA)

The Carlisle Virtual Academy (CVA) is the district equivalent of a total online educational program of studies most closely paralleling a "cyber-school" experience. Academy students have the opportunity to obtain a regular Carlisle High School diploma by completing all graduation requirements stated in the Academy Online – Educational Planning Guide manual (curriculum guide). This option also provides students with access to activities and services available to students attending the traditional educational program of studies in accordance with established board policy and administrative guidelines.

Students who enroll in the Carlisle Virtual Academy's – Academy Online learning component receive the following benefits:

- Upon successful completion of the online education program, students receive a regular Carlisle High School diploma.
- All students have access to activities and services afforded to students enrolled in the traditional educational program.
- High–quality, standards-aligned curriculum.
- All courses follow the same basic format with visual links.
- Options to blend virtual program with traditional course delivery in areas such as music, art and Career & Technology Education opportunities.
- All students are provided with an academic mentor who oversees their educational program as well as instructional, counseling, library and technical services.
- All students are provided with technology support and instructional support to facilitate academic progress and success with respect to their educational programs of studies.

- Laptop OR reimbursement of up to $500.00 per semester is available to all CVA-AO students for expenses incurred by the students/parents related specifically to this educational program option. Examples of related expense are: computer hardware and/or software, internet access (connection) fees, educational supplies related to course work, educational (field) trips related to courses of study, and fees for physical education programs. Details are available from the Virtual Administrator.
- Tuition-free

Driver's Education – Behind the Wheel Training 0 credit

Contact the driver's education teacher to schedule 6 hours of behind-the-wheel instruction. This course is not Safety Education which is a graduation requirement.

Instrumental Music Lessons 0 credit

Contact your instrumental music teacher for specific information.

Oracle (Yearbook) – Course #460 1 credit

Prerequisite: Approval of the teacher, Mrs. Muir, at course selection time 5 pds/wk
Grades 9-12

This course is designed as a hands-on, laboratory experience, with students actively engaged in the production of the yearbook, *Oracle*. If you have an aptitude in writing, photography, research, interviewing and/or computer design and are interested in preserving the history of Carlisle High School, please consider joining our staff. Preference will be given to students who have shown cooperation, dependability and an aptitude in one of the skill areas mentioned. Students will work on various other school publications after production of the yearbook is completed. As a member of the staff, students should expect to have individual and group assignments, which may include afterschool activities. Please see Mrs. Muir for more information and application.

Periscope (News Magazine/Website) – Course #470

Prerequisite: Approval of the teacher, Mrs. Kate Muir, at course selection time 1 credit
Grades 9-12 5 pds/wk

This course is designed as a hands-on, laboratory experience, with students actively engaged in the production of *Periscope,* both a print school news magazine and a news website. Students should expect to spend time outside of the regular school day working on activities related to the production of these publications. This course explores journalism form and function including: journalistic style and elements of a news story; interviewing; writing news, features, editorials, and sports stories; writing headlines and captions; copy-editing; layout and web design; advertising; photojournalism; and press law and ethics. Please see Mrs. Muir for more information and application.

Summer School (enrichment offerings)

Dates: June - July (specific dates will be announced in the spring)
Days: Monday - Thursday

Enrichment courses are held for a total of 100 hours. In the event that a science course would run as a summer school enrichment offering, additional hours may be applied to account for science labs. Depending on need and teacher availability, other courses may run in various subject areas. A complete listing of summer school enrichment courses is available from the Director in late spring.
Please Note:

- There is a cost for all enrichment courses.
- Information on all summer school offerings is available through the Director of Summer School and the building counseling centers in the spring of the year.

WORLD LANGUAGE

DEPARTMENT

WORLD LANGUAGE

The academic, social and economic needs of individuals and the nation have contributed to the importance of learning at least one foreign language. In order to be competitive in their preparation for college or for many careers, it is recommended that students elect and continue the study of a foreign language throughout high school and into post-secondary studies whenever possible.
Please note that at times it is necessary to combine upper level courses because of limited enrollments. This factor is not always known at the time students are making selections. If this issue is a concern, please discuss it with the school counselors, principals or the World Language Program Chair.

****Please Note: All language classes require students to speak in the target language as often as possible and often in front of the class.**

French I – Course #301 1 credit
Prerequisite: None 5 pds/wk
Grades 9-12

This course follows the same curriculum as French 1 offered at the middle schools. It is suggested that students who were academically successful in French 1 and who have obtained the recommendation of their middle school teacher and wish to continue to study French in high school select French II.

French I is an introduction to French language and culture. The course builds the foundation for communication by speaking, reading, writing and understanding written and spoken French. Students will learn to communicate in everyday situations through dialogues, oral presentations and projects. Vocabulary and the fundamentals of grammar are acquired and practiced through readings, dialogues, conversations, video scenes, songs and authentic resources. Students will use the target language to discuss their preferences and their daily life. The discussion of Francophone life and the cultural aspects of the French language form an integral part of the course.

French II – Course #302 1 credit
Prerequisite: French I (with a C or above recommended) 5 pds/wk
Grades 9-12

French II builds on the foundation of French I with increased emphasis on using the target language to communicate. Students continue to develop proficiency in listening, speaking, reading and writing. Students will build on the vocabulary and grammar introduced in French I through more complex reading and listening activities. Students will work to enhance their communicative competency through dialogues, conversations, directed compositions and stories. Students will use the language to discuss their daily life and the world around them. The cultural aspects of the language and life in the Francophone world will continue to be explored in French II.

Honors French III – Course #303 1 credit
Prerequisites: French II and recommendation of French II teacher 5 pds/wk
Grades 10-12

Honors French III is an intermediate course, which continues to build proficiency in listening, speaking, reading and writing. There is a greater emphasis on fluency in oral work and a greater refinement of composition and sentence structure in written work. Honors French III aims to develop a higher level of reading comprehension necessary for understanding authentic texts. This course includes an introduction to French literature, art, music and history.

Honors French IV – Course #311 1 credit
Prerequisites: French III and recommendation of French III teacher 5 pds/wk
Grades 11-12

Honors French IV continues to develop more advanced listening, speaking, reading and writing skills. It includes a basic grammar review and continues to introduce more advanced elements of grammar. It is designed as an introduction to some of the themes found on the Advanced Placement French Language and Culture Exam. As such, there is a greater emphasis on French in the Francophone world. The goal is to provide the student with an active and rewarding learning experience as they continue to strengthen their language skills and develop their cultural competency. Students who complete Honors French IV will be prepared to study Advanced Placement French V or college-level French courses.

AP French – Course #329 1 credit
Prerequisites: French IV and recommendation of French IV teacher 5 pds/wk
Grades 11-12

This course is designed to prepare students for the Advanced Placement French Language and Culture Exam and uses the themes present on the exam as a guide to learning. The ultimate objective of the course is to improve the proficiency for all students in the areas of listening, speaking, reading and writing. Students will continue to develop the ability to understand spoken French in various contexts and to express themselves both orally and in writing with reasonable fluency and accuracy. A wide variety of authentic resources will be used including short stories, novels, films and numerous print and technological ancillaries. The goal continues to be to provide the student with an active and rewarding learning experience as they continue to strengthen their competencies and love for the French language. Students will be prepared for the AP Exam and college-level classes.

German I – Course #312 1 credit
Prerequisite: None 5 pds/wk
Grades 9-12

This course follows the same curriculum as German 1 offered at the middle schools. It is suggested that students who were academically successful in German 1 and who have obtained the recommendation of their middle school teacher and wish to continue to study German in high school select German II.

In German I, students acquire the most important parts of a language necessary to survive in a German speaking country. Students practice the four areas of language learning (listening, speaking, reading and writing) by acquiring vocabulary and learning about grammar. In order to make the language more meaningful and engaging, students sing songs, play word games, hold conversations and produce creative projects all in the target language. Students also view videos and read articles direct from the German-speaking realm. Students learn how to express themselves in the target language in everyday situations such as going shopping, ordering food in a restaurant, talking about themselves/family/friends and expressing preferences and interests.

German II – Course #313 1 credit
Prerequisite: German I (with a C or above recommended) 5 pds/wk
Grades 9-12

German II expands on many of the topics covered in German I allowing students to progress as language learners. Students go beyond the basics of German I vocabulary and grammar and hone in on authentically communicating in the target language. Students complete realistic tasks and navigate through situations that emulate real world experiences. Students will compare and contrast aspects of German and American culture and language usage. The four skill areas of language learning (listening, speaking, reading and writing) receive equal emphasis.

Honors German III – Course #315 1 credit
Prerequisites: German II and recommendation of German II teacher 5 pds/wk
Grades 10-12

This is an intermediate course in which students begin to move from concrete vocabulary to speaking and writing in German. Students will use this vocabulary in dialogues, casual and guided conversations and directed compositions that are both structured and creative. Students will work with authentic texts and authentic videos to begin using their language skills beyond the classroom. Students will continue to build on the grammatical foundations begun in the first two years, including an emphasis on the major verb tenses. An emphasis will be placed on writing skills in this course.

Honors German IV – Course #316 1 credit
Prerequisites: German III and recommendation of German III teacher 5 pds/wk
Grades 11-12

At this level of German, the students are capable of reading German newspapers and magazine articles, authentic text materials and non-technical literature such as poetry, dramas, short stories and novellas written by German speakers for German speakers. Students practice oral discussions of current events and current topics of interest as well as using German in casual conversations. Students will continue to work with authentic videos to refine their understanding of spoken German, including dialects of the German language. There are grammar reviews and the introduction of more advanced grammar concepts to aid students in their written and spoken use of the language. An emphasis on geographical, historical, and literary understandings of the people who speak the language will also occur in this course.

AP German – Course #327 1 credit
Prerequisites: German IV and recommendation of German IV teacher 5 pds/wk
Grades 11-12

In AP German students will continue the study of literature, history and culture through the reading of various pieces of literature. Grammar concepts from the first four years will be reviewed, including more complex grammar structures, and used as a tool for good communication. Listening skills will be emphasized through the use of authentic videos and recorded materials. Reading and writing skills will continue to be included and built upon, including structured writing focused on current events and creative writing. Students will be expected to speak and write about themes that are important to young adults today and to show a real knowledge of German-speaking people and their lands and cultures. Extensive listening and speaking practice in preparation for the optional Advanced Placement Test can be expected.

Spanish I – Course #305 1 credit
Prerequisite: None 5 pds/wk
Grades 9-12

This course follows the same curriculum as Spanish 1 offered at the middle schools. It is suggested that students who were academically successful in Spanish 1 and who have obtained the recommendation of their middle school teacher and wish to continue to study Spanish in high school select Spanish II.

Spanish I builds the foundations of language acquisition with an emphasis on use of the target language for communication. Much of the class is conducted in the target language with emphasis on the skills of listening, reading, speaking and writing. Students will be exposed to grammar lessons as part of interpretive activities to be followed by instruction. Students will be required to demonstrate their proficiency through both prepared presentations and writings as well as impromptu interpersonal conversations. Students will be asked to make cultural and linguistic comparisons, and will be encouraged to find opportunities to use their acquired skills through the exploration of diverse cultures and communities.

Spanish II – Course #306 1 credit
Prerequisite: Spanish I (with a C or above recommended) 5 pds/wk
Grades 9-12

Spanish II builds on the foundations of Spanish I with a continued emphasis on use of the target language for communication. The majority of the class is conducted in the target language with emphasis on the skills of listening, reading, speaking and writing. Students will be exposed to grammar lessons as part of interpretive activities to be followed by instruction. Students will be required to demonstrate their proficiency through both prepared presentations and writings as well as impromptu interpersonal conversations. Students will be asked to make both cultural and linguistic comparisons at a deeper level than Spanish I, as well as connect to other aspects of life requiring critical thinking and problem solving using the target language. Students will be encouraged to find opportunities to use their acquired skills through the exploration of diverse cultures and communities.

Honors Spanish III – Course #317 1 credit
Prerequisites: Spanish II and recommendation of Spanish II teacher 5 pds/wk
Grades 10-12

Honors Spanish III expands upon the rigor of Spanish II with an emphasis on the use of the target language for communication. The majority of the class is conducted in the target language with emphasis on the skills of listening, reading, speaking and writing. Students will be exposed to grammar lessons as part of interpretive activities to be followed by instruction. Students will be required to demonstrate increased proficiency through both prepared presentations and writings as well as impromptu interpersonal conversations. Students will be asked to make both cultural and linguistic comparisons at a deeper level than Spanish II, as well as connect to other aspects of life requiring critical thinking and problem solving using the target language. Students will be encouraged to find opportunities to use their acquired skills through the exploration of diverse cultures and communities.

Honors Spanish IV – Course #318 1 credit
Prerequisites: Spanish III and recommendation of Spanish III teacher 5 pds/wk
Grades 11-12

Honors Spanish IV builds on the intermediate-low language proficiency achieved in Spanish I-III. The majority of the class is conducted in the target language with emphasis on interpretive, presentational and interpersonal communication skills. Students will review as well as be presented with new grammar for the purpose of its use in effective communication. Students will be required to demonstrate an increasing degree of intermediate proficiency through prepared presentations and writings as well as impromptu interpersonal conversations. Students will continue to make both cultural and linguistic comparisons, as well as connect to other aspects of life requiring critical thinking and problem solving using the target language. Students will be tasked to use their acquired skills in the exploration of various Hispanic cultures and communities.

AP Spanish – Course #328 1 credit
Prerequisites: Spanish IV and recommendation of Spanish IV teacher 5 pds/wk
Grades 11-12

AP Spanish builds on the intermediate language proficiency achieved in Spanish I through IV in a holistic study of the six themes of the College Board's Spanish Language & Culture Advanced Placement Exam. The course is conducted entirely in the target language and AP Spanish students are expected to be independently proactive in their pursuit of advanced vocabulary, grammar and Hispanic culture. The reading and listening selections offered in the course represent many authentic literary and auditory sources which are used as the basis for both oral and written communications. Extensive listening, reading, writing and speaking practice opportunities will be presented to prepare students for the optional AP Exam.

International Languages and Cultures – Course #320
Prerequisite: None 1 credit
Grades 9-12 5 pds/wk

This course follows the same curriculum as the Language and Culture Exploratory course offered at the middle schools. Students who have taken the exploratory course and wish to continue their language study should select level 1 of either French, German or Spanish.

This is an exploratory language program for students who have not previously earned language credit or taken a language exploratory course in middle school. This course will introduce students to language learning, build awareness and appreciation of other cultures, develop an appreciation for the value of learning another language and prepare students for potential future language study. Through the study of other languages, students will also gain an enhanced understanding of English. Because each language is studied for only a portion of the course, fluency in the new languages is not an expected outcome.

ART
021 Art Exploration
026 Digital Media I
027 Digital Media II
020 Digital Media III
034 Drawing & Painting I
035 Drawing & Painting II
043 Drawing & Painting III
044 AP Drawing & 2D Studio Art
037 Sculpture & Ceramics I
045 Sculpture & Ceramics II
042 Sculpture & Ceramics III
028 AP 3D Studio Art
048 AP Art History

CAREERS & TECHNOLOGY
Automotive Technology
901 Automotive Technology I
902 Automotive Technology II
903 Automotive Technology III
904 PA College Brake Systems

Business Academy
119 Accounting
141 Intro to Bus/Bus Comm. & Careers
150 Intro to Selling/Personal Finance
157 Marketing I
158 Marketing II
178 Finance & Investing
170 BELCO Credit Union II
171 BELCO Credit Union III

Carpentry Trades
905 Carpentry Trades I
906 Carpentry Trades II
907 Carpentry Trades III
923 PA College Power Tools

Communications Technology
943 Exploring Video Production
944 Broadcasting I
945 Broadcasting II
949 Graphic Arts & Design I
951 Graphic Arts & Design II

Computer Systems Networking
7025 IT I – Essentials
7000 IT II – Cisco Networking Pt. I
7020 IT III – Cisco Networking Pt. II
7029 IT IV – Workstation/Server OS
7033 IT Intern
7032 IT Intern II
7034 IT Intern III

Culinary Arts
930 Culinary Arts I
931 Culinary Arts II
932 Culinary Arts III
933 PA College Culinary Sanitation

Early Childhood Education
919 Early Childhood Education I
920 Early Childhood Education II
921 Early Childhood Education III

Engineering Technology
145 Honors Comp. Integ. Ma (PLTW)
146 Honors Intro. to Engin (PLTW)
147 Honors Princ. of Engineering (PLTW)
148 Honors Civil Engin/Architect (PLTW)
149 Honors Engin Design & Dev. (PLTW)
151 Architect-Construction-Engineering
601 Foundations of Technology
607 Engineering CAD Design
612 Architectural Engineering & Design

Family & Consumer Science
615 Child Development
616 Contemporary Living Skills
617 FCS: Skills for Success
622 Foods & Baking
623 Foods & Nutrition
636 CPARC Intern
637 CPARC Intern I
180 CPARC Intern II
181 CPARC Intern III

Health Careers Academy
640 Intro to Medical Careers
650 Medical Terminology & Procedures I
651 Medical Terminology & Procedures II
652 Certified Nursing Assistant Program
653 Penn State Holy Spirit Explor. Prog.
645 Emergency Medical Serv. Academy
657 UPMC Exploration Program

Work-Based Learning Experiences
133 Workforce Education
153 Career Internship I
154 Career Internship II
155 Career Internship III
166 Diversified Occupations I
162 Diversified Occupations II
167 Diversified Occupations III
168 IEC Pre-Apprentice
172 USA Spares Program
173 Career Link Equus
174 Career Link Equus I
175 Career Link Equus II
176 Career Link Equus III
179 Non-Profit Career Internship

ENGLISH
201 English I-Option I
202 English I-Option II
200 Honors English I
204 English II-Option I
205 English II-Option II
207 Honors English II
220 English III-Option I
230 English III-Option II
240 AP English III Lang & Comp.
251 English IV-Option I
260 English IV-Option II
270 AP English IV Lit. & Comp.
290 Creative Writing
280 Shakespeare: Page to Stage

English Language Development (ELD)
2000 ELD I-Entering
2001 ELD II-Emerging
2003 ELD III-Developing
2004 ELD IV-Expanding
2007 ELD Academic Support

HEALTH & WELLNESS
511 Phys Ed 9/10 Female
512 Phys Ed 9/10 Male
535 Phys Ed 11/12 Female
536 Phys Ed 11/12 Male
530 Safety Education
510 Health I
541 Health II
3318 Adaptive Phys Ed

MATHEMATICS
415 Algebra IA
416 Algebra IB
417 Essential Mathematics
411 Algebra I
422 Geometry
418 Honors Geometry
432 Algebra II
419 Honors Algebra II
441 Pre-Calculus
424 Honors Pre-Calculus
443 Probability & Statistics
451 Calculus
8584 Raspberry Pi
455 AP Statistics
456 AP Calculus AB
426 AP Calculus BC
428 AP Computer Science Principles
427 AP Computer Science A
439 HACC – College Algebra
440 HACC – College Trigonometry

MUSIC
050 Concert Band
052 Symphonic Band
054 Concert choir
056 Bel Canto Singers
057 Chamber Singers
059 Orchestra
061 Concert Band/Concert Choir
062 Concert Band/Orchestra
063 Symphonic Band/Orchestra
064 Concert Choir/Orchestra
069 Symphonic Band/Chamber
070 Symphonic Band/Concert Choir
072 Orchestra/Chamber Singers
073 Orchestra/Bel Canto
074 Symphonic Band/Bel Canto
089 Piano/Music Theory I
101 Advanced Piano
100 AP Music Theory
088 Guitar/History Rock & Roll
102 Advanced Guitar
091 Intro to Music Technology
099 Music Technology II
092 History of Western Music
093 Perspec. of Music in Pop Culture
065 N/C Concert Band
066 N/C Symphonic Band
071 N/C Orchestra
081 N/C Concert Choir
083 N/C Bel Canto
084 N/C Chamber Singers

SCIENCE
711 Geo-Environmental Option I
712 Geo-Environmental Option II
720 Biology I-Option I
721 Biology I-Option II
723 Honors Biology
724 Honors Anatomy & Physiology
725 Honors Chemistry
726 Honors Geo-Environmental
728 Honors Physics
729 AP Biology
732 Chemistry I
733 Applied Chemistry
734 Physics
739 AP Environmental Science
743 AP Chemistry
745 AP Physics
749 Aerospace Engineering

SOCIAL STUDIES
811 US History II-Option I
812 US History II-Option II
829 Honors US History
826 World History Option I
827 World History Option II
830 Honors World History
839 Civics-Option I
840 Civics-Option II
853 AP European History
852 AP US History
854 AP US Gov & Politics
850 Psychology
851 Sociology
862 Anthropology
823 World Geography
820 Law & Modern Issues
824 Comp. Study of World Religions

WORLD LANGUAGE
301 French I
302 French II
303 Honors French III
311 Honors French IV
329 AP French
312 German I
313 German II
315 Honors German III
316 Honors German IV
327 AP German
305 Spanish I
306 Spanish II
317 Honors Spanish III
318 Honors Spanish IV
328 AP Spanish
320 International Lang & Cultures

PUBLICATIONS
460 Oracle
470 Periscope

AP CAPSTONE PROGRAM
1000 AP Seminar
1001 AP Research

SPECIAL PROGRAMS
990 CPYB 2 pd
991 CPYB 1 pd
8550 Dickinson

RESERVED
790 Algebra IA-LS
791 Algebra IB-LS
793 Integrated Math IV-LS
800 Basic English 9
802 Basic English 10
805 Basic English 11
807 Basic English 12
885 Reading A
886 Reading B
888 Reading C
889 Reading D
879 Reading E
896 Connected Math I
897 Connected Math II
881 Career Ed/Work Experience
3009 English 9S
3010 English 10S
3011 English 11S
3012 English 12S
3109 Math 9S
3110 Math 10S
3111 Math 11S
3112 Math 12S
3209 Social Studies 9S
3210 Social Studies 10S
3211 Social Studies 11S
3212 Social Studies 12S
3309 Science 9S
3310 Science 10S
3311 Science 11S
3312 Science 12S
3700 Basic Studies 9/10
3701 Basic Studies 11/12
3702 Life Skills English
3703 Life Skills Math
3704 Life Skills Social Studies
3705 Life Skills Science
3706 Academic Support
3708 Life Skills Reading

VIRTUAL
CVA-Phys Ed 9 = 6505
CVA-Phys Ed 10=6506
CVA- Phys Ed 11 = 6507
CVA-Phys Ed 12 = 6508
CVA-Health I = 6503
CVA-Health II = 6501