## CHARTIERS VALLEY <br> SCHOOL DISTRICT $\operatorname{\text {Inspiringexcellence.}}$



## Chartiers Valley High School



## 2022-2023 Program of Studies

## Mission Statement

The mission of the Chartiers Valley School District, a community dedicated to shared leadership, is to graduate students who achieve personal success by providing an exceptional academic foundation in a safe, nurturing environment that inspires creativity and innovation while embracing diversity.

## Vision Statement

We will inspire excellence in instruction, learning and innovation to prepare our students to achieve personal success.

## Core Values

1. Demonstrate genuine care, concern and fondness for students
2. Adopt an education-centered focus where students come first, followed closely by the needs of their parents
3. Develop and nurture healthy, productive and cooperative relationships with colleagues
4. Communicate regularly and clearly with students, their families and the community
5. Create and cultivate a district-wide Learning Community where all employees and educators are valued
6. Encourage innovation and creativity
7. Embrace community and regional partnerships.

> School Colors:<br>> Motto:<br>> Mascot:<br>\section*{Red \& Blue}<br>Character, Virtue, Honor and Scholarship Colt

> Alma Mater
> Glorious things of thee are spoken, Home of the red and blue.
> N'er to fail and 'ere to conquer,
> To thy name we'll always be true.
> Spirits lasting thro' the ages,
> Never ceasing to proclaim.
> Chartiers Valley, now we praise thee,
> And may we ever cherish thy name.
(Words by the Chartiers Valley High School's
Chapter of the National Honor Society)

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The Chartiers Valley School District does not discriminate on the basis of race, sex, religion, handicap, national origin, or marital status, as required by Title VI of the 1964 Civil Rights Act, Title IX of the 1972 Education Amendments, and Section 504 Regulations of the 1973 Rehabilitation Act.

## (Go to Course Lists)

## General Program Information

Graduation Requirements (Back to Menu) (Go to Course Lists)

| Minimum Requirements |  |  |  |
| :--- | :--- | :---: | :---: |
| English | 4 Credits |  |  |
| Mathematics | 3 Credits |  |  |
| Science | 3 Credits |  |  |
| Social Studies | 3 Credits |  |  |
| Physical Education | 1 Credit (.25 per year) |  |  |
| Health | 1 Credit (.5 in 9th and 10 th grades) |  |  |
| Arts \& Humanities Electives | 3 Credits |  |  |
| Electives | 7 |  |  |
| Advisory | 1 Credit (.25 per year) |  |  |
|  |  |  |  |

**Computer Science courses, with the exception of Cybercrime \& Digital Forensics and Game Design Triad, may count as a math or science credit .

The requirements mandated for graduation may change based on the Pennsylvania Department of Education's rules and regulations.

## Typical Units of Study

$\begin{array}{ll}\text { 9th grade } & 8.00 \text { credits (includes } 0.25 \text { Advisory units) } \\ \text { 10th grade } & 8.00 \text { credits (includes } 0.25 \text { Advisory units) } \\ \text { 11th grade } & 7.50 \text { credits (includes } 0.25 \text { Advisory units) } \\ \text { 12th grade } & 7.50 \text { credits (includes } 0.25 \text { Advisory units) }\end{array}$

## Typical Promotion

6.25 credits
12.75 credits
19.25 credits
28.00 credits

One credit is earned by successfully completing a course that meets at least one period per day, five days per week. The minimum school-year load is seven subjects plus physical education.

It is a student's responsibility to know the requirements for promotion and graduation and to make plans accordingly. Additionally, students must keep their parents/guardians informed of progress toward graduation. School counselors are available to assist students and parents. No student who has completed the requirements for graduation shall be denied a diploma as a disciplinary measure but he or she may be denied participation in the ceremony of graduation when personal conduct so warrants. Such exclusion shall be regarded as a school suspension.

## Community Service Credit

1. Students may earn one (1) Community Service Elective credit by completing 120 hours of community service over four (4) years. Students may begin accumulating hours as soon as they complete eighth grade. Proof of hours and a service log should be submitted to the school counselor.
2. Seniors deficient in credits for graduation may obtain a maximum of one (1) Community Service Elective credit by completing a minimum of 120 hours within one (1) calendar year.

Students may use the chart below to plan to meet the required credits for graduation and the elective courses that will help them reach their career goals.

Graduation Credit Planner

| Course/Credits Required | 9th | $10^{\text {th }}$ | $11^{\text {th }}$ | $12^{\text {th }}$ |
| :--- | :--- | :--- | :--- | :--- |
| English (4) |  |  |  |  |
| Math (3) |  |  |  |  |
| Social Studies (3) |  |  |  |  |
| Science (3) |  |  |  |  |
| Health (1) <br> (.5 - 9th $.5-10^{\text {th }}$ ) |  |  |  |  |
| Physical Education (1) <br> (.25 per year 9-12) |  |  |  |  |
| Arts \& Humanities (3) |  |  |  |  |
| Electives (7) |  |  |  |  |
| Advisory (1) <br> (.25 per year 9-12) |  |  |  |  |
| Total Required (26) |  |  |  |  |

## (Back to Menu) (Go to Course Lists)

## Keystone Graduation Requirements (Back to Menu) (Go to Course Lists)

In October of 2018, the Pennsylvania requirement that all students must obtain a proficient or advanced score on each of the three Keystone Exams (Algebra 1, Biology \& Literature) was removed.

Beginning in the 2021-22 school year, a new statewide graduation requirement will apply in addition to the Chartiers Valley High School graduation requirements. The new Pennsylvania graduation requirements provide five alternative pathways for high school students to demonstrate readiness for postsecondary success.

- Scoring proficient or advanced on each Keystone Exam - Algebra I, Literature, and Biology.
- Earning a satisfactory composite score on the Algebra I, Literature, and Biology Keystone Exams. The passing composite score will be available in August of the same year.
- Earning a passing grade on the courses associated with each Keystone Exam, and satisfactorily complete one of the following: an alternative assessment (SAT, PSAT, ACT, ASVAB, Gold Level ACT WorkKeys), advanced coursework (AP, IB, concurrent enrollment courses), pre-apprenticeship, or acceptance in a 4-year nonprofit institution of higher education for college-level coursework.
- Earning a passing grade on the courses associated with each Keystone Exam, and pass the National Occupational Competency Testing Institute (NOCTI) or the National Institute of Metalworking Skills (NIMS) assessment in an approved Career and Technical Education concentration.
- Earning a passing grade on the courses associated with each Keystone Exam, and demonstrate readiness for postsecondary engagement through three pieces of evidence from the student's career portfolio aligned to student goals and career plan. Examples of evidence will include ACT, WorkKeys, SAT Subject tests, AP, IB and concurrent coursework, higher education acceptance, community learning project, completion of an internship, externship or co-op or full-time employment.

It is important to remember that Keystone Exams are the statewide assessment that Pennsylvania uses to comply with accountability requirements in the federal Every Student Succeeds Act (ESSA). Chartiers Valley School District is still expected to achieve 95 percent participation on its statewide exams.

## (Go to Course Lists)

## Daily Schedules (Back to Menu) (Go to Course Lists)

Daily Schedule

| Homeroom | $7: 35-7: 49$ |
| :---: | :---: |
| Pass | $7: 49-7: 53$ |
| Period 1 | $7: 53-8: 34$ |
| Pass | $8: 34-8: 38$ |
| Period 2 | $8: 38-9: 19$ |
| Pass | $9: 19-9: 23$ |
| Period 3 | $9: 23-10: 04$ |
| Pass | $10: 04-10: 08$ |
| Period 4 | $10: 08-10: 49$ |
| Pass | $10: 49-10: 53$ |
| Period 5 | $10: 53-11: 34$ |
| Pass | $11: 34-11: 38$ |
| Period 6 | $11: 38-12: 19$ |
| Pass | $12: 19-12: 23$ |
| Period 7 | $12: 23-1: 04$ |
| Pass | $1: 04-1: 08$ |
| Period 8 | $1: 08-1: 49$ |
| Pass | $1: 49-1: 53$ |
| Period 9 | $1: 53-2: 34$ |
| Dismissal | $2: 34$ |
| Bus Departure | $2: 40$ |

Pep Assembly Schedule

| Homeroom | $7: 35-7: 40$ |
| :---: | :---: |
| Pass | $7: 40-7: 44$ |
| Period 1 | $7: 44-8: 23$ |
| Pass | $8: 23-8: 27$ |
| Period 2 | $8: 27-9: 06$ |
| Pass | $9: 06-9: 10$ |
| Period 3 | $9: 10-9: 49$ |
| Pass | $9: 49-9: 53$ |
| Period 4 | $9: 53-10: 32$ |
| Pass | $10: 32-10: 36$ |
| Period 5 | $10: 36-11: 15$ |
| Pass | $11: 11-11: 19$ |
| Period 6 | $11: 19-11: 58$ |
| Pass | $11: 58-12: 02$ |
| Period 7 | $12: 02-12: 41$ |
| Pass | $12: 41-12: 45$ |
| Period 8 | $12: 45-1: 19$ |
| Pass | $1: 19-1: 23$ |
| Period 9 | $1: 23-2: 03$ |
| Assembly | $2: 03-2: 34$ |
| Bus Departure | $2: 40$ |

Advisory Schedule

| Homeroom | $7: 35-7: 40$ |
| :---: | :---: |
| Pass | $7: 40-7: 44$ |
| Period 1 | $7: 44-8: 22$ |
| Pass | $8: 22-8: 26$ |
| Period 2 | $8: 26-9: 04$ |
| Pass | $9: 04-9: 08$ |
| ADVISORY | $9: 08-9: 46$ |
| Pass | $9: 46-9: 50$ |
| Period 3 | $9: 50-10: 28$ |
| Pass | $10: 28-10: 32$ |
| Period 4 | $10: 32-11: 09$ |
| Pass | $11: 09-11: 13$ |
| Period 5 | $11: 13-11: 50$ |
| Pass | $11: 50-11: 54$ |
| Period 6 | $11: 54-12: 31$ |
| Pass | $12: 31-12: 35$ |
| Period 7 | $12: 35-1: 12$ |
| Pass | $1: 12-1: 16$ |
| Period 8 | $1: 16-1: 53$ |
| Pass | $1: 53-1: 57$ |
| Period 9 | $1: 57-2: 34$ |

Two-Hour Delay Schedule

| Homeroom | $9: 35-9: 40$ |
| :---: | :---: |
| Pass | $9: 40-9: 43$ |
| Period 1 | $9: 43-10: 12$ |
| Pass | $10: 12-10: 15$ |
| Period 2 | $10: 15-10: 44$ |
| Pass | $10: 44-10: 47$ |
| Period 3 | $10: 47-11: 16$ |
| Pass | $11: 16-11: 19$ |
| Period 4 | $11: 19-11: 48$ |
| Pass | $11: 48-11: 51$ |
| Period 5 | $11: 51-12: 21$ |
| Pass | $12: 21-12: 24$ |
| Period 6 | $12: 24-12: 54$ |
| Pass | $12: 54-12: 57$ |
| Period 7 | $12: 57-1: 27$ |
| Pass | $1: 27-1: 30$ |
| Period 8 | $1: 30-2: 00$ |
| Pass | $2: 00-2: 04$ |
| Period 9 | $2: 04-2: 34$ |
| Dismissal | $2: 34$ |
| Bus Departure | $2: 40$ |

## Student Services

## School Counseling Department

Resources offered by School Counselors can be found at: https://hs.cvsd.net/ "Services" then "School Counselors"

Chartiers Valley High School Counselors are available to provide all students with academic, personal, social, career, and college/post secondary resources and guidance through a comprehensive school counseling program.

Mrs. Lesley Kunkel, Counselor last names A - F
Mrs. Leah O'Malley, Counselor last names G - N
Mrs. Danyelle Boyd, Counselor last names O-Z
Ms. Molly Clokey, Attendance Secretary
Ms. Sherri Gillim, Secretary
412.429.2268 lkunkel@cvsd.net
412.429.2629 lomalley@cvsd.net
412.429.2271 dboyd@cvsd.net
412.429.2270 mclokey@cvsd.net
412.429-2622 sgillim@cvsd.net

## Scheduling \& Course Request Procedures (Back to Menu) (Go to Course Lists)

Scheduling for the following school year is completed early in the second semester. Current students (including incoming freshmen) will complete course requests utilizing the online Program of Studies and Infinite Campus course registration feature. All students are required to submit a signed course request summary form.

## How to Request Courses

- Log in to Infinite Campus account using the student log-in and password.
- Select Course Registration option from the navigation pane on the left of the screen.
- Select Course Search - can be searched by the course name or by the course number.
- To request this course as part of the schedule for next year, click the Request as Elective
- Courses can also be requested as Alternates. Students are required to select 3 Alternates
- Select a Physical Education/ Dance course - Request as Elective
- When finished, Print Request Summary
- Parent/Guardian must sign and date the printed request summary prior to the student's scheduling meeting with their school counselor.

Students may submit changes to their requests, using the Request Change form, until April 8, 2022.
Students and parents have the opportunity to discuss scheduling with school counselors during classroom sessions and parent events. School Counselors will work with their students to resolve scheduling conflicts prior to the start of the school year.

## (Go to Course Lists)

## Scheduling Considerations (Back to Menu) (Go to Course Lists)

Students and parents are encouraged to become familiar with course descriptions found in the Program of Studies. The student's academic performance, interests, aptitude and ability should also be considered.

- Students must select and carry a minimum of seven subjects plus physical education.
- Courses will be scheduled once during the school year; students are advised to select courses carefully.
- Students must choose courses that meet the graduation requirements.
- In selecting subjects that are continuous in nature, a typical minimum grade of $75 \%$ in the previous course is required.
- English and physical education must be scheduled each year. English requirements cannot be met in advance by taking more than one English course during a year. However, students may choose to carry an additional English course as an elective. Only students who have failed physical education will be scheduled for more than the required number of physical education classes per week.
- Students who fail courses that are required for graduation are strongly encouraged to attend summer school or they may risk delaying graduation.
- Requests for specific teachers, classes, lunch periods, or similar requests will not be approved.
- Please contact your school counselor if additional supports are needed.


## Schedule Change Requests

Changes may be granted if...

- A system scheduling error has occurred.
- Student failed a course, needs to repeat it, and the change did not occur.
- Student desires to add an elective (if seat is available) in the place of a study hall (same period).
- There is an error in the schedule that affects graduation requirements.

No changes will be made after the first ten (10) days of the school year. Schedule changes will not be granted based on lunch, time/period, or teacher preference. Changes are not guaranteed and must be approved by the principal.

## Withdrawal from a Course

- Students will be required to meet with their school counselor at the time of the request to discuss and design an intervention plan to be followed for a period of time before a withdraw/fail grade is approved by the principal.
- Withdrawal from a course after the 10th school day will result in a "WF" withdrawal fail course grade on the report card and transcript.
- "WF" will have a negative impact on the student's GPA/rank.


## Course Waivers

A course waiver can be requested by a parent/student who does not qualify and is not recommended for a course. The deadline to request a waiver is April 8, 2022. A meeting with a building principal to review the student's academic history will be required prior to the waiver being approved and applied to the student's schedule.

## Cancelled Courses (Back to Menu) (Go to Course Lists)

The courses available during student registration are not guaranteed to be offered during the following school year. Specifically, factors such as school resources and lack of student demand for a particular course may result in the cancellation of a course. Any course with fewer than sixteen registered students will be evaluated to determine if the course will be offered.

## Career Exploration and Student Portfolios (Back to Menu) (Go to Course Lists)

The Pennsylvania Department of Education requires schools to ensure that students have access to career exploration and preparation activities based on the Pennsylvania Academic Standards for Career Education and Work. The career activities span the length of each student's academic career and will be tracked through a comprehensive career portfolio.

The Pennsylvania Department of Education requires all students to have an individualized, comprehensive career portfolio guided by career exploration and preparation activities that are standards-aligned (PDE Academic Standards for Career Education and Work).

These standards address Career Awareness and Preparation, Career Acquisition, Career Retention and Advancement, and Entrepreneurship. Grade-level designed lessons are facilitated by school counselors, English and Social Studies projects/assignments, and student participation in the Advisory Program. Student activities and documents are saved in Naviance Student.

By the end of 11th grade, every student must have a career portfolio containing:

- Career exploration evidence required from K-8 grade
- Eight additional pieces of evidence collected during the 9-11 grade span.
- At least two pieces of evidence 9-11 grade showing implementation of the student's individualized career plan

Activities can be facilitated by school counselors and teachers, during the Advisory Program, or integrated within class lessons. High School students will maintain required evidence in Naviance Student.

Below are the scheduled lessons and activities completed at each grade level. Additional activities may be added as appropriate.

| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| :--- | :--- | :--- | :--- |
| Financial Literacy |  <br> Interviewing | College or Alternative <br> Scavenger Hunt | Job Interviewing, Resume <br> Review and Mock Interviews |
| Personality Type and <br> Career Exploration | Financial Literacy | Local Career <br> Opportunities | Financial Literacy |
| Intro to Resumes | Career Clusters | Resume Writing <br> Review |  |
| Parkway West CTC <br> Informational Presentation | Roadtrip Nation Career <br> Exploration | Career Relocation <br> Project |  |
| Entrepreneurship | Career Interest <br> Inventory |  |  |
| Career Interview | Career Research Paper |  |  |

## Advisory Program (Back to Menu) (Go to Course Lists)

High school students are assigned to a small group "Advisory" led by a teacher. Advisory groups meet once per month using an alternative bell schedule; student participation and attendance is expected. Advisory lessons cover a variety of topics including career exploration, post-secondary planning, and financial literacy.

## Naviance Student (Back to Menu) (Go to Course Lists)

Naviance is an online portfolio that helps students plan and organize high school goals, research colleges, explore careers, and keep track of the post-secondary application process.

Website \& Student Login Credentials:
https://student.naviance.com/chartiersvhs
Google Single Sign-On enabled
More info:
https://www.naviance.com/content/naviance-student

## $\mathrm{G}_{\mathrm{V}}$ Grading and Reporting of Progress

## Grade Reporting (Back to Menu) (Go to Course Lists)

Grades will be issued at the conclusion of each quarterly grading period (9-weeks). Student report cards will not be printed and mailed home at the conclusion of the first three quarters. Rather, parents and students may access final quarterly and semester grades via Infinite Campus. Paper copies of the final report card will be sent home via postal mail at the conclusion of the school year. If you would like a paper copy of a quarterly report card, please contact the main office and a hard-copy will be prepared for you.

## Grade Calculation

Mid-term examinations are an option for course instructors. When utilized, the mid-term examination score will be reflected on the students' report cards as a percentage and will change how grades are calculated at the semester and final grade levels.

Final exams examinations covering materials from the each of the four grading periods will be given in all the major disciplines. Students taking AP courses will have the option of taking the AP exam or the course final exam. The final examination shall count as 20 percent of the final grade unless the teacher utilizes a mid-term exam during the first semester.

## Quarterly Grades

To calculate a quarterly (9-week) grade, the points earned in each class will be totaled and converted to a percentage.

## Grade calculations without a mid-term exam:

- Semester 1: Average of quarters 1 and 2
- Semester 2: Average of quarters 3 and 4 final percentages ( $80 \%$ of second-semester grade); final exam ( $20 \%$ of second semester grade)
- Final Grade: Average of semesters 1 and 2


## Grade calculations with a mid-term exam:

- Semester 1: Average of quarter 1 and 2 final percentages ( $80 \%$ of first-semester grade); mid-term exam ( $20 \%$ of first semester grade)
- Semester 2: Average of quarters 3 and 4 final percentages ( $80 \%$ of second-semester grade); final exam ( $20 \%$ of second semester grade)
- Final Grade: Average of semesters 1 and 2 final percentages


## Grading Scale (Back to Menu) (Go to Course Lists)

|  | Grade | Standard Quality <br> Point Average $^{*}$ | Honors \& CiHS <br> Courses | Advanced <br> Placement |
| :---: | :---: | :---: | :---: | :---: |
| $97-100 \%$ | A+ | 4.5 | 5.0 | 5.5 |
| $93-96 \%$ | A | 4.25 | 4.75 | 5.25 |
| $90-92 \%$ | A- | 4.0 | 4.5 | 5.0 |
| $87-89 \%$ | B | 3.5 | 4.0 | 4.5 |
| $83-86 \%$ | B | 3.25 | 3.75 | 4.25 |
| $80-82 \%$ | B- | 3.0 | 3.5 | 4.0 |
| $77-79 \%$ | C | 2.5 | 3.0 | 3.5 |
| $73-76 \%$ | C | 2.25 | 2.75 | 3.25 |
| $70-72 \%$ | C- | 2.0 | 2.5 | 3.0 |
| $67-69 \%$ | D + | 1.5 | 2.0 | 2.5 |
| $63-66 \%$ | D | 1.25 | 1.75 | 2.25 |
| $60-62 \%$ | D- | 1.0 | 1.5 | 2.0 |
| $59 \% \&$ below | F | 0 | 0 | 0 |

*Advanced and Standard Courses are on the Standard Quality Point Scale

## Weighted Courses (Back to Menu) (Go to Course Lists)

## Advanced Placement (AP) Courses

5.5 Weighted Scale

Chartiers Valley High School participates in the Advanced Placement Program of the College Entrance Examination Board. This program serves the interests of three groups: high school students capable of pursuing college level studies, secondary schools that desire to offer these students the opportunity to work at an advanced level, and colleges that wish to encourage and recognize such achievements. Advanced Placement courses may have required summer assignments.

| English |  |  | Science |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1350 | AP Language \& Composition | 3442 | AP Biology | 2423 | AP Calculus AB |
| 1355 | AP Literature \& Composition | 3341 | AP Chemistry | 2430 | AP Calculus BC |
| 1360 | AP Seminar (Capstone) | 3441 | AP Physics 1 | 2515 | AP Statistics |
| 1365 | AP Research (Capstone) | 3445 | AP Physics 2 |  |  |
|  |  | 3450 | AP Physics C Mechanics |  |  |
|  |  | 3455 | AP Physics E \& M |  |  |


| Social Studies |  |  | Art, Computer Sciences, World Language |  |
| :--- | :--- | :--- | :--- | :---: |
| 4409 | AP Macroeconomics | 7450 | AP Digital Art (2D \& 3D) |  |
| 4410 | AP Microeconomics | 7460 | AP Studio Art |  |
| 4346 | AP US Government \& Politics | 2635 | AP Computer Science A (Java) |  |
| 4348 | AP United States History | 6062 | AP Computer Science Principles |  |
| 4347 | AP Psychology | 5116 | AP Spanish |  |
|  |  |  |  |  |

## College in the High School (CiHS) (Back to Menu) (Go to Course Lists) 5.0 Weighted Scale

College in the High School (CiHS) permits high school students to take university-level courses as part of their regular high school day. Chartiers Valley teachers, in cooperation with Duquesne University, Rochester Institute of Technology (RIT), Community College of Allegheny County and the University of Pittsburgh offer these courses during the regular high school day. The cooperating university has approved both the courses and the teachers that are part of the college in high school program. CIHS courses are regular university courses, and participating in the course requires an investment of time, effort and money. To transfer credits, since these high school courses also result in college credit, the student must request an official transcript from the college or university. CIHS credits are generally accepted as transfer credits by all colleges and universities. There is no guarantee, however, that all credits will transfer to all institutions. Universities, and even degree programs within universities, have varying policies on accepting transfer credits. A student who successfully completes a CIHS course will receive a university transcript with a grade for the course and three or more credits. Each university establishes their own guidelines for the minimum grade to receive college credits. Associated with each course is a fee for credit that may be earned. Currently the following courses are offered as College in the High School:

- CiHS Advanced Video Broadcasting (Point Park)
- AP Psychology (Dual Described -University of Pgh)
- CiHS Spanish 4 (Duquesne University)
- AP Statistics (Duquesne University)
- $\mathrm{C}++$ (Duquesne University)
- CiHS Calculus (Duquesne University)
- CiHS Nutrition (University of Pittsburgh)
- All AET PLTW (Rochester Institute of Technology)
- CiHS Commun/Rhetoric (University of Pittsburgh)
- CiHS Computer Assisted Design 1 \& 2 (CCAC)
- CiHS French 4 (Duquesne University)
- CiHS German 4 (Duquesne University)
- Principles of Accounting (Carlow University)
- CiHS Shaping Modern World (Duquesne University
- All Biomedical PLTW (Milwaukee School of Engineering)

All PLTW courses are College in the High School courses and are noted with a PLTW in the course description. College credits may be earned provided the student meets the requirements. A fee is associated with college credits. Additional credit opportunities are available for all PLTW courses.

- Computer Integrated Manufacturing
- Principles of Biomedical Sciences (PBS)
- Introduction to Engineering Design
- Principles of Engineering
- Environmental Sustainability
- Engineering Design and Development
- Civil Engineering and Architecture
- Biomedical Innovation
- Human Body Systems
- Medical Interventions

The Engineering, Applied Engineering and Technology Path is comprised of rigorous and relevant courses from Chartiers Valley and Project Lead the Way (PLTW). This project-based curriculum is designed to provide students with the foundation they need to become the next generation of leaders and innovators in our community and beyond.

| English |  |  | Science |  | Mathematics |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1132 | Honors English 9/Composition 1 | 3133 | Honors Biology | 2143 | Honors Algebra 2 |
| 1232 | Honors English 10/Composition 2 | 3332 | Honors Chemistry | 2244 | Honors Combined Geometry |
|  |  |  |  | 2403 | Honors Pre-Calculus |


| Social Studies |  |  | Art |
| :--- | :--- | :--- | :--- |
| 4002 | Honors Development of the United States | 7455 | Honors Digital Art |
| 4006 | Honors World History | 7445 | Honors Studio Art |

## Online Tools

Infinite Campus: Provides access to family contact information, student grades/report cards, attendance, schedules, school-home communication management, etc. Click here: Infinite Campus Parent Login
Or use: Infinite Campus Mobile App -- District ID: YQPKSC
Schoology: Use Schoology to access your child's courses, schedules and grades. See class assignments, homework, calendar of events and other postings from your child's teacher. To access Schoology, click Schoology Login Site or go to www.cvsd.net, select "High School", and look in "Parent Resources".

## Appeal of Grade (Board Policy \#213) (Back to Menu) (Go to Course Lists)

The teacher is the primary evaluator. Parents or students who wish to appeal a course grade should appeal to the teacher. Parents or students who remain unsatisfied following the appeal to the teacher may appeal to the principal.

With substantial and valid reasons, the principal, under state code and following the collective bargain agreement, may revise the grade.

A below-average or failing grade, without significant mitigating circumstances, is not sufficient reason for a withdrawal from a class.

## Homework(Board Policy \#213) (Back to Menu) (Go to Course Lists)

Teachers are encouraged to evaluate, record and return in a timely fashion all written homework that is collected. At the beginning of the course, students should be advised as to the teacher's homework evaluation procedures.

## Class Participation (Board Policy \#213)

Class participation is a valid component in student evaluation. However, grades may not be lowered for inappropriate classroom behavior. Such behavior must be addressed within the school's discipline procedure.

## Absence from Class (Board Policy \#213)

The procedures for making up work may be found in the Student Handbook issued annually by the school. Absences from class may impact negatively on a student's academic progress. Failure to complete work assigned as a result of absence will negatively affect the student's grade. Suspension from school is an excused absence. In extraordinary situations, opportunities to make up work or take tests missed during unexcused absence may be offered. These opportunities are left to the discretion of the principal after teacher consultation.

## Class Rank and Commencement Recognition (Beginning with the class of 2023)

 (Board Policy \#213)The Chartiers Valley School District will no longer keep an official record of student class rank. Accordingly, there will be no designation of class rank at commencement exercises and no designation of class rank on the high school transcript.

Class rank for an individual student will be supplied directly to outside agencies only when failure to do so would exclude a student from consideration for acceptance to an academic program or for the granting of a scholarship or merit award. When the district receives official notification from an outside agency that class rank is a mandatory requisite for a selection process, a class rank will be established and reported directly to the requesting agency. The comparative cumulative (grades 9 through 12) weighted quality point averages of all students in a class will serve as the basis for ranking. Students tied in ranking shall be given the highest rank available so that several students may hold the same rank. Thereafter, ranking will continue as though there had been no tie(s). For example, if two students tie at the number one position, the next student will rank number 3 .

Seniors will be recognized at commencement exercises as follows: Summa Cum Laude, 5.00 or higher cumulative quality point average; Magna Cum Laude, 4.75 through 4.99 cumulative quality point average, Cum Laude, 4.50 through 4.74 cumulative quality point average. The cumulative quality point average at the end of the first semester of the senior year will serve as the basis for these distinctions. Beginning with the class of 2023, any student who qualifies for any of the aforementioned distinctions may apply to speak at graduation by submitting a written copy of his or her proposed speech to a committee of senior high school teachers and administrators established by the high school principal. The committee will invite those students whose written speeches are deemed most compelling to an interview with the committee. The committee will then select by consensus a maximum of three speakers from among those students.

## Engineering Academy

## Engineering Academy Requirements (Back to Menu) (Go to Course Lists)

The Engineering, Applied Engineering and Technology Path is comprised of rigorous and relevant courses from Chartiers Valley and Project Lead The Way (PLTW). This project-based curriculum is designed to provide students with the foundation they need to become the next generation of leaders and innovators in our community and beyond.

## Year One

Required College Bound Core Classes: English, Social Studies, Engineering, Math, Science, Health, Physical Education, Modern Language

Required Engineering Classes

- Introduction to Engineering Design (IED) Full Year PLTW
- Metals and More Full Year


## Year Two

Required College Bound Core Classes: English, Social Studies, Math, Science, Physical Education
Required Engineering Classes

- Robotics 2
Full Year
- Principles of Engineering (POE)
Full Year PLTW
- Mass Production
Full Year


## Year Three

Required College Bound Core Classes: English, Social Studies, Math, Science, Physical Education

## Required Engineering Classes

- Engineering Design and Development

Full Year PLTW

- Product Factory Full Year
- Engineering Elective


## Engineering Electives

- Civil Engineering and Architecture (CEA)

Full Year PLTW

- Computer Assisted Design and Drafting (CADD) 1 Full Year
- Computer Assisted Design and Drafting (CADD) 2 Full Year
- Materials/Construction Systems Full Year
- Maker Lab

Full Year

- Transportation

Full Year

- Robotics


## Engineering Academy Certificates (Back to Menu) (Go to Course Lists)

To obtain an Applied Engineering and Technology (AET) certificate, four related credits in a specific area must be completed. These credits will be taken as electives. In addition, students will be required to complete the Chartiers Valley graduation requirements for all certificate programs.

## Career Interests

Certificate programs may lead to careers in robotics, advanced manufacturing, engineering technology and drafting.

## Engineering Certificate

- Maker Lab
- Materials/Construction
- Modern Infrastructure
- Metals and More
- Robotics
- Intro to Engineering Design (IED)
- Principles of Engineering (POE)
- Computer Integrated Manufacturing (CIM)
- Civil Engineering \& Architecture (CEA)

Machine and Fabrication Technology Certificate

- Materials
- Maker Lab
- Mass Production
- Applied Engineering
- Product Factory

Architectural Design and Modeling Certificate

- Maker Lab
- Materials/Construction
- CADD 1
- CADD2
- IED
- CEA


## Mechanical Design and Modeling Certificate

- Maker Lab
- Materials/Construction
- CADD 1
- CADD 2
- IED


## Courses of Study

(Back to Menu)

| Applied Engineering \& Technology (AET) |  |  |  |  |  |
| :---: | :--- | :---: | :--- | :--- | :--- |
| 6811 | Engineering 1 <br> Intro to Engineering Design | 6601 | Manufacturing Tech 1 <br> Materials \& Construction | 6503 | MMT 3A <br>  <br> Photography |
| 6801 | Engineering 2 <br> Principles of Engineering | 6602 | Manufacturing Tech 2A <br> Mass Production | 6509 | CiHS Advanced Video <br> Broadcasting |
| 6611 | Engineering 3 <br> Computer Integrated <br> Manufacturing | 6302 | Manufacturing Tech 2B <br> Metals \& More | 6800 | MakerLab@AET |
| 6815 | Engineering 4 <br>  <br> Development | 6605 | Manufacturing Tech 3 <br> Product Factory | 6823 | CiHS Computer Assisted <br> Design 1 (CAD1) |
| 6825 | Environmental <br> Sustainability | 6606 | MMT 1 <br> Multimedia Technology | 6824 | CiHS Computer Assisted <br> Design 2 (CAD2) |
| 6802 |  <br> Architecture | 6502 | MMT 2A <br>  <br> Photography | 6301 | Transportation Systems |
| 6803 | Introduction to <br> Architecture* | 6826 | Applied Environmental <br> Sustainability | 6813 | Robotics |
|  | Fabrication Art and <br> Design* |  |  |  |  |


| Art |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| 7107 | Exploratory Art (9-11) | 7106 | Drawing | 7401 | Senior Studio Art |  |
| 7011 | Exploratory Art (12) | 7112 | Drawing 2 | 7445 | Honors Studio Art |  |
| 7103 | Animation | 7113 | Drawing 3 | 7460 | AP Studio Art |  |
| 7104 | Ceramics | 7109 | Painting |  <br> Design |  |  |
| 7116 | Ceramics 2 | 714 | Painting 2 | 7455 | Honors Digital Art |  |
| 7117 | Ceramics 3 | 715 | Painting 3 | 7450 | AP Digital Art |  |
| 7105 | Crafts \& Mixed Media | 7109 | Printmaking | 7482 | GD3: Video Game Art |  |
| 7476 | Digital Art \& Design | 7110 | Sculpture |  |  |  |
| Business |  |  |  |  |  |  |
| 6010 | Introduction to <br> Accounting | 6055 | Accounting 1B | 6065 | Marketing Dynamics |  |
| 6005 | Financial Accounting | 6050 | Introduction to Business <br> Concepts | 6080 | Sports and Entertainment <br> Marketing |  |
| 6051 | Foundations of Personal <br> Finance | 6088 | GD3: Advanced Game <br> Marketing \& School Store |  |  |  |

Career \& Community Learning Opportunities
6092 Peer Learning Assistant 6090 Work Experience

| Computer Science |  |  |  |  |  |
| :---: | :--- | :---: | :--- | :--- | :--- |
| 6062 | AP Computer Science <br> Principles | 2653 | CiHS C++ | 2612 | Introduction to Computer <br> Programming |
| 2635 | AP Computer Science A | 6021 | Cybercrime and Digital <br> Forensics | 2615 | Introduction to Artificial <br> Intelligence \& Machine <br> Learning |
| 2613 | GD3: Game Development |  |  |  |  |


| (1350 |  |  |  |  |  |
| :---: | :--- | :---: | :--- | :--- | :--- |
| 1111 | English 9/Composition 1 |  <br> Composition | 1365 | AP Research |  |
| 1131 | English 9 Advanced/ <br> Composition 1 | 1422 | World Literature <br> 12/Composition 4 | 1503 | SAT Prep |
| 1132 | Honors English <br> 9/Composition 1 | 1426 | Advanced World <br> Literature 12: Voices in <br> World Lit \& College <br> Writing | 1506 | Public Speaking |
| 1211 | English 10/ Composition 2 | 1355 |  <br> Composition | 1507 | Creative Writing |
| 1231 | English 10 Advanced/ <br> Composition 2 | 1502 | CiHS Communications/ <br> Rhetoric | 1504 | CiHS Introduction to Film |
| 1232 | Honors English 10/ <br> Composition 2 | 1509 |  <br> Media Writing | 1510 | Introduction to Screenplay <br> Writing |
| 1322 | American Literature <br> Composition 3/11 | 1360 | AP Seminar |  |  |
| 1325 |  <br> Composition/11 |  |  |  |  |


| Family \& Consumer Science |  |  |  |  |  |
| :---: | :--- | :---: | :--- | :--- | :--- |
| 8511 | Introduction to the World <br> of Food and Nutrition 1 | 8501 | Child Development and <br> Family Relations | 8520 | Introduction to Interior Design |
| 8512 | Ethnic and Regional <br> Cuisine and Nutrition 2 | 8513 | Culinary Arts \& Food <br> Science |  |  |
| 8516 | Partners in the Kitchen |  |  |  |  |


| Mathematics |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| 2121 | Pre-Algebra | 2211 | Cognitive Geometry | 2413 | CiHS Calculus |  |
| 2122 | Algebra 1 | 2212 | Combined Geometry | 2423 | AP Calculus AB |  |
| 2123 | Cognitive Algebra I | 2244 | Honors Combined <br> Geometry | 2430 | AP Calculus BC |  |
| 2131 | Cognitive Algebra 2 | 2145 | Algebra 3 | 2515 | AP Statistics |  |
| 2132 | Algebra 2 | 2313 | Trigonometry/Analysis | 2516 | Analytics \& Statistics in Sports |  |
| 2143 | Honors Algebra 2 | 2403 | Honors Pre-Calculus |  |  |  |


| Performing Arts |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  |  |  |  |  |  |  |
| 7501 | Cadenza Chorus | 8041 | Modern \& Jazz Dance 1 | 8100 | Intro to Theatre Arts |  |
| 7505 | Select Chorus | 8042 | Modern \& Jazz Dance 2 | 8101 | Design for the Theatre |  |
| 7511 | Band | 8043 | Modern \& Jazz Dance 3 | 8201 | Acting 1 |  |
| 7521 | Orchestra | 8044 | Modern \& Jazz Dance 4 | 8202 | Acting 2 \& 3 |  |
| 8040 | Introduction to Dance | 8055 | Modern \& Jazz Dance 5 | 7533 | Jazz Band* |  |
|  |  | 8051 | Majorettes - Drill Team <br> Dance Troupe - Dance <br> Production | 7542 | Music Theory* |  |


| Physical Education |  |  |  |  |  |  |
| :---: | :--- | :---: | :--- | :---: | :--- | :---: |
| 8032 | Physical Education <br> (4 days) | 8034 | Lifetime Activities <br> (2 days) | 8038 | Partners in Physical <br> Education (2 Days) |  |
| 8025 | Health (4 days) | 8027 | Drivers Theory (5 days) |  | Dance (See Performing Arts) |  |
| 8070 |  <br> Healthy Living (2 Days) | 8036 | Sports Officiating and <br> Principles of Coaching | 8514 | CiHS Nutrition |  |


| Science |  |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- |
| 3221 | Biology Lab | 3341 | AP Chemistry | 3455 | AP Physics C: Electricity <br> and Magnetism |
| 3133 | Honors Biology | 3350 | Anatomy \& Physiology | 3442 | AP Biology |
| 3210 | Physical Science* | 3421 | Practical Physics | 3355 | Principles of Biomedical <br> Science (PBS) |
| 3209 | Explorations of Life on <br> Earth* | 3441 | AP Physics 1 | 3360 | Human Body Systems <br> (HBS) |
| 3331 | Chemistry w/ Lab | 3445 | AP Physics 2 | 3365 | Medical Interventions |
| 3340 | Honors Chemistry* | 3450 | AP Physics C: Mechanics | 3370 | Biomedical Innovation |


| Social Studies |  |  |  |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| 4000 | Development of the <br> United States | 4345 | Shaping of the Modern <br> World | 4406 | Economics |  |  |
| 4002 | Honors - Development of <br> the United States | 4346 | AP U.S. Government and <br> Politics | 4407 | Law and Government |  |  |
| 4005 | World Cultures | 4347 | AP Psychology | 4409 | AP Macroeconomics |  |  |
| 4006 | Honors World Cultures | 4348 | AP United States History | 4410 | AP Microeconomics |  |  |
| 4010 | Contemporary US/Global <br> Studies | 4405 | Psychology |  |  |  |  |


| World Languages |  |  |  |  |  |
| :--- | :--- | :---: | :--- | :--- | :--- |
| 5011 | French 1 | 5022 | German 2 | 5112 | Spanish 3 |
| 5012 | French 2 | 5023 | German 3 | 5114 | CiHS Spanish 4 |
| 5013 | French 3 | 5024 | CiHS German 4 | 5116 | AP Spanish Language |
| 5014 | CiHS French 4 | 5108 | Spanish 1 | 5117 | Spanish Communication <br> through Contemporary Topics |
| 5021 | German 1 | 5110 | Spanish 2 |  |  |

Parkway West Career \& Technical Center

| Parkway West Career \& Technical Center |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 9113 | Auto Body Repair | 9161 | Culinary Arts | 9185 | Public Safety Technology |
| 9313 |  | 9361 |  | 9385 |  |
| 9119 | Automotive Technology | 9190 | Graphic Arts \& Production | 9375 | Sports Medicine and <br> 9319 |
|  | 9389 | Technology | 9376 | Rehabilitation Therapy <br> Technology (SMARTT) |  |
| 9137 | Construction Technology | 9173 | Health Occupations | 9193 | Veterinary Assistant |
| 9337 | Cluster | 9373 | Technology | 9402 | Technology |
| 9143 | Cosmetology | 9155 | Cyber Security \& | 9234 | Principles of Technology |
| 9343 |  | 9355 | Networking Technology |  |  |
| 9238 | Chemical Properties in | 9220 | US History | 9221 | U.S. History II |
|  | Practice | 9223 | World History | 9224 | Power Motorsports |
| 9120 | Diesel Technology |  |  | 9225 | Technology |
| 9320 |  |  |  |  |  |

* = New Course


# Applied Engineering \& Technology (AET) 

(Back to All Course List)

The AET department was recognized nationally as a top 3 STEM program in the United States in 2015. All students are encouraged to take advantage of this outstanding opportunity in preparation for the 21st century career fields. The department offers courses in visual communications, manufacturing, construction, and engineering disciplines. Each area has introductory and advanced level courses. Introductory courses are open to all grade levels. Advanced level courses may have grade level or academic prerequisites. See course description for details.

All PLTW courses are College in the High School courses and are noted with a PLTW banner at the course title. College credits may be earned, provided the student meets the requirements. Additional credit opportunities are available for all PLTW courses. Speak to a PLTW teacher for more information. This is an opportunity to earn up to 17 college credits prior to High School Graduation.

| Engineering@AET | Manufacture@AET | MultiMedia <br> Tech@AET | Make and <br> Model@AET |
| :--- | :--- | :--- | :--- |
| Engineering 1 <br> Intro to Engineering Design | Manufacturing Tech 1 <br> Materials \& Construction | MMT 1 <br> Multimedia Technology | MakerLab@AET |
| Engineering 2 <br> Principles of Engineering | Manufacturing Tech 2A <br> Mass Production | MMT 2A <br>  <br> Photography | CiHS Computer Assisted <br> Design 1 (CAD1) |
| Engineering 3 <br> Computer Integrated <br> Manufacturing | Manufacturing Tech 2B <br> Metals \& More | MMT 3A <br>  <br> Photography | CiHS Computer Assisted <br> Design 2 (CAD2) |
| Engineering 4 <br>  <br> Development | Manufacturing Tech 3 <br> Product Factory | CiHS Advanced Video <br> Broadcasting | Transportation Systems |
| Environmental <br> Sustainability |  |  | Robotics |
|  <br> Architecture |  | Applied Environmental <br> Sustainability |  |
|  |  |  |  |

* = New Course


## Engineering @AET

| Engineering 1 <br> Intro to Engineering Design | 6811 | PLTW <br> CiHS | 1 Credit | Y.0 Weight | Year |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Course Description | Students dig deep into the engineering design process, applying math, science, and <br> engineering standards to hands-on projects. They work both individually and in teams <br> to design solutions to a variety of problems using 3-D modeling software, and use an <br> engineering notebook to document their work. |  |  |  |  |
| Prerequisites | Completed Algebra 1 or Teacher Recommendation <br> - Grades 9, 10,11,12 |  |  |  |  |


| Engineering 2 <br> Principles of Engineering | 6801 | PLTW <br> CiHS | 1 Credit | 5.0 Weight | Year |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Course Description | Through problems that engage and challenge, students explore a broad range of <br> engineering topics, including mechanisms, the strength of structures and materials, and <br> automation. Students develop skills in problem solving, research, and design while <br> learning strategies for design process documentation, collaboration, and presentation. |  |  |  |  |
| Prerequisites | Algebra 2 with a 70\% or higher. <br> Open to grades 10, 11, \& 12 |  |  |  |  |


| Engineering 3 <br> Computer Integrated Manufacturing | 6611 | PLTW <br> CiHS | 1 Credit | 5.0 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | Manufactured items are part of everyday life, yet most students have not been <br> introduced to the high-tech, innovative nature of modern manufacturing. This course <br> illuminates the opportunities related to understanding manufacturing. At the same time, <br> it teaches students about manufacturing processes, product design, robotics, and <br> automation. Students can earn a virtual manufacturing badge recognized by the <br> National Manufacturing Badge system. |  |  |  |  |
| Prerequisites | Completion of Intro to Engineering Design <br> - Teacher recommendation |  |  |  |  |


| Engineering 4 <br> Engineering Design \& Development | 6815 | PLTW <br> CiHS | 1 Credit | 5.0 Weight | Year |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Course Description | The knowledge and skills students acquire throughout PLTW Engineering come <br> together in Engineering Design and Development as they identify an issue and then <br> research, design, and test a solution, ultimately presenting their solution to a panel of <br> engineers. Students apply the professional skills they have developed to document a <br> design process to standards, completing Engineering Design and Development ready to <br> take on any post-secondary program or career. |  |  |  |  |
| Prerequisites | Completion of IED \& POE <br> Concurrent enrollment in college preparatory mathematics. |  |  |  |  |


| Environmental Sustainability |  | 6825 | PLTW <br> CiHS | 1 Credit | 5.0 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Course Description | In Environmental Sustainability, students investigate and design solutions in response <br> to real-world challenges related to clean and abundant drinking water, food supply, and <br> renewable energy. Applying their <br> simulations, students research and design potential solutions to these true-to-life <br> challenges. |  |  |  |  |  |
| Prerequisites | - Students will have completed Biology with a $70 \%$ or higher. <br> - Open to grades 10, 11, \& 12 |  |  |  |  |  |


| Civil Engineering \& Architecture |  | 6802 | PLTW <br> CiHS | 1 Credit | 5.0 Weight |
| :--- | :--- | :---: | :---: | :---: | :---: | Year


| Introduction to Architecture | 6803 | Semester |
| :--- | :--- | :--- | :--- | :--- |
| Course Description | The Introduction to Architecture course is an exciting semester class that introduces high <br> school students to ideas, principles, and methods of exploring architectural problems in <br> a beginner setting. This introductory course will teach you how to understand <br> architecture as both cultural expression and technical achievement. Review of classic <br> buildings, and hands-on exercises in drawing and modeling, will bring you closer to <br> understanding the work of architects. The course will have you looking at some of the <br> design aspects of Architecture - such as composition, form, space and hierarchy - and <br> then creating a virtual 3D model home that helps define your design. The semester <br> course is open to high school students who are interested in exploring a career in <br> architecture. |  |
| Prerequisites | None <br> Grades 9, 10, 11 \& 12 |  |


| Manufacturing Tech 1 <br> Materials \& Construction | Credit Unweighted | Year |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Course Description | This year long course provides a foundation for the AET department and introduces <br> students to the proper use of tools in the laboratory. This course is designed to instruct <br> students in the areas of reading project drawings, knowledge of materials and uses, <br> calculations of materials, and project procedures. A major emphasis will be placed on <br> shop safety, proper hand and power tool usage. <br> This course provides students with an in-depth introduction to the shop and students <br> will gain practical knowledge needed to work on their own projects or continue on with <br> lifelong skills in fabrication and construction. Students will construct various teacher <br> assigned projects, as well as create, design and build personal projects of their choice <br> with teacher guidance and close supervision. <br> The course also provides students with a broad analysis of the organization and <br> structure of the residential construction industry and the many career choices the <br> industry offers. Students will study the current construction methods and materials <br> used for various types of residential structures. This course introduces site <br> development, preparation, job layout, materials and methods for construction. |  |
| - None |  |  |
| - Grades 9, 10, 11 \& 12 |  |  |


| Manufacturing Tech 2A <br> Mass Production |  | 6602 | Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | Students will explore manufacturing systems and the development of small, mass <br> produced projects in the lab. Students will learn the safe operation of tools and machines <br> to process various materials. The use of automated CNC technology, such as routers, <br> plasma cutters, laser engravers and the associated software for both wood and metal, <br> will be utilized by the students. Students may be asked to work on projects in a mass <br> production setting, where each student completes one part of a production in an <br> assembly line, as well as individual and small group projects. |  |  |  |
| Prerequisites | - Successful completion of Manufacturing Tech 1 <br> - Teacher Recommendation <br> - Grades 10, 11, 12 only |  |  |  |


| Manufacturing Tech 2B <br> Metals and More | U302 Credit | Unweighted | Year |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Course Description | Metals and More is a course focused on the techniques of metal design and fabrication <br> Coursework will be based upon current trends in the industrial world with a focus on <br> MIG Welding and CNC Plasma cutting. Successful students will be able to work through <br> a problem, design a solution, and build the answer. Students will be exposed to many <br> different industrial technologies such as cutting, welding, bending, threading, shearing <br> and soldering all with a strong emphasis on industrial safety. Students will also learn <br> about and integrate current technologies into their projects, such as CNC, 3D Printing, <br> CAD, CNC Laser and more. Students may be asked to work alone or in teams to create <br> quality products to be displayed with pride knowing it was created with their own <br> hands. |  |  |
| Prerequisites | - Successful completion of Manufacturing Tech 1 <br> - Trades 10, 11 \& 12 only |  |  |


| Manufacturing Tech 3 Product Factory | 6605 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | The product factory course is intended to be the culmination of all other preparatory courses in the AET department. This course will educate a new generation of innovators by integrating creativity, research, design, prototyping, and manufacturing. Students will use the design process to determine shortcomings in existing products, improve upon them, and present their designs in the first portion of the year. Students will develop their own product after successfully demonstrating proficiency with all machines and processes. This course demands students to apply skills, techniques, and technological abilities learned in previous courses to design and develop a product in groups as well as individually. Students will have access to 3d modeling, laser engraving/cutting, CNC plasma cutting, CNC routering, that are available in the AET department |  |  |  |
| Prerequisites | - Makerlab@AET or CADD 1 and Manufacturing Tech 1 <br> - Manufacturing Tech 2A or Manufacturing Tech 2B |  |  |  |


| Fabrication Art and Design | 6607 | . 5 Credit | Unweighted | Semester |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Course Description | This hands-on course will provide a rigorous cross-curricular approach to learning that <br> integrates standards of both the visual arts and manufacturing technologies. Students <br> will combine the foundational concepts of art known as the Elements and Principles of |  |  |  |
| Art with the technologies, materials and skills used in mass production/construction |  |  |  |  |
| courses to create innovative, original and aesthetically pleasing objects that may be |  |  |  |  |
| functional and/or decorative in nature. The course will utilize 2 teachers Art and |  |  |  |  |
| Engineering. This course will focus primarily on real world application of both the |  |  |  |  |
| artistic and mass production practices that align with curricular standards. Students |  |  |  |  |
| will also develop the artistic and technological skills that would be used in a professional |  |  |  |  |
| or entrepreneurial manner with a general understanding of how to market their work |  |  |  |  |
| for future sale in the school store. |  |  |  |  |

MultiMedia Tech@AET

| MMT 1A <br> Multimedia Technology | 6606 | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Course Description | This year long course is intended to give each student experience and exposure to different <br> areas of visual communication and video production. Topics include: digital Photography, <br> image manipulation, screen printing t-shirts, vinyl decal production, video production and <br> offset press printing. All projects will be designed using Adobe ® CC products, including <br> Photoshop, Illustrator and Premiere Pro. If you enjoy taking pictures, designing, creating, <br> filming, making and doing things, this course is for you. <br> The video aspect of this course will teach students how to make and edit video clips using <br> Adobe Premiere Pro. Students will work individually and collaboratively to create and <br> present a weekly morning show that will air on YouTube and Twitter. |  |  |  |
| Prerequisites | None |  |  |  |


| MMT 2A <br> Graphic Design \& Photography | 6502 | Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Course Description | This year-long course is an extension of the visual communication portion of Multimedia <br> Technology. This exciting course encourages creativity with projects that are challenging, <br> rewarding and fun. Each student will learn advanced techniques in Adobe Illustrator, <br> Photoshop and Lightroom. Projects include multi-colored vinyl decals and t-shirts, glass <br> etching, photography, image manipulation and 3D Printing. Digital photography is <br> covered for one semester and you will do many projects using a high-end digital camera. <br> If you enjoyed Multimedia Tech, this course is for you, or if you are considering a career <br> in graphics/photography then this course is a must. This course is a Technology Credit. |  |  |  |
| Prerequisites | 75\% or better in MMT 1 (Multimedia Technology) |  |  |  |


| MMT 3A <br> Advanced Graphic Design \& Photography | 6503 | Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :--- | :---: |
| Course Description | This year-long course is an extension of the Graphic Design and Photography course. <br> This course expects a high level of creativity and a willingness to "think outside the box". <br> Projects are challenging and require more time and thought to complete. Projects <br> include multi-colored vinyl decals and t-shirts, glass etching, photography, image <br> manipulation and 3D Printing. Each student will continue to learn advanced techniques <br> in Adobe Illustrator, Photoshop and Lightroom. This is the perfect course for the <br> designer, artist, and creator. This course is a must if you are considering a career in <br> graphic design, photography, marketing or advertising. This course is a Technology <br> Credit. |  |  |  |
| Prerequisites | Teacher Recommendation <br> - 75\% or better in Graphic Design and Photography |  |  |  |


| CiHS Advanced Video Broadcasting | 6509 | 1 Credit | 5.0 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | Students will act as a producer for a television show. Students will learn all operations <br> of film production, and act in many rolls throughout the course. Students will operate <br> a program play out server, and a graphic generator for the message board. Students will <br> need leadership skills to effectively produce high level television shows to air on <br> Comcast and Verizon local broadcast. |  |  |  |
| Prerequisites | - Teacher Recommendation <br> - $75 \%$ or better in Introduction to VisCom and Video Basics |  |  |  |

## Make and Model@AET

| MakerLab@AET |  | 1 Credit | Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: |
| Course Description | Makerspaces are creative, DIY spaces where people can gather, to create, invent, and <br> learn. Students will be able to use 3D printers, software, electronics, craft supplies, and <br> tools to develop their designs and bring them to life. Drawings that previously ended <br> on paper will transform into 3D products. Students will learn the process of solving a <br> technological problem, model a solution, and develop a working prototype. <br> This introductory level course is appropriate for 9-12 grade students who are interested <br> in design and engineering. Students will have the opportunity to develop skills and <br> understanding of course concepts through activity, project, as well as problem-based <br> learning, used in combination with a teaming approach. This course assumes no <br> previous knowledge or prerequisite. |  |  |  |
| Prerequisites | None <br> - Open to grades $9,10,11, \& 12$ |  |  |  |


| CIHS Computer Assisted Drawing 1 (CAD1) $\quad 6821$ | CiHS | 1 Credit | 5.0 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | A full-year course offered to students in grades 9-12. This course teaches students how <br> to use the computer as a drafting tool to meet today's demand for computer literate <br> draftsmen and engineers. Students will implement industry standard Autodesk <br> applications. Students will create scaled 3d models of some of their designs using <br> various materials to simulate a working architectural model. |  |  |  |
| Prerequisites | Open to grades 9, 10, 11, \& 12 <br> Teacher Recommendation |  |  |  |


| CiHS Computer Assisted Drawing 2 (CAD2) 6824 | CiHS | 1 Credit | 5.0 Weight | Year |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Course Description | This course is designed to provide students with an opportunity to pursue skills and <br> applications in Computer Aided Drafting and Architectural Design Technologies. Areas <br> of study will include, but are not limited to: geometric construction, orthographic <br> projection, advanced practices in dimensioning, sectioning, auxiliary, view systems, <br> pictorial systems, architectural drawings, and computer aided drafting. This will result <br> in the development of skills for a career in architectural planning, design, and drawing. <br> Students will also be given the opportunity to receive a certificate of proficiency through <br> Autodesk. |  |  |  |
| Prerequisites | - $75 \%$ or better in CAD 1 <br> - Teacher Recommendation |  |  |  |


| Transportation Systems | 6301 | 1 Credit | Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | This course will focus on providing an in depth look into the vast and constantly <br> changing world of transportation. From the vehicles themselves, to the Infrastructure <br> they rely on. Students will be given a chance to explore, build and test vehicles from <br> various modes of transportation. Students will be using various hand tools, electrical <br> components, and propulsion devices to build vehicles that will be performance tested. <br> We will also spend time learning about the systems we rely on to move people and goods <br> on a daily basis in the U.S. |  |  |  |
| Prerequisites | • None |  |  |  |


| Robotics | 6813 | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :---: |
| Course Description | This year long course will introduce students to the design, construction, and <br> programming of robotic systems. Students will acquire a basic understanding of the <br> many types and operational capabilities of robots, as well as the programming, and use <br> of robots in manufacturing. Teamwork and problem solving will be emphasized <br> throughout the course. Students will also have the opportunity to compete in various <br> robotic competitions. This course provides a great foundation for students interested in <br> the extra-curricular activity, FIRST Robotics, that allows students to designs and build a <br> robot for competition |  |  |  |
| Prerequisites | - Open to grades 9,10,11,\&12 |  |  |  |

## AG@AET

| Applied Environmental Sustainability | 6826 |  | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Course Description | This year-long project-based course focuses on the development of <br> environmentally sustainable systems and their integration into our lives, <br> schools, and communities. The guiding principles in this course are the <br> designing, building, and testing of various systems that could potentially <br> resolve real-world problems while expanding upon Global Standards. <br> Specifically, the goal of the course is to afford students the opportunity to gain <br> hands-on experience in the areas of environmental sustainability for a better <br> tomorrow, safe and abundant water, food security and renewable <br> energy. Students will use content and concepts from the Environmental <br> Sustainability course to design and create systems that reinforce the concepts <br> previously learned. A review of the relevant material will help all students <br> succeed, thus, any student in grades 9-12 will be able to participate in the course. |  |  |  |  |
|  | Open to grades 9,10, 11,\&12 |  |  |  |  |
| Prerequisites |  |  |  |  |  |

## (Back to All Course List)

The Art program is designed to accommodate the needs, interests and abilities of each student by providing a wide range of visual experiences in the areas of ceramics, sculpture, graphics, drawing, painting, commercial art and crafts. All art courses are electives.

| Art |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 7107 | Exploratory Art (9-11) | 7476 | Digital Art \& Design | 7109 | Printmaking |
| 7011 | Exploratory Art (12) | 7106 | Drawing | 7110 | Sculpture |
| 7103 | Animation | 7112 | Drawing 2 | 7401 | Senior Studio Art |
| 7104 | Ceramics | 7113 | Drawing 3 | 7445 | Honors Studio Art |
| 7116 | Ceramics 2 | 7108 | Painting | 7455 | Honors Digital Art |
| 7117 | Ceramics 3 | 7114 | Painting 2 | 7450 | AP Digital Art |
| 7105 | Crafts \& Mixed Media | 7115 | Painting 3 | 7460 | AP Studio Art |
| 7481 | Game Design Triad (GD3): The Game Design Triad consists of three yearlong courses that work <br> collaboratively to allow the students to immerse themselves in a real-world game design experience. <br> Students will work in teams across the three classes as a collective "company" to produce, design, animate, <br> playtest and market their game to the student body. Throughout the process, students will be responsible <br> for meeting checkpoints and deadlines; they will be evaluated on the success of their final game launch. <br> a. Video Game Art (Art Department Offering) <br> b. Game Development (Computer Science Department Offering) <br> c. Advanced Game Marketing (Business Department Offering) |  |  |  |  |


| Exploratory Art (9-11) | 7107 | .5 Credit | Unweighted | Semester |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | Exploratory Art 9th - 11th grade is an introductory studio art course that will introduce <br> and analyze the principles and elements of art, which will be used to effectively complete <br> projects throughout the semester. Students will be introduced to a variety of fine art <br> mediums such as drawing, painting, printmaking, graphic design and sculpture. <br> Exploratory Art 9th - 11th grade will meet the developmental and cognitive needs of the <br> students at their respective grade level. |  |  |  |
| Prerequisites | None |  |  |  |


| Exploratory Art (12) | 7011 | 5 Credit | Unweighted | Semester |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | Exploratory Art 12th grade is an introductory studio art course that will discuss the <br> principles and elements of art in relation to projects completed throughout the <br> semester. Students will be introduced to a variety of fine art mediums such as drawing, <br> painting, printmaking, graphic design and sculpture. This course will focus primarily <br> on real world application of artistic practices. The student will develop skills that would <br> be used in a professional or entrepreneurial manner. Contemporary and historical <br> artists and styles will also be explored to enhance student understanding of the creative <br> process. Exploratory Art 12th grade will meet the developmental and cognitive needs <br> of the students at their respective grade level. |  |  |  |
| Prerequisites | • None |  |  |  |


| Animation | 7103 | .5 Credit | Unweighted |
| :--- | :--- | :---: | :---: |
| Course Description | Animation is an introductory design course in which students express their visual <br> creativity through drawing, storytelling, and other visual mediums. Students will <br> explore the international history and evolution of animation through character design, <br> the natural flow and movement of objects, background development, lighting, and stage <br> design. Multiple traditional and digital animation processes will be explored and <br> investigated throughout the course. Students will be able to identify and utilize <br> animation terminology, tools, concepts, and processes. |  |  |
| Prerequisites | None |  |  |


| Ceramics | 7104 | . 5 Credit | Unweighted | Semester |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | Ceramics is an introductory studio course consisting of both hand built and wheel thrown methods of construction. This course will include the examination of clay, glazing techniques, decoration methods and firing procedures. Students will learn and use the slab construction, coil built, pinch pot and hand thrown techniques to create clay projects. Students will be able to utilize, identify and name ceramic tools, clay bodies, and construction techniques. Additionally, students will become familiar with ceramic terminology, the firing process and design process implementation. |  |  |  |
| Prerequisites | - None |  |  |  |
| Ceramics 2 | 7116 | . 5 Credit | Unweighted | Semester |
| Course Description | A studio class consisting of both hand built and wheel thrown methods of construction. This course will include the examination of clay, glazing techniques, decoration methods and firing procedures. Students will continue working with slab construction, coil built, pinch pot and hand thrown techniques learned in Ceramics 1. |  |  |  |
| Prerequisites | - 10th, 11th and $12^{\text {th }}$ Grade <br> - Student must receive $90 \%$ or better in Ceramics 1 <br> - Teacher Recommendation |  |  |  |


| Ceramics 3 | 7117 | . 5 Credit | Unweighted | Semester |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | Ceramics 3: An advanced studio class consisting of both hand built and wheel thrown methods of construction. This course will include the examination of clay, glazing techniques, decoration methods and firing procedures. Students will advance their ceramics skills using slab construction, coil built and hand thrown techniques to create clay projects. |  |  |  |
| Prerequisites | - 10th, 11 th and $12^{\text {th }}$ Grade <br> - Student must receive $90 \%$ or better in Ceramics 2 <br> - Teacher Recommendation |  |  |  |


| Crafts \& Mixed Media | 7105 | .5 Credit | Unweighted |
| :--- | :--- | :--- | :---: |
| Course Description | Crafts \& Mixed Media is an introductory studio course intended for students who are <br> interested in the creative process, but not interested in the fine art aspects <br> (drawing/painting). Students will learn about the art and craft of various cultures while <br> creating works of art. Students will get to experience working with a variety of different <br> mediums such as paint, clay, fabric, metal, wood, and yarn, while learning multiple <br> studio techniques. Examples of the skills that may be developed include macramé, <br> decoupage, charted designs, basketry, weaving, quilting, knitting, crocheting, paper <br> craft, bookbinding, and stamping. Real-world applications will be explored such as the <br> work and entrepreneurial opportunities available on social media sites such as Etsy and <br> Pinterest. |  |  |
| Prerequisites | None |  |  |


| Digital Art \& Design | 7476 | . 5 Credit | Unweighted | Semester |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | Deep exploration into digital fine art techniques, styles and processes are the focus of this course. Traditional design principles and art making processes will be utilized, reexamined, and reevaluated along with non-traditional and cutting edge technologies in order to create uniquely contemporary artwork. Twenty-first century artists, processes and mediums will be explored in order to address a diversity of current themes and issues. Themes include digital painting, image manipulation, compositing, typography, vector drawing, image transfer, and traditional/digital art hybrids. |  |  |  |
| Prerequisites | - None |  |  |  |


| Drawing |  | 7106 | .5 Credit | Unweighted |
| :--- | :--- | :--- | :--- | :--- |
| Course Description | Drawing is an introductory studio course that will focus on the development of <br> observational skills and drawing techniques. Projects will include the exploration of a <br> wide range of drawing media and drawing surfaces. Students will use pencil, charcoal <br> pencils, colored pencils and pastels to create observational still life and portraiture <br> drawings along with non-representational subject matter. Traditional and non- <br> traditional methodology will be incorporated, placing emphasis on experiences with <br> design principles and a variety of drawing techniques. |  |  |  |
| Prerequisites | None |  |  |  |


| Drawing 2 | 7112 | . 5 Credit | Unweighted | Semester |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | A Semester long course used to refine and develop drawing skills and techniques practiced in drawing 1. Emphasis will be placed on exploring specific types of drawing such as but not limited to observational, portraiture, landscape and abstraction. Graphite, colored pencils, charcoal and pastels will be used in a more concentrated area of study for each medium based on knowledge from the previous drawing course. |  |  |  |
| Prerequisites | - None |  |  |  |


| Drawing 3 |  | 7113 | .5 Credit | Unweighted | Semester |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | A semester long course that will enable the student to develop and hone his/her skills <br> in their area of interest in regards to drawing medium, subject matter and <br> style. Emphasis will be placed on creating a cohesive and coherent body of work and <br> artist statement explaining rational for work. |  |  |  |  |
| Prerequisites | • None |  |  |  |  |


| Painting | 7108 | . 5 Credit | Unweighted | Semester |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | Painting is an introductory studio course that will explore the transparent media of watercolor painting, opaque acrylic painting and other paint media. Specific projects will address matters in the areas of still-life, portrait, landscape, and abstract painting. Students will also explore the concepts of color, light, texture and composition throughout the painting process. Students will be able to utilize, identify and name painting tools, materials, and painting techniques. A major emphasis is on experiencing a variety of techniques and creating composition through observation. |  |  |  |
| Prerequisites | - None |  |  |  |


| Painting 2 | 7114 | . 5 Credit | Unweighted | Semester |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | A Semester long course used to refine and develop Acrylic and Watercolor painting skills and techniques practiced in Painting 1. Emphasis will be placed on exploring specific types of genre painting (still-life, portraiture and landscape), composition and color theory. Other types of painting medium will be discussed and explored in the course such as gauche, watercolor pencils and oil paints. |  |  |  |
| Prerequisites | - 10th, 11th and <br> - Student must rec <br> - Teacher Recom | er in Paintin |  |  |


| Painting 3 |  | 7115 | .5 Credit | Unweighted | Semester |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | A Semester long course that will enable the student to develop and hone his/her skills <br> in their area of interest in regards to paint medium, subject matter and style. Emphasis <br> will be placed on creating a cohesive and coherent body of work and artist statement <br> explaining rational for work. |  |  |  |  |
| Prerequisites | - 10th, 11th and 12th <br>  <br> - Student must receive $90 \%$ or better in Painting 2 <br> - Teacher Recommendation |  |  |  |  |


| Printmaking |  | 7109 | .5 Credit | Unweighted |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | Printmaking is an introductory studio course that will provide students with the <br> opportunity to learn the various methods of creating multiple copies from a single image <br> through the printmaking process. <br> monoprint and collagraph printmaking are a few otching, linoleum reduction print, <br> in class. Students will be immersed in the distinctive nature of that will be practiced <br> the study of tools, inks, paper, plate preparation, registration, printing processes and <br> qualities of prints e.g overlays, transparency, offset, and multiple images. Historical <br> relevance and contemporary interpretation of the printmaking process will be discussed <br> in relation to student work. |  |  |  |
| Prerequisites | $\bullet$ None |  |  |  |


| Sculpture |  | 7110 | .5 Credit | Unweighted |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | Sculpture is an introductory studio course that will explore three-dimensional design <br> while developing both useful and sculptural forms. Students will explore the element of <br> form using a variety of materials such as clay, plaster, wood, and metals. Students will <br> gain knowledge in additive, subtractive, and assemblage techniques as sources of <br> construction. Historical and contemporary concepts ranging from representational <br> figures to abstract forms are investigated. Creativity and quality craftsmanship will be <br> strongly emphasized. |  |  |  |
| Prerequisites | None |  |  |  |


| Senior Studio Art | 7401 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This course is designed for seniors who want to extend their knowledge of previously learned visual art mediums. This is a hands-on open studio style course. |  |  |  |
| Prerequisites | - Must be a senior <br> - Successfully completed 3 prior art courses <br> - Teacher recommendation |  |  |  |



| Advanced Digital Art \& Design | 7480 | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :---: |
| Course Description | Along with deeper exploration into digital fine art techniques, styles and processes, this <br> course will focus on design principles and elements to advance students' digital <br> vocabulary. Individual style and artistic voice will be examined and developed as <br> students delve into the digital art realm. Students will utilize digital painting, image <br> manipulation, compositing, vector drawing, animation, image transfer, and <br> traditional/digital art hybrids will be explored and students will develop their own <br> work methods and processes. |  |  |  |
| Prerequisites | - $90 \%$ in Digital Art \& Design <br> - Teacher recommendation |  |  |  |


| Honors Studio Art |  | 7445 | Honors | 1 Credit | 5.0 Weight |
| :--- | :--- | :---: | :---: | :---: | :---: | Year 9.


| Honors Digital Art |  | 7455 | Honors | 1 Credit | 5.0 Weight |
| :--- | :--- | :---: | :---: | :---: | :---: | Year | Course Description | This is a preparatory course designed for 11th grade students who are interested in <br> taking AP Digital Art in their senior year. Students will build upon and utilize prior <br> digital multimedia concepts and techniques in order to begin creating a personalized <br> design portfolio. All course work will foster individualized creative problem solving, <br> wherein students will be responsible for all stylistic and design considerations. This <br> course will lay the groundwork for the AP Digital Art course by giving students a head <br> start in creating a portfolio that is reflective of a unique and personal artistic voice. |
| :--- | :--- |
| Prerequisites | $\bullet 90 \%$ in Digital Art \& Design <br> - Teacher recommendation |


| AP Digital Art | 7450 | AP | 1 Credit | 5.5 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | Seniors who are seriously interested in the practical experience of a fit for this course. <br> Students will create a portfolio of works that focus on utilizing techniques in digital art <br> and multimedia. Please visit http://apcentral.collegeboard.com for a full course <br> description. |  |  |  |  |
| Prerequisites | - 12 th grade <br> - $80 \%$ in Digital Art <br> $\bullet$ Teacher recommendation |  |  |  |  |


| Game Design Triad (GD3): <br> Video Game Art | Y481 | Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Course Description | The Character \& Graphic Development course will serve as the asset creation leg of the <br> courses. Students will learn about, create, and develop the various visual graphic <br> elements (characters, backgrounds, objects, start screens, etc.) needed for a multitude of <br> game styles. In the end, students will provide the necessary handmade assets that their <br> peers in the Game Creation course will use in the final game itself. |  |  |  |
| Prerequisites | • None |  |  |  |

(Back to All Course List)

The Business Education program is committed to preparing students to meet the growing demands of the global business community. Our goal is to provide a comprehensive selection of academic electives that will enable them to establish skills for a successful professional future. All courses are focused on a rigorous curriculum that is project-based including simulations, real-life applications, and hands-on exercises. Membership in DECA is recommended. All courses are electives.

| ID | Course |  |  | ID | Course Name |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6010 | Introduction to Accounting |  |  | 6050 | Introduction to Business Concepts |  |  |
| 6051 | Foundations of Personal Finance |  |  | 6065 | Marketing Dynamics |  |  |
| 6005 | Financial Accounting |  |  | 6080 | Sports and Entertainment Marketing |  |  |
| 6055 | Accounting 1B |  |  |  |  |  |  |
| 6087 | Game Design Triad: The Game Design Triad consists of three yearlong courses that work collaboratively to allow the students to immerse themselves in a real-world game design experience. Students will work in teams across the three classes as a collective "company" to produce, design, animate, playtest and market their game to the student body. Throughout the process, students will be responsible for meeting checkpoints and deadlines; they will be evaluated on the success of their final game launch. <br> a. Character \& Graphic Development (Art Department Offering) <br> b. Game Development (Computer Science Department Offering) <br> c. Advanced Game Marketing \& School Store (Business Department Offering) |  |  |  |  |  |  |
| * = New Course |  |  |  |  |  |  |  |
| Introduction to Accounting |  |  | 6010 |  | 1 Credit | Unweighted | Year |
| Course Description |  | Since it is known as the Language of Business, a working knowledge of accounting is desirable for many career paths including general management, marketing, finance, and real estate. This is the first-year course in the accounting program and is an excellent course for both professional and personal use. The emphasis is on understanding the complete accounting cycle for a business operated as a sole proprietorship. Business transactions will be analyze, classified, and recorded using both manual and computerized accounting systems. The fundamental principles of double-entry bookkeeping, financial statements, trial balances, worksheets, special journals, adjusting entries and closing entries will be introduced. Enrollment in this course provides a solid foundation of the basics needed for organizing both personal and professional financial information and assists with the transition to college-level accounting principles. |  |  |  |  |  |
| Prerequisites |  | - None |  |  |  |  |  |


| Financial Accounting | 6005 | 1 Credit NonWeighted | Year |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | Highly motivated accounting students will most benefit from Financial Accounting. This <br> course will provide the theoretical background necessary for students who are planning <br> on a career in any business-related field. Students will be introduced to the basic <br> concepts of financial accounting that includes the preparation, interpretation, and <br> utilization of financial statement data. A working knowledge of accounting and financial <br> reports is an asset to any enterprise with which one is associated. <br> Prerequisites |  |  |
| Prerequisites | Teacher recommendation |  |  |


| Foundations of Personal Finance | 6051 | .5 Credit | Unweighted | Semester |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Course Description | Students will learn fundamental personal finance skills that will prepare them for <br> financial independence. Understanding money management, investments, wealth <br> building, credit and debit, real estate, earning potential, and consumer awareness are <br> topics explored throughout this course. Critical thinking skills including analyzing real- <br> world situations, decision-making, problem solving and goal setting are also developed <br> in Foundations of Personal Finance. |  |  |  |
| Prerequisites | None |  |  |  |


| Accounting 1B | 6055 | 1 CreditUnweighted Year |
| :--- | :--- | :--- | :--- | :--- |
| Course Description | Accounting 1B is a continuation and expansion of the concepts introduced in <br> Introduction to Accounting. However, the emphasis is on understanding the complete <br> accounting cycle for a business operated as a corporation. Corporate business <br> transactions will be analyzed, classified, and recorded using both manual and <br> computerized accounting systems. The fundamental principles of double-entry <br> bookkeeping along with subsidiary ledgers and special journals, payroll accounting, <br> planning and recording account allowances and adjustments, and preparing and <br> analyzing corporate financial information will be discussed. Enrollment in this course <br> will add to your solid foundation of accounting basics and further assist with the <br> transition to college-level accounting principles. |  |
| Prerequisites | $\bullet$ Introduction to Accounting |  |


| Introduction to Business Concepts $\quad 6050$ | 1 Credit Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | This yearlong course provides students with the opportunity to gain awareness of <br> running a small business through examining the many areas of business including <br> Management, Marketing, Finance, Advertising, Operations, Human Resources, Finance <br> and Ethics. Students will research and write a cumulative business plan that explores in <br> depth the aspects of business. Business writing, oral, and collaborative skills are also <br> incorporated into the course units. Students will learn how to plan, organize, construct, <br> revise and deliver business documents and presentations in a professional and effective <br> way. We will conduct business research, analyze and solve business problems through <br> critical and reflective thinking, and communicate results and ideas through appropriate <br> mediums. |  |
| Prerequisites | None |  |


| Game Design Triad (GD3): Advanced Game Marketing $\mathcal{E}$ School Store |  | 6087 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | Advanced Game Marketing provides students with solid experiences in creating market-driven strategies for the future success of a business, specifically a game development company. Students will take the approach of Chief Marketing Officers (CMO) and a marketing leadership perspective to maximize their game's profit and recognition within the marketplace. Students will gain real-world experience as they work collaboratively to implement a marketing plan that will impact the opinions and buying behaviors of customers and the overall success of the game. In addition to participation in the Game Fair, students will have an active role in managing the school store. |  |  |  |  |
| Prerequisites | - It is recommended (Not required) that students take the Introduction to Business or Marketing Dynamics prior to enrolling in this course. |  |  |  |  |


| Marketing Dynamics | 6065 | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :--- |
| Course Description | Designed for students who are interested in the field of marketing, this course provide <br> an in-depth look into marketing theories, approaches and functions. Students will also <br> have the opportunity to investigate the marketing approaches used in various media. <br> Also incorporated are the development of the thought process and skills needed to <br> successfully market a new product, develop new products, and gather product and <br> customer research. The second half of the year will focus on implementing and <br> analyzing the concepts learned through projects, simulations, and hands-on <br> applications. Students will be given the opportunity to expand their acquired basic <br> knowledge by exploring more specific concepts, career opportunities, and current issues <br> facing many different areas of marketing (including sports and entertainment, <br> hospitality, travel and tourism, internet, and retail). This course is open to all grade <br> levels. |  |  |  |
| Prerequisites | None |  |  |  |


| Sports and Entertainment <br> Marketing | 6080 | Credit Unweighted | Semester |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Course Description | Sports and Entertainment Marketing is a semester specialized course designed to offer <br> students an opportunity to gain knowledge and develop skills related to the growing <br> sports and entertainment industry. In this course, students acquire transferable <br> knowledge and skills related to the industry of sports, entertainment, and event <br> marketing. Students will develop skills in the areas of merchandising, advertising, <br> public relations/ publicity, event marketing, sponsoring, ticket distribution, and career <br> opportunities as they relate to the sports and entertainment industry. |  |  |
| Prerequisites | Intro to Business (recommended) |  |  |

## (Back to All Course List)

Career \& Community
Learning Opportunities


| ID | Course Name | ID | Course Name | ID | Course Name |
| :---: | :---: | :---: | :--- | :---: | :---: |
| 6092 | Peer Learning Assistant | 6090 | Work Experience |  |  |


| Peer Learning Assistant | 6092 | . Credit | Unweighted | Year |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | This junior/senior level course will afford students the opportunity to develop and <br> apply their leadership and academic skills that can be transferred to life beyond high <br> school. Specifically, students can apply to become a technology support assistant, <br> library peer manager, and/or academic tutor during available class periods. |  |  |  |
| Designated students will help other students and assist instructors in these areas. This <br> opportunity includes a competitive application and interview process with limited <br> spots available based on set criteria and schedule availability. For more information, <br> please go to: www.cvsd.net/1/Content/peerlearningassistant |  |  |  |  |
| Prerequisites | Must be in 11th or 12th grade <br> Recommendation from application committee |  |  |  |


| Work Experience | 6090 | 1-3 Credits | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | Work experience will provide seniors with a valuable learning experience by integrating the opportunity of employment during the senior year. Work experience offers seniors scheduling flexibility similar to what they will encounter with most postsecondary experiences. Evaluations will include visits to the workplace, monitoring of work hours and schedules, completion of student journals and reflections, independent assignments, and frequent communication between the workplace and school. |  |  |  |
| Prerequisites | - $12^{\text {th }}$ grade <br> - Enrolled in <br> - Counselor r <br> - Student trai | ling PE) |  |  |

## (Back to All Course List)

## (Back to All Course List)

The Computer programming courses have strong connection to engineering, mathematics, and the sciences. Often, students choosing an engineering career in college will encounter a programing course during their freshman year.

Students with an interest in graphics, animation and game development may consider Introduction to Computer Graphics and Animation, Introduction to Computer Game Development and Introduction to Computer Programming. **Computer Science courses, with the exception of Cybercrime \& Digital Forensics and Game Design Triad, may count as a math or science credit.

| ID | Course Name | ID | Course Name |
| :---: | :--- | :---: | :--- |
| 6062 | AP Computer Science Principles | 6021 | Cybercrime \& Digital Forensics |
| 2635 | AP Computer Science A | 2612 | Introduction to Computer Programming |
| 2653 | CiHS C++ | 2615 | Introduction to Artificial Intelligence \& Machine <br> Learning* |

2613 Game Design Triad: The Game Design Triad consists of three yearlong courses that work collaboratively to allow the students to immerse themselves in a real-world game design experience. Students will work in teams across the three classes as a collective "company" to produce, design, animate, playtest and market their game to the student body. Throughout the process, students will be responsible for meeting checkpoints and deadlines; they will be evaluated on the success of their final game launch.
a. Character \& Graphic Development (Art Department Offering)
b. Game Development (Computer Science Department Offering)
c. Advanced Game Marketing (Business Department Offering)

* = New Course

| AP Computer Science Principles $\quad 6062$ | AP | 1 Credit | 5.5 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | AP Computer Science Principles is designed to introduce students to the central ideas of <br> computer science, instilling the ideas and practices of computational thinking and <br> inviting students to understand how computing changes the world. This rigorous <br> course promotes deep learning of computational thinking skills, and engages students <br> in the creative aspects of the field. |  |  |  |
| Prerequisites | This course is unique in its focus in fostering on students to be creative. Students are <br> encouraged to apply creative processes when developing computational artifacts and to <br> think creatively while using simulations to explore questions that interest them. Rather <br> than teaching a particular programing language or tool, the course focuses on using <br> technology and programing as a means to solve computational problems and creating <br> exciting and personally relevant artifacts. Students design and implement innovative <br> solutions using an iterative process similar to what artists, writers, computer scientists, <br> and engineers use to bring ideas to life. This course may be used as a math or science credit. |  |  |  |
| - Successful completion of Geometry |  |  |  |  |
| - Or Teacher Recommendation |  |  |  |  |


| AP Computer Science A | 2635 | AP | 1 Credit | 5.5 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | A highly challenging course that is designed for the motivated student who is planning <br> a career in computer science, business or any science-related fields. The Advanced <br> Placement (AP) curriculum will be followed and includes an in-depth case study. <br> Students are expected to participate in the AP exam which occurs in May. This exam <br> requires a thorough knowledge of Java and its programming techniques. This course may <br> be used as a math or science credit. |  |  |  |  |
| Prerequisites | - Introduction to Computer Programming <br> - Teacher recommendation |  |  |  |  |


| Cybercrime \& Digital Forensics $\quad 6021$ | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | The cybercrime \& digital forensics course explores how existing criminal activity is <br> conducted and how new criminal opportunities have been created. Students will <br> examine the history and nature of computer-related crime and how societies have <br> attempted to respond. Students will discuss the different types of cybercriminals, <br> including motives, rationale, and methods of attack. Students will also evaluate various <br> legal issues cyberspace including surveillance, sting operations, current and proposed <br> legislation, user-reporting initiatives, identity filtering/blocking technologies, vigilante <br> movements, individual rights, and international law enforcement cooperation. |  |  |
| Prerequisites | None |  |  |


| Introduction to Computer <br> Programming | 2612 | Credit Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | This course will use curriculum written in partnership with professors and students at <br> Carnegie Mellon University. In this course, Chartiers Valley students will have the <br> opportunity to work with faculty and/or students from Carnegie Mellon University. <br> Students will get a general introduction to programming techniques by studying errors, <br> graphics, functions, events, loops, and strings. Students will begin learning python, and <br> then the second semester will focus on broader topics and languages. |  |  |
| Prerequisites | $\bullet$ Enrolled in or completed Algebra 1 |  |  |


| Game Design Triad (GD3): <br> Game Development | Year | Unweighted | Year |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Course Description | Game Development is designed for aspiring game developers who want to gain a solid <br> foundation in the game development/design process. Students will gain real world <br> experience as they work in student teams to design games from the ground up in the <br> Unity game engine. The Game Development class will serve as the design, <br> development, and implementation of the game leg of the Game Design Triad. The Game <br> development course should appeal to individuals who are good problem solvers and <br> able to work as a productive member of a team. |  |  |
| Prerequisites | •None |  |  |


| CiHS C++ |  | 2653 | CiHS | 1 Credit |
| :--- | :--- | :---: | :---: | :---: |
| Course Description | College in the High School C++ is affiliated with Duquesne University and college credit <br> may be earned (purchased) for successful completion of this course. C++ is an advanced <br> programming language that introduces the concepts of objects. This highly structured <br> language enables the student to write code that is organized, precise, and clear. A prior <br> programming language will be very useful in understanding the routines presented in <br> the course. Often, C++ is the first course a freshman engineering/science major will <br> encounter. |  |  |  |
| Prerequisites | - Introduction to Computer Programming <br> - Teacher recommendation |  |  |  |


| Introduction to Artificial Intelligence \& Machine Learning |  | 2615 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | The aim of this course is to demystify the topic of AI, with students gaining an understanding of AI terminology such as machine learning and deep learning. Students will gain knowledge and skills while considering the social, moral, and ethical impacts of AI systems and usage. Students will explore practical daily applications of AI that are likely to have an impact upon their lives. Throughout the course, students will be encouraged to come up with their own designs for areas such as smart cities, homes, and schools. Students also learn to build and fly a drone. |  |  |  |  |
| Prerequisites | - No |  |  |  |  |

## (Back to All Course List)

## English

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The English Language Arts Department strives to enhance the reading, writing, speaking and listening skills of all students. Courses provide the opportunity for students to explore various literary forms from a wide array of time periods and authors, as well as to express their thoughts through written and visual forms.

| ID | 9th Grade English Courses | ID | 10th Grade English Courses | ID | 11th Grade English Courses |
| :---: | :--- | :---: | :--- | :---: | :--- |
| 1111 | English 9/Composition 1 | 1211 | English 10/ Composition 2 | 1322 | American Literature <br> Composition 3/11 |
| 1131 | English 9 Advanced/ <br> Composition 1 | 1231 | English 10 Advanced/ <br> Composition 2 | 1325 |  <br> Composition/11 |
| 1132 | Honors English <br> 9/Composition 1 | 1232 | Honors English 10/ <br> Composition 2 | 1350 | AP Language \& Composition |
|  |  | 1360 | AP Seminar | 1355 | AP Literature \& Composition |
|  |  |  |  | 1360 | AP Seminar |
|  |  |  | 1365 | AP Research |  |


| ID | 12th Grade English Courses | ID | Electives: Full Year | ID | Electives: Semester |
| :---: | :--- | :---: | :--- | :---: | :--- |
| 1422 | World Literature <br> 12/Composition 4 | 1509 |  <br> Media Writing | 1503 | SAT Prep |
| 1426 | Advanced World Literature <br> 12: Voices in World <br> Literature \& College Writing | 1502 | CiHS Communications/ <br> Rhetoric | 1506 | Public Speaking |
| 1350 |  <br> Composition |  | 1507 | Creative Writing |  |
| 1355 |  <br> Composition |  | 1504 | CiHS Introduction to Film |  |
| 1360 | AP Seminar |  |  | 1510 | Intro to Screenplay Writing |
| 1365 | AP Research |  |  |  |  |


| English 9/Composition 1 | 1111 |  | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :--- | :--- |


| Course Description | This course is an introduction to high school level composition and literature <br> curriculum. Each student will further develop those skills needed for the rigors of high <br> school level writing and critical thinking in response to fiction and non-fiction texts. <br> Instruction will be geared to students' ability, such that they can develop the skills <br> necessary to succeed at this level. |
| :--- | :--- |
| Prerequisites | $8^{\text {th }}$ grade performance data <br> - Teacher recommendation |


| English 9/Advanced Composition $\mathbf{1} \quad 1131$ | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | This course is an introduction to high school level advanced composition and literature <br> curriculum. Each student will further develop the skills necessary in accordance with <br> PDE requirements, as well as those skills needed for the rigors of high school level <br> writing and critical thinking in response to fiction and non-fiction texts. Students will <br> examine the content of literature as well as the writer's style and structure of each <br> assigned piece. Emphasis will be placed on formal, analytical essays and the synthesis <br> of various sources into one cohesive, written assignment. |  |  |
| Prerequisites | $8^{\text {th }}$ grade performance data <br> - Teacher recommendation |  |  |


| Honors English 9/Composition 1 |  | 1132 | Honors | 1 Credit | 5.0 Weight | Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | This course is designed to prepare students for the rigorous learning pace and literature of Advanced Placement studies. Students will examine the content of literature as well as the writer's style and structure of each assigned piece. Emphasis will be placed on formal, analytical essays and the synthesis of various sources into one cohesive, written assignment. Students will study fiction, non-fiction, drama and poetry from various time periods and countries of origin. |  |  |  |  |  |
| Prerequisites | - $85 \%$ <br> - Tea | igher in recomm | Grade Liter ation | ure and Eng |  |  |


| English 10/Composition 2 | 1211 | Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Course Description | The tenth grade English course is a continuation of the composition and literature <br> curriculum of the high school. Students will read examples of all genres and begin to <br> study them analytically. During this study, they will be encouraged to develop high <br> school level writing, critical thinking and rhetorical methods in response to fiction and <br> non-fiction texts. |  |  |  |
| Prerequisites | - 9th grade performance data <br> - Teacher recommendation |  |  |  |


| English 10 Advanced/Composition 2 | 1231 | AP | 1 Credit | Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | This course is a continuation of high school level advanced composition and literature <br> curriculum. Students will explore the advanced elements of analytical writing as well as <br> grammar and usage. Each student will further those skills needed for the rigors of high <br> school level writing, critical thinking and rhetorical methods in response to fiction and <br> non-fiction texts. |  |  |  |  |
| Prerequisites | - 9th grade performance data <br> - Teacher recommendation |  |  |  |  |


| Honors English 10/Composition 2 | 1232 | Honors | 1 Credit | 5.0 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | This course will continue the sequential development of language arts skills from the <br> Honors English 9 curriculum and is designed to prepare students for AP courses. An in- <br> depth analysis of literary elements will be emphasized with a focus on traditional as well <br> more modern selections of fiction and non-fiction. Students will learn more advanced <br> methods of poetry analysis and be introduced to rhetorical methods and elements. |  |  |  |  |
| Prerequisites | - $80 \%$ in Honors English 9 or $90 \%$ in Advanced English 9 <br> Teacher recommendation |  |  |  |  |


| American Literature Composition $\mathbf{3 / 1 1} \quad 1322$ | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | The emphasis of this course is placed on the reading, writing, and research element of <br> the Pennsylvania Core Standards. The course follows a thematic element of the "Coming <br> of Age", which students often experience during this period of their life. Each unit will <br> focus, reflect, and revolve around these unique themes associated with the coming of <br> age in reference to direction in life, the responsibilities of a young adult, discovering <br> oneself, etc. Literature will include novels, short stories and poetry selections from <br> American literature.. Critical analysis essays, practical and career writing and projects, <br> objective tests, and project based learning assignments will be utilized to evaluate <br> student understanding as it correlates to the Common Core Standards. |  |  |
| Prerequisites | 10th grade performance data <br> - Teacher recommendation |  |  |

## (Back to All Course List)

| Advanced Language \& Composition/11 $\quad 1325$ | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Course Description | The goal of this course is to have students read complex fiction and nonfiction texts and <br> respond in writing that conveys depth of understanding and meaning. Students will <br> develop close reading and critical thinking skills in order to identify and understand a <br> writer's argument and methods of persuasion. Students will learn to construct original <br> argumentation through the analysis of the techniques of rhetorical analysis, <br> argumentation and synthesis. In addition, students will learn to write persuasively with <br> evidence and meaningful commentary. Based on the curriculum for AP Language and <br> Composition, the skills mastered in this course provide students with an analytical base <br> which can be applied to all subject areas. |  |  |
| Prerequisites | 10th grade performance data <br> Teacher recommendation |  |  |


| World Literature 12/Composition 4 | 1422 | 1 Credit | Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: |
| Course Description | Each unit of the course focuses on building literary skills that are needed in the post- <br> secondary world. Analysis of fiction and non-fiction selections, in conjunction with <br> grammar, vocabulary, and writing skills, will further develop student comprehension <br> and the ability to communicate in both written and oral forms as required by the <br> Pennsylvania core standards. In addition, students are prepared for post-secondary <br> communication skills through project oriented assessments and career and practical <br> writing assignments. These assessments reflect the student's ability to think critically, <br> work independently as well as in a group, and to comprehend and respond to prompts <br> related to fiction and non-fiction sources. |  |  |  |
| Prerequisites | - 11 th grade performance data <br> - Teacher recommendations |  |  |  |


| Advanced World Literature 12 Voices in World Literature $\mathcal{E}$ College Writing |  | 1426 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | Advanced World Literature is comprised of two courses (Voices in World Literature and College Writing), but will be scheduled as a yearlong class. Students will switch teachers to take the opposite half of the course at the end of the first semester. <br> Voices in World Literature will explore timeless storylines of literature from all across human history and from all across the globe. Our study will include an exploration of the significance and meaning uncovered from multiple cultures and time periods, from ancient mythology to modern storytelling in various forms and genres. The course is designed as an inquisitive journey that will include pieces ranging from Beowulf to the Beatles' lyrics. Students will be exposed to stories, beliefs and ideas from all around the world in an effort to prepare for life ahead by developing skills in analytical thought and writing. <br> College Writing is designed to help students hone writing skills essential for college. Centered around the theme of identity, students will read and respond to various texts, will study the writing process including drafts and revisions, and ultimately write a research paper. |  |  |  |  |
| Prerequisites | - $11^{\text {th }}$ Grade Teacher Recommendation |  |  |  |  |

## (Back to All Course List)



## (Back to All Course List)

| AP | ition | 1350 | AP | 1 Credit | 5.5 Weight | Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | The Advanced Placement course is organized according to the requirements and guidelines of the current AP Language and Composition Course and Exam Description, therefore students are expected to read critically, think analytically, and communicate clearly, both in writing rhetorically and argumentatively. This course is organized by the study of rhetoric. Each unit requires students to acquire and use rich vocabulary, to use proper grammar, and to understand the importance of diction and syntax in an author's style. The literature will include various nonfiction selections. The 2019 rubric changes have also been implemented as well as multiple choice adjustments to the exam per AP classroom. Students are expected to take the Advanced Placement exam given in May. |  |  |  |  |  |
| Prerequisites | - $80 \%$ in Honors English 10, $75 \%$ in an AP English course or $90 \%$ in Advanced English <br> - Teacher recommendation |  |  |  |  |  |


| AP Literature and Composition $\quad 1355$ | AP | 1 Credit | 5.5 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | Advanced Placement Literature and Composition is designed to develop reading, <br> analysis and composition skills needed for college bound seniors. In this course, the <br> students learn how to read works of literature perceptively and how to express their <br> responses orally and in written compositions. Students will read novels, dramas, short <br> stories and poetry from many literary periods, from the Renaissance to the very modern. <br> Composition, primarily critical and expository, stresses frequent writing and careful <br> revision, training the student to think and organize clearly and to be direct, lucid and <br> supported by the text. Participation in whole class and small group discussions is <br> essential. Students are expected to take the Advanced Placement exam given in May. |  |  |  |
| Prerequisites | - $80 \%$ in Honors English, $75 \%$ in an AP English course or $90 \%$ in Advanced English <br> - Teacher Recommendation |  |  |  |


| CiHS Communications/Rhetoric 1502 | CiHS | 1 Credit | 5.0 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | This course examines argument through the examination of various forms of <br> communicative argumentation and debating techniques. Each unit will follow a series <br> of themes or related issues in order to better understand and apply various forms of <br> argumentation and debate. The development of argument techniques will be examined <br> through classroom debates and forms of argument, visual/audible/published <br> expression of argument, and development of critical thinking skills. In depth discussions <br> in and out of the classroom setting, analysis and argumentation of socially charged <br> documentaries and other forms of expression, as well as real life situational project <br> challenges are an integral part of the course. |  |  |  |
| The class is a College in High School course and there is an option to receive three credits <br> from The University of Pittsburgh. Since this course is articulated through the University <br> of Pittsburgh, there is a fee involved for students who want to earn college credits. Class <br> attendance is imperative to receive college credits. |  |  |  |  |
| Prerequisites | 75\% in English <br> English teacher recommendation |  |  |  |

## (Back to All Course List)

| Yearbook Production \& Media Writing $\quad 1509$ | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | Students who select this elective course will assume the responsibility as staff editors <br> of the yearbook. They will design, manage, seek advertising, and produce the Chartiers <br> Valley yearbook. Students will also have the opportunity to combine photography and <br> videography and media writing to develop school-related social media posts for the <br> High School's official social media accounts. Organizing, running and participating in <br> fundraisers is a requirement of this course. Also, attendance at weekly afterschool <br> meetings is required. |  |  |
| Prerequisites | Teacher recommendation |  |  |


| Creative Writing |  | 1507 | .5 Credit | Unweighted |
| :--- | :--- | :--- | :--- | :--- |
| Course Description | This course will encourage students to think and experiment with creative ways in <br> relation to their writing skills. Students will learn various creative writing styles and <br> techniques such as poetry, short stories, flash fiction, lyrics, and screenplay writing. <br> Students will participate in the writing workshop process where they will peer review, <br> edit, and make constructive suggestions to the written work. Students will also focus <br> on content development and stylistic choices and possibly have the opportunity to <br> publish their work. |  |  |  |
| Prerequisites | $\bullet$ None |  |  |  |


| SAT Prep |  | 1503 | .5 Credit | Unweighted |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | This semester SAT Prep course is specific to college bound students who plan to take the <br> SAT in the next few months or have taken the SAT and plan to re-take it. Course is not |  |  |  |
| relevant for seniors in the spring semester of their senior year. Utilizing the College |  |  |  |  |
| Board model, this Evidence-Based Reading and Writing course is organized around key |  |  |  |  |
| skills and concepts tested on the Reading Test and Writing and Language Test ONLY. |  |  |  |  |
| Practice on Official SAT Practice is organized around passage content and writing type, |  |  |  |  |
| so even though a class lesson will focus on one or two skills at a time, during |  |  |  |  |
| independent practice students will be able to apply multiple skills across multiple |  |  |  |  |
| passages in a way that is authentic to how we read and write in daily life. The four essay |  |  |  |  |
| lessons begin with examining and unpacking the prompt and lead into writing a full |  |  |  |  |
| response. Enrollment is limited to 18 students per semester and students must have a |  |  |  |  |
| working laptop daily to properly utilize the online platform. |  |  |  |  |

## (Back to All Course List)

| Public Speaking |  | 1506 | .5 Credit | Unweighted | Semester |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Course Description | This course will enable students to discover what makes an effective speaker. Students <br> will learn different types of speech, mechanics of speech, dynamics of good <br> communication, speaking, and listening etiquette. We will use researching skills to <br> integrate information into clearly organized, developed speeches. This course would <br> allow students to combine multiple skills - research, interviewing, reading, writing, <br> listening, and speaking all in one course. Presentation skills are imperative for students <br> on all career paths, whether college-bound or planning to enter the workforce. |  |  |  |  |
| Prerequisites | None |  |  |  |  |


| CiHS Introduction to Film | 1504 | CiHS | .5 Credit | 5.0 Weight | Semester |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | Introduction to Film is a basic course on the visual arts that teaches students how to <br> appreciate, analyze and interpret theme, character, story structure and narrative <br> technique through the medium of film including cinema, television, and social media as <br> well as other arts, including photography, painting, and theater. Students will read <br> screenplays, analyze shots, research film history, study, and critique directors, retool <br> and rework existing scripts, compose story treatments, pitch ideas in a group setting, <br> revise and improve dialogue, compose action sequences, draft their own screenplays, <br> learn filmmaking techniques, and film their own original works. |  |  |  |  |
| Prerequisites | $\bullet$ None |  |  |  |  |


| Intro to Screenwriting | 1510 |  | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Course Description | This course will introduce students to the fundamentals of film and television <br> screenplay writing. Units will range from format structure to story building. The <br> modern world is a world of digital screens. Large corporations need content to fill those <br> screens. A screenwriting course would give Chartiers Valley students a gateway into a <br> billion dollar industry. Companies such as Netflix, Amazon, Hulu, etc. are willing to <br> pay for well-written content. Additionally, this class would give students a chance to <br> discover their own creative talents. |  |  |  |  |
| Prerequisites | None |  |  |  |  |

## (Back to All Course List)

## Family \& Consumer Science

## (Back to All Course List)

The Chartiers Valley High School Family and Consumer Sciences curriculum is designed provide opportunities for students to actively participate in the improvement of the quality of individual and family life in a changing society. Family and Consumer Sciences empowers individuals, strengthens families, and enables communities. All F\& CS courses are electives.

| ID | Course Name | ID | Course Name |
| :---: | :--- | :---: | :--- |
| 8511 | Introduction to the World of Food and Nutrition 1 | 8520 | Introduction to Interior Design |
| 8512 | Ethnic and Regional Cuisine and Nutrition 2 | 8516 | Partners in the Kitchen* |
| 8501 | Child Development and Family Relations |  |  |
| 8513 | Culinary Arts \& Food Science |  |  |

*= New Course

| Introduction to the World of Food and Nutrition 1 |  | 8511 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | This is an introductory course that involves students in basic principles of nutrition and their applications to food choices, nutritional analysis and consumerism. The course defines the need for students to understand their role in healthy eating to ensure good health in the future. While working in teams, students will gain necessary work skills including communications, organization, and technical reading to ensure success in their future careers. Kitchen management, recipe skills and basic food preparations are incorporated in the weekly foods labs while students learn about nutrition and health responsibilities in their family, career, and community environments. |  |  |  |  |
| Prerequisites |  |  |  |  |  |


| Ethnic and Regional Cuisine and Nutrition 2 |  | 8512 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | This course incorporates the learning from the Introduction to the World of Foods and Nutrition 1 and allows the student to delve into more specialized and independent projects to explore selected ethnic foods in relation to customs and food preparation techniques, consumer challenges and career opportunities. Students will prepare various regional and ethnic foods in weekly labs, as well as identify individual and family dietary needs. Students will also practice proper food safety and sanitation principles while working in the foods lab and excelling in work skills requested by future employers. |  |  |  |  |
| Prerequisites | - $75 \%$ in Intro to World of Foods |  |  |  |  |


| Child Development and Family <br> Relations | 8501 | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Course Description | This course offers an in-depth look at the concepts and theories associated with child <br> development. Emphasis is placed on the child's total development, physical, mental, <br> moral, social and emotional, as the child proceeds through the sequential developmental <br> stages from birth to tearly childhood. This course offers hands-on experiences including <br> the use of Real Care Baby Simulators, as well as, practical experience with children <br> through limited direct participation in the high school children's learning center <br> program. Students are also involved in community activities such as Blood Drives, and <br> various preschool activities. |  |  |  |
| - None |  |  |  |  |


| Culinary Arts \& Food Science | 8513 | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :---: |
| Course Description | This course is designed to provide students with higher level skills in the culinary field <br> with an emphasis on the sciences in food preparation. Students will analytical skills in <br> food safety and sanitation, the chemistry of food, functional and nutritional components <br> of food, evaluate food sensory and the psychology of food and eating. Students must <br> successfully complete Introduction to Food and Nutrition and Ethnic and Regional <br> Cuisine course with a $75 \%$ or better or by teacher recommendation. |  |  |  |
| Prerequisites | Grades $11 \& 12$ |  |  |  |


| Introduction to Interior Design | 8520 | .5 Credit | Unweighted | Semester |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | This course is designed to teach students the elements of design. Students will create an <br> impact using color, fabrics, and textures. Instruction will focus on the history of interior <br> design, furniture styles and design theory through projects and presentations. |  |  |  |
| Prerequisites | $\bullet$ None |  |  |  |


| Partners in the K | 8516 | . 5 Credit | Unweighted | Semester |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This course is designed for students interested in a career path that involves working with students with special needs as well as working in the kitchen. The Partners in the Kitchen (Cooking Partners) course is an inclusive approach that pairs students with special needs and their general education peers. The general education students will demonstrate skills one-on-one to motivate special needs students to fully participate in basic kitchen skills. The lessons are designed to teach everyday life skills in the kitchen. Activities include but are not limited to handwashing practices, kitchen safety, demonstrating proper measuring techniques, table setting, sanitation, preparation of simple dishes and teamwork. |  |  |  |
| Prerequisites | - None |  |  |  |

## (Back to All Course List)

# Mathematics <br> (Back to All Course List) 

The Chartiers Valley High School Math curriculum is aligned with the Pennsylvania Core Standards. The curriculum not only stresses conceptual understanding and key ideas, but also emphasizes the knowledge and skills students need to be prepared for mathematics in college, career and life.

| ID | Course Name | ID | Course Name | ID | Course Name |
| :---: | :--- | :---: | :--- | :---: | :--- |
| 2121 | Pre-Algebra | 2211 | Cognitive Geometry | 2413 | CiHS Calculus |
| 2122 | Algebra 1 | 2212 | Combined Geometry | 2423 | AP Calculus AB |
| 2123 | Cognitive Algebra I | 2244 | Honors Combined Geometry | 2430 | AP Calculus BC |
| 2131 | Cognitive Algebra 2 | 2145 | Algebra 3 | 2515 | AP Statistics |
| 2132 | Algebra 2 | 2313 | Trigonometry/Analysis | 2516 | Analytics and Statistics in <br> Sports |
| 2143 | Honors Algebra 2 | 2403 | Honors Pre-Calculus |  |  |


| Pre-Algebra |  | 2121 | 1 Credit | Unweighted |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | Our Pre-Algebra course is an introduction to basic algebra concepts and a review of <br> arithmetic algorithms. The course emphasizes the concepts necessary to be successful in <br> Algebra I and II. The course helps students develop good mathematical study skills and <br> learning strategies. Students will explore algebraic expressions and integers, solve one- <br> step equations and inequalities, decimals and equations, factors, fractions, exponents, <br> operations with fractions, ratios, proportions, percent, linear functions and graphing, <br> spatial thinking, area and volume, right triangles in Algebra, data analysis and <br> probability, and nonlinear functions and polynomials. |  |  |  |
| Prerequisites | $\bullet$ None |  |  |  |


| Algebra 1 | 2122 | 1 Credit | Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: |
| Course Description | Students will formalize and expand on algebraic concepts established in previous <br> coursework. Students will deepen and extend their understanding of linear and <br> exponential relationships by contrasting them with each other and by applying linear <br> models to data that exhibit a linear trend. They will engage in methods for analyzing, <br> and using functions. Students will fluently move between multiple representations of <br> functions including but not limited to linear, exponential and quadratics. |  |  |  |
| Prerequisites | - Successful completion of Algebra Essentials <br> - Teacher recommendation |  |  |  |


| Cognitive Algebra 1 | 2123 | 1 Credit | Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | Cognitive Algebra 1 is designed to strengthen Algebra 1 skills in preparation for the PA <br> State Algebra 1 Keystone Exam. The course will explore the two modules: (1) Operations <br> and Linear Equations \& Inequalities and (2) Linear Functions \& Data Organizations <br> focusing on the following six anchors: Operations with Real Numbers and Expressions, <br> Linear Equations, Linear Inequalities, Functions, Coordinate Geometry and Data <br> Analysis. All students that have scored basic or below basic on the Algebra Keystone <br> Exam will be recommended to take this course. |  |  |  |
| Prerequisites | Algebra 1 |  |  |  |


| Cognitive Algebra 2 | 2132 | 1 Credit | Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: |
| Course Description | The course will begin with an extensive review of linear functions and systems of <br> equations. Students will study quadratic functions and use these to model real-world <br> scenarios. Students will be introduced to polynomial, rational, and trigonometric <br> functions, and do some work in the field of descriptive statistics. The course will move <br> at a slower pace than Algebra 2 and topics covered will have a broader approach. |  |  |  |
| Prerequisites | - Below 70\% in Algebra 1 <br> - Below 85\% in Cognitive Algebra 1 <br> - Teacher recommendation |  |  |  |


| Algebra 2 |  | 2132 | 1 Credit | Unweighted |
| :--- | :--- | :--- | :---: | :---: | Year


| Honors Algebra 2 | 2143 | Honors | 1 Credit | 5.0 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | Students extend their repertoire of functions to include polynomial, rational, <br> trigonometric, and radical functions. Working closely with families of functions, <br> students will apply their understanding of transformations. They will model situations <br> and solve equations including quadratics over the set of complex numbers and <br> exponential equations using the properties of logarithms. Students will use descriptive <br> statistics and probability as a tool for making inferences about data. Some topics will <br> have accelerated coverage, while some will be covered in greater depths than the regular <br> Algebra II course. |  |  |  |  |
| Prerequisites | • |  |  |  |  |


| Cognitive Geometry |  | 2111 | 1 Credit | Unweighted |
| :--- | :--- | :--- | :---: | :---: | Year | Course Description |
| :--- | | The purpose of the course is to formalize, deepen and extend students' geometric and |
| :--- |
| algebraic experiences. Students will continue their work with similarity and congruence. |
| Students explore more complex geometric concepts, and relationships, including: formal |
| mathematical arguments, transformations, the coordinate system, right triangle |
| trigonometry, circles and probability. This course will move at a slower pace than |
| Geometry and topics covered will have a broader approach. |


| Combined Geometry | 2212 | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | The purpose of the course is to formalize, deepen and extend students' geometric and <br> algebraic experiences. Students will continue their work with similarity and congruence. <br> Students explore more complex geometric concepts, and relationships, including formal <br> mathematical arguments, transformations, the coordinate system, right triangle <br> trigonometry, circles and probability. |  |  |  |
| Prerequisites | • 75\% in Algebra 1 <br> Teacher recommendation |  |  |  |


| Honors Combined Geometry | $\quad 2244$ | Honors | 1 Credit | 5.0 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | The purpose of the course is to formalize, deepen and extend students' geometric and <br> algebraic experiences. Students will continue their work with similarity and congruence. <br> Students explore more complex geometric concepts, and relationships, including: formal <br> mathematical arguments, transformations, the coordinate system, right triangle <br> trigonometry circles and probability. Some topics will have accelerated coverage, while <br> some will be covered in greater depths than the Combined Geometry course. |  |  |  |  |
| Prerequisites | - $93 \%$ in Algebra 1 <br> - Teacher recommendation |  |  |  |  |


| Algebra 3 |  | 2145 | 1 Credit | Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | Students will gain an in-depth understanding of algebraic principles and learn how to <br> use them to solve problems that we encounter in everyday life. Students will learn about <br> linear and quadratic functions, systems of equations, polynomials, graphing, and <br> complex numbers. Students will also be introduced to basic trigonometry. The course <br> emphasizes applications by exploring real-world scenarios. |  |  |  |  |
| Prerequisites | - Successful completion of Cognitive Algebra 2 <br> - Teacher recommendation |  |  |  |  |


| Trigonometry/Analysis |  | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | A course dealing with the concepts of algebra, composition of functions, exponential and logarithmic functions, finite and infinite sequences and series, circular functions, radian measure, solution of right triangles and application of the Laws of Sines and Cosines. |  |  |  |
| Prerequisites | - $75 \%$ or better in <br> - Teacher recomn |  |  |  |


| Honors Pre-Calculus |  | 2403 | Honors | 1 Credit |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | Honors Trigonometry/Pre-Calculus is a course designed for students planning to <br> further their studies in mathematics to include calculus, notably, AP Calculus. Topics <br> covered include a review of basic algebraic concepts; polynomial, rational, exponential <br> and logarithmic functions; trigonometric functions and identities; polar coordinates; <br> analytical Geometry; sequences and an introduction to calculus. Students will develop <br> logical thinking and imagination through the experience of mathematical patterns and <br> will become familiar with the fundamentals of pre-calculus. |  |  |  |
| Prerequisites | - $90 \%$ in Honors Algebra 2 <br> - $95 \%$ in Algebra 2 |  |  |  |
|  | - Teacher recommendation |  |  |  |



## (Back to All Course List)

| AP Calculus AB | 2423 | AP | 1 Credit | 5.5 Weight | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | This course is primarily concerned with developing the students' understanding of the concept of calculus and providing experience with its methods and applications. The course represents a multi-presentational approach to calculus with concepts, results, and problems being expressed geometrically, numerically, analytically, and verbally. The connections between these representations are also very important. Broad concepts and widely applicable methods are emphasized. The focus is neither manipulation nor memorization of an extensive taxonomy of functions, curves, theorems, or problem types. Technology is used regularly by students and teachers to reinforce the relationships among the multiple representations of functions to confirm written work, to implement experimentation, and to assist in interpreting results. An assignment involving Algebra 2 problems and some basic Trigonometry concepts will be required for students to complete over the summer prior to taking this course. As a component of the course, students are expected to take the Advanced Placement Exam in May. |  |  |  |  |
| Prerequisites | - $90 \%$ in Honors <br> - $88 \%$ in Honors <br> - Teacher recom | 2 ${ }^{2}$ |  |  |  |


| AP Calculus BC | 2430 | AP | 1 Credit | 5.5 Weight | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | Calculus BC is presented as a cohesive whole through the use of the unifying themes of limits, derivatives, integrals, polynomial approximations, series, parametric and polar functions, and vectors. The course features a multi-representative approach to calculus and concepts, results, and problems expressed graphically, numerically, analytically, and verbally. |  |  |  |  |
| Prerequisites | - $93 \%$ in Honors <br> - $93 \%$ in Honors <br> - Teacher recomm |  |  |  |  |


| AP Statistics |  | 2515 | AP | 1 Credit | 5.5 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Course Description | Students will explore methods of collecting, organizing, and interpreting (inferring) data <br> produced by others and themselves. Solving everyday problems and utilizing <br> technology will be emphasized throughout the course. The student is expected to take <br> the Advanced Placement Exam in May of the school year. Students enrolled in this <br> course also have the option to purchase college credits through Duquesne University. |  |  |  |  |  |
|  | An assignment involving basic statistical concepts will be required for students to <br> complete over the summer. Course units will include: Measures of Central Tendency, <br> Displaying Distributions, Normal Distributions, Correlation and Regression, <br> Probability, Tests of Significance, and Analysis of Variance. |  |  |  |  |  |
| Prerequisites | $\bullet$ Successful completion of Algebra 2 |  |  |  |  |  |


\section*{| Analytics \& Statistics in Sports | 2516 |  | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :--- | :--- |}

## Course Description

## Prerequisites

This yearlong course will provide students the opportunity to challenge themselves with a math course that forces them to think about math in a way that none of their previous courses have. One component of the course will be learning about advanced statistics that different sports use, what they mean, and how they are calculated. Students will learn to track and compute statistics derived from looking at box scores and drive charts, as well as from the study of video. The other component of the course will require the students to analyze the data and statistics. Students will have to present their understanding of the material in written form and orally through presentations and debates with their fellow classmates. Students with an interest in either sports or mathematics will find this an interesting, yet challenging, way to connect the two and expose themselves to thinking about mathematics in an entirely different setting.

- $11^{\text {th }}$ or $12^{\text {th }}$ Grade
- Successfully completed or are enrolled in Algebra 2


## Performing Arts

(Back to All Course List)
The Department of Performing Arts offers areas of study in the performing arts - dance, music, and theatre arts for all high school students. Dance can count as a physical education credit in grades 9 through 12. Music and theatre students will receive elective credits for their selected courses.

| ID | Course Name | ID | Course Name | ID | Course Name |
| :---: | :--- | :---: | :--- | :---: | :--- |
| 7501 | Cadenza Chorus | 8041 | Modern \& Jazz Dance 1 | 8100 | Intro to Theatre Arts |
| 7505 | Select Chorus | 8042 | Modern \& Jazz Dance 2 | 8201 | Acting 1 |
| 7511 | Band | 8043 | Modern \& Jazz Dance 3 | 8202 | Acting 2 \& 3 |
| 7521 | Orchestra | 8044 | Modern \& Jazz Dance 4 | 7533 | Jazz Band* |
| 8040 | Introduction to Dance | 8055 | Modern \& Jazz Dance 5 | 7542 | Music Theory* |
|  |  | 8051 | Majorettes - Drill Team - Dance Troupe - Dance Production |  |  |

*= New Course ${ }^{n}$ NEN

| Cadenza Chorus | 7501 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | Cadenza chorus is an intermediate level high school group that enjoys the study and performance of choral music. Students in this ensemble have satisfying experiences performing music in the community, supporting school culture, (when appropriate) and in school concerts in the winter and spring. Prescribed concert dress is mandatory. <br> Using the powerful medium of music students will be encouraged to express their feelings and emotions through mature interpretation of the written music. For this to occur, discipline and support of each member of the group and director must be in place. <br> Students will develop correct singing technique in a group atmosphere. Reading skills, including melodic and rhythmic notation, sight reading skills, and intelligent interpretation of the musical style will be emphasized. On-line theory study will enhance this knowledge. This knowledge will be quizzed and graded. Solo and small ensemble opportunities will be available to advanced students. <br> Students will rehearse and perform a variety of styles of music in school and community performances. Dress rehearsals and performances will be part of the grade. One of the highlights of the year is the SOUNDWAVES recital in the spring. <br> The chorus groups often take spring performance trips. Although students are encouraged to go because they are educational and fun, they are not mandatory. In December, after the winter concert, auditions will be held to determine students moving into upper level chorus groups for the following year. |  |  |  |
| Prerequisites | - Director's signa |  |  |  |


| Select Chorus |  | 7505 | Year |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | The select chorus consists of mainly juniors and seniors who are deeply committed to <br> choral study and performance. These students will be recognized as having good <br> attitudes and work ethics. They will be expected to practice outside of class and will be <br> encouraged to study privately. |  |  |
| Using the powerful medium of music students will be encouraged to express their <br> feelings and emotions through mature interpretation of the written music. For this to <br> occur, discipline and support of each member of the group and director must be in place. |  |  |  |
| Select chorus will study advanced theory, music history, music appreciation, correct <br> vocal technique and sight reading in their pursuit of excellence in choral performance. <br> There will be on-line theory study and quizzes to check understanding of concepts and <br> knowledge. Since chorus is a performance based class, students will be expected to be |  |  |  |


|  | present at all dress rehearsals and performances unless excused by the director. Select <br> chorus has prescribed concert attire that is mandatory. <br> Students that desire to be in Select chorus audition in late December/early January of <br> their 9th grade year or at a further advanced grade level. |
| :--- | :--- |
| The chorus groups often take spring performance trips. Although students are <br> encouraged to go because they are educational and fun they are not mandatory. <br> Performance in more than one chorus is possible depending on the student's schedule. <br> Students interested in this class should approach the teacher to discuss audition <br> procedures and times. |  |
| Prerequisites | An audition that includes sight reading, theory quiz and a vocal solo. |


| Band | 7511 | 1 Credit | Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | Band is a performance based ensemble with both marching and concert bands. First <br> year students are expected to develop basic playing skills while participating in <br> rehearsals and performances with the ensembles. Notation reading, rhythm decoding, <br> correct intonation as well as developing and applying fundamental vocabulary is taught. |  |  |  |
| Students will analyze the effect of rehearsal/practice sessions and apply various <br> pedagogies during this time. Students will understand a piece based on the historical, <br> cultural and social context and interpret these selections by classifications. Second year <br> band is designed to further develop marching and concert band skills. Intermediate <br> playing skills are expected as the students continue to strive for excellence in ensemble <br> and performance. Third and fourth year band further develops marching and playing <br> skill while encouraging students to assume leadership roles in ensembles. All music <br> techniques are further developed. Students are required to participate in all concerts. |  |  |  |  |
| Prerequisites | Audition and/or Director's recommendation for all band classes. |  |  |  |


| Orchestra | 7521 | 1 Credit | Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | Orchestra is a performing ensemble for instrumentalists of all levels. This course offers <br> musicians the opportunity to explore the formal qualities of music, to perform a variety <br> of musical styles, and to understand the aesthetic value of music. Emphasis is placed on <br> the alternative fiddling repertoire with continual study and reference to the classics. <br> Students acquire musical knowledge and appreciation by building their orchestral <br> repertoire. Students are expected to develop advanced skills that are necessary to <br> interpret and perform music and model these techniques. Students are required to <br> participate in all concerts. |  |  |  |
| Prerequisites | Audition and/or Director's recommendation for all Orchestra classes. |  |  |  |


| ntroduction to D | 8040 | 1 Credit | Unweighte | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This course is designed for students who are interested in body movement and selfexpression through dancing. Various dance form will be explored with emphasis on ballet, jazz, and modern techniques. This course will provide students with opportunities to develop dance skills and techniques, to express emotions and ideas through movement, and to work with a varied sample of music styles. Class presentations and videotaping will enable the students to develop performance techniques and receive feedback concerning their overall performance. The class members will be required to perform in Showcase. The course is open to $9^{\text {th }}, 10^{\text {th }}, 11^{\text {th }}$ and $12^{\text {th }}$ grades. Students with advanced dance skills and training may audition to be exempted from this course and be placed in the appropriate level dance course. Students are responsible for a $\$ 50$ costume fee for Showcase. Should requests for this class exceed a manageable number as determined by the instructor and high school principal, a lottery to reduce numbers to an acceptable class load will be conducted. |  |  |  |
| Prerequisites | - All students must dress in appropriate dance wear (black leotards and black tights purchased by the student) |  |  |  |



| Modern \& Jazz D | 8042 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | The course is designed to develop intermediate technique in both modern and jazz dance forms. Emphasis is on refining and enhancing technical performance at an intermediate level. The student will have opportunities to analyze movement elements, styles and principles of choreography and to create a performance composition. Evaluation for the course is based on performance tasks and rubric assessments, daily class participation, selected response testing, open ended tests, choreographic tasks. Videotaping and peer assessment will also be used to evaluate progress. Students are responsible for a $\$ 120$ costume fee for Showcase. |  |  |  |
| Prerequisites | - Modern Jazz 1 <br> - Appropriate da pros...dancewe <br> - Participate in th <br> - Able to physica <br> - Students with an adapted phy <br> - Teacher Recom | val from tards and e student case and <br> ghly inten or injuries <br> ss for the | rtment <br> k tights or Nike <br> rehearsal (thre hysical class on be required to ion of the medi | ings). <br> basis. ced into cuse. |


| Modern \& Jazz Dance 3 |  | 8043 | 1 Credit | Unweighted |
| :--- | :--- | :--- | :---: | :---: | Year

## Prerequisites

- Modern Jazz II and have pre-approval from the Department.
- Appropriate dance wear (black leotards and black tights or Nike Pros...dancewear purchased by the student.)
- Participate in the annual arts showcase and dress rehearsal (three evenings). Be physically able to perform in a highly intense, physical class on a daily basis.
- Students with long term illnesses or injuries may be required to be placed into an adapted physical education class for the duration of the medical excuse.

| Modern \& Jazz Dance 4 |  | 8044 | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Course Description | This course offers the advanced dance student/performer the opportunity to further <br> develop his/her skill, technique, choreographic expertise, analytical reasoning and peer <br> mentoring opportunities. This course accommodates the needs of the few students who <br> have higher-level dance skills when entering the dance department at C.V. (students <br> who are exempt from Intro to Dance in their freshman year). The student will work to <br> refine advanced dance techniques and genres. The student will act as a teaching <br> assistant/student choreographer, role model, etc. There would also be a component <br> requiring the student to work independent of the class by choreographing a self-directed <br> dance piece and/or working as an apprentice with professional dance teachers and <br> choreographers. Students are responsible for a \$120 costume fee for Showcase. |  |  |  |  |
| Prerequisites | Modern and Jazz Dance <br> Appropriate dance wear (black leotards and black tights or Nike <br> pros...dancewear purchased by the student.) |  |  |  |  |
| Teacher recommendation |  |  |  |  |  |


| Modern \& Jazz Dance 5 |  | 8055 | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Course Description | This course offers the advanced dance student/performer the opportunity to further <br> develop his/her skill, technique, choreographic expertise, analytical reasoning and peer <br> mentoring opportunities at a more advanced level. The course accommodates the needs <br> of the few students who have higher-level dance skills when entering the dance <br> department at C.V. (students who exempt Intro to Dance in their freshman year). The <br> student will work to refine advanced dance techniques and genres. The student will act <br> as a teaching assistant/student choreographer, role model, etc. There would also be a <br> component requiring the student to work independently of the class by choreographing <br> a self-directed dance piece and/or working as an apprentice with professional dance <br> teachers and choreographers. All students must dress in a black leotard and black tights. <br> These items must be purchased at the student's expense. Students are responsible for a <br> \$120 costume fee for Showcase. |  |  |  |  |
| -Modern and Jazz Dance 4 <br> Prerequisites <br> Appropriate dance wear (black leotards and black tights or Nike <br> Pros...dancewear purchased by the student.) |  |  |  |  |  |
| Teacher recommendation |  |  |  |  |  |

## (Back to All Course List)

| Majorettes <br> Drill Team <br> Dance Troupe <br> Dance Production | 8051 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This course is designed for Dance Troupe, Charvalettes, and Majorettes to work on their routines for each season. This course will provide the majorettes and drill team with the opportunity to practice with the marching band. The class meets five (5) days a week. During the first nine-week period, the unit rehearses for performances at football games, band festivals and parades. During the second nine-week period, the unit takes dance class or practices for Showcase. All students interested in taking this course must audition, and, if selected, will be scheduled by the advisor. Members of the Dance Troupe will work to develop performance skills and will participate in several dance shows. Dance Troupe is also a competition team. They will compete at 3 Regional Competition and 1 National Competition. All students must dress in a black leotard, black tights or Nike Pros. These items must be purchased at the student's expense. In addition to the regular school year, the students in this class will have summer practices that start in May and run through the summer. Dance troupe also attends a camp in July for 4 days. Costs for these groups are explained at a parent meeting prior to tryouts. |  |  |  |


| Introduction to Theatre Arts |  | 8100 | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Course Description | An exploration that will cover both the technical and performance aspects of live theater. <br> Tech theater studies will include production concepts and design for lighting sets, <br> costumes, and make-up. Performance studies will include an introduction to the basics <br> of acting, such as theater history, stage direction terminology, voice \& speech, <br> improvisation exercises, monologues \& scene work. |  |  |  |  |
| Prerequisites | - None |  |  |  |  |


| Acting 1 | 8201 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This course is for students who are interested in an acting career or who merely want to learn more about this art. Students will perform improvisations, work on monologues, scenes, and one act plays. Class presentations and videotaping will provide opportunities to develop creativity while supplying the student with immediate feedback about performance. <br> The course is open to all students in grades 9 through 12. All students will be required to perform in an acting production. Should request for this class exceed a manageable number as determined by the instructor and high school principal, students will be required to do a monologue audition for placement in the class. |  |  |  |
| Prerequisites | - Introduction to |  |  |  |

## (Back to All Course List)

| Acting 2 \& 3 | 8202 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This course if for students who want to continue their training in the art of Acting. This course is for students who are interested in an acting career or who merely want to learn more about this art. Students will perform improvisations, work on monologues, scenes, and one act plays. Class presentations and videotaping will provide opportunities to develop creativity while supplying the student with immediate feedback about performance. <br> The course is open to all students in grades 9 through 12. All students will be required to perform in an acting production. Should request for this class exceed a manageable number as determined by the instructor and high school principal, students will be required to do a monologue audition for placement in the class. |  |  |  |
| Prerequisites | - Acting 1 and/o <br> - Audition and |  |  |  |


| Jazz Band | 7533 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This course will provide students the opportunity to play and learn jazz music as well as improvisational techniques in a band setting. Students will be exposed to basic jazz theory and jazz history. |  |  |  |
| Prerequisites |  |  |  |  |


| Music Theory |  | 7542 | 1 Credit | Unweighted | Semester |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | In this course, students will learn basic written and aural music theory skills and <br> methods that will provide a thorough understanding of basic composition techniques, <br> chord progressions and structures, and how each musical era's applied theories were <br> used and recognized throughout the history of Western music. |  |  |  |  |
| Prerequisites |  |  |  |  |  |

## (Back to All Course List)

(Back to All Course List)
The goal of the Chartiers Valley Health and Physical Education program is to encourage, motivate and prepare students to lead a healthy and active lifestyle. The Chartiers Valley Health and Physical Education programs emphasize the understanding of health related content and lifetime activities to real world situations. Students will participate in, understand, and appreciate the benefits of a healthy and active life style. Health and Physical Education plays an integral role in a comprehensive educational program. This program will engage and help inspire students to pursue a lifetime of fitness activities and healthy decisions.

| ID | Course Name | ID | Course Name |
| :---: | :--- | :---: | :--- |
| 8032 | Physical Education (4 days) | 8038 | Partners in Physical Education (2 Days) |
| 8025 | Health 9-10 (4 days) | 8039 | Adaptive Physical Education |
| 8034 | Lifetime Activities (2 days) |  | Dance (Descriptions in Performing Arts) |
| 8027 | Drivers Theory (5 days) | 8070 | Personal Fitness \& Healthy Living* |
| 8036 | Sports Officiating \& Principles of <br> Coaching (5 Days) | 8514 | CiHS Nutrition* |
| * = New Course |  |  |  |

* $=$ New Course

| Physical Education <br> ${ }^{* *}$ Required for $9^{\text {th }} \& 10^{\text {th }}$ Grades |  | 8032 | . 25 Credit | Unweighted | Semester (4 days) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | The curriculum focus for $9^{\text {th }}$ and $10^{\text {th }}$ grade Physical Education is lifetime fitness, sports, and physical activity. Activities will enable students to develop skills necessary to maintain a healthy active lifestyle. The course is designed to enhance activity level, develop positive attitudes, responsible habits, and exhibit good sportsmanship. Students will have the opportunity to participate in; swimming, fitness, weight training, recreational racquet sports, diamond sports, volleyball and ultimate Frisbee/razzle. |  |  |  |  |
| Prerequisites |  |  |  |  |  |


| Health (9th \& $\mathbf{1 0}^{\text {th }}$ Grades) |  | 8025 Credit | Unweighted | Semester <br> (4 days) |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | Chartiers Valley Health curriculum is designed to provide students with an opportunity <br> to learn about physical, mental and social aspects of health. Emphasis is placed on the <br> importance of making healthy decisions that will lead to a higher quality of life. <br> Students are encouraged to develop optimal health through recognizing health issues <br> and applying preventative strategies. Students will connect academic content to real life <br> scenarios and understand the impact of personal choices. Units of study include; stress, <br> mental health, mental disorders, healthy relationships, abuse, bullying prevention, <br> school violence, nutrition, physical fitness, non-communicable diseases, SDI's, human <br> sexuality, CPR, first Aid, environmental health, tobacco, alcohol and drugs. |  |  |  |
| Prerequisites | - None |  |  |  |


| Lifetime Activities <br> $11^{\text {th }} \& 12^{\text {th }}$ Grades | 8034 | .25 Credit | Unweighted | Year <br> 2 Days |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Course Description | The curriculum focus for 11th and 12 <br> and prade Physical Education is lifetime fitness, sports, <br> maintain a healthy active lifestyle. The course is designed to enhance activity level, <br> develop positive attitudes, responsible habits, and exhibit good sportsmanship. <br> Students will be offered a variety of activities to include: physical fitness, volleyball, <br> tennis, recreational racquet sports (pickleball, badminton, and table tennis), diamond <br> sports, ultimate Frisbee/razzle football, and drug and alcohol unit. |  |  |  |
| Prerequisites | • 11 th and $12^{\text {th }}$ grade students |  |  |  |


| Drivers Theory |  | 8027 | .5 Credit | Unweighted | Semester <br> 5 Days |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | This curriculum will develop the knowledge and attitudes necessary for safe driving <br> techniques. The elective course introduces students to the theory and practical <br> application of how to operate an automobile, rules and regulations. Curriculum is in <br> accordance with PA driver guidelines and information from the PA driver's handbook; <br> including strategies for identifying risks, of driving and their consequences. |  |  |  |  |
| Prerequisites | $\bullet 10^{\text {th }} 11^{\text {th }}$, and 12th grade students |  |  |  |  |


| Sports Officiating and <br> Principles of Coaching |  | . 5 Credit | Unweighted | $\begin{aligned} & \text { Semester } \\ & \text { (5 Days) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This classroom course is designed for students to study the art, science, industry standards, and best practices of the officiating profession across all levels of sport. This course will provide hands-on experience working in teams, combined with a study of moral and ethical philosophy along with best practices from sport thought-leaders, to explore ways to handle these concerns. At the conclusion of this course students will be given the opportunity to become a certified PIAA sports official after they turn 18 years old. |  |  |  |
| Prerequisites | $9^{\text {tht }}, 10^{\text {tht }}, 11^{\text {th }} 12$ |  |  |  |


$\left.$| Partners in Physical Education |  | 8038 |  | .25 Credit | Unweighted |
| :--- | :--- | :--- | :--- | :--- | :--- | | Year |
| :---: |
| (2 Days) | \right\rvert\,


| Dance |  |  |
| :--- | :--- | :--- | :--- |
| Course Description | Students may choose any dance course in the Performing Arts section of the Academic <br> Handbook. Please see the Performing Arts section or course numbers and prerequisites. <br> Dance will meet PE equirements for all grade levels. |  |
| Prerequisites | - All grade levels |  |


| Personal Fitness \& Healthy Living <br> 11 $\& ~$ <br> 12 | 8070 | .25 Credit | Unweighted | Year <br> (2 Days) |
| :--- | :---: | :---: | :---: | :---: |
| Course Description | Obesity, diabetes and poor mental health are on a rise in the US. This PE course would <br> be available to upper classman who would like to focus more on individual physical <br> fitness rather than group lifetime activities. In this course, students will be exposed to <br> more individual ways to work out; weight room, yoga, running, HIIT and other <br> aspects. With this course, students would also be educated on nutrition. Throughout <br> the course, students will work towards goals to accomplish with their physical fitness. |  |  |  |
| Prerequisites | $\bullet 11^{\text {th }} 12^{\text {th }}$ grades |  |  |  |


| CiHS Nutrition |  | 8514 | . 5 Credit | 5.0 Weight | Semester |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | This course will cover an overview of scientific principles or nutrition and their applications to humans at the individual, systemic and environmental levels. This course will also introduce the students to the dietetics profession and how food, nutrition, and health status can be viewed from a psychosocial perspective. This course will run through University of Pittsburgh and provide college credit to those students who earn it |  |  |  |  |
| Prerequisites | - None |  |  |  |  |

## (Back to All Course List)

## Science

| ID | Course Name | ID | Course Name | ID | Course Name |
| :---: | :--- | :---: | :--- | :---: | :--- |
| 3221 | Biology Lab | 3341 | AP Chemistry | 3455 | AP Physics C: Electricity <br> and Magnetism |
| 3133 | Honors Biology | 3350 | Anatomy \& Physiology | 3442 | AP Biology |
| 3210 | Physical Science* | 3421 | Practical Physics | 3355 | Principles of Biomedical <br> Science (PBS) |
| 3209 | Explorations of Life <br> on Earth* | 3441 | AP Physics 1 | 3360 | Human Body Systems (HBS) |
| 3331 | Chemistry w/ Lab | 3445 | AP Physics 2 | 3365 | Medical Interventions |
| 3332 | Honors Chemistry* | 3450 | AP Physics C: Mechanics | 3370 | Biomedical Innovation |

* = New Course

| Biology Lab | 3221 | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :--- |
| Course Description | This is a one year course in which students are given a solid foundation of the study of <br> living things. The emphasis for the course is on the big ideas and unifying themes in <br> biology, such as basic biological principles/cells, chemical basis of life, bioenergetics, <br> homeostasis and transport, cell growth and reproduction, genetics, theory of evolution <br> and ecology. Students will work independently, in small groups and large groups to <br> understand and apply their skills. Application to real world concepts are emphasized <br> through the use of case studies, role plays, hands on activities and laboratory exercises. <br> This course is intended for students who may or may not be college bound and <br> successful completion of it can be a pre-requisite for higher level science electives and <br> AP courses. |  |  |  |
| Prerequisites | $\bullet$ None |  |  |  |


| Honors Biology | 3133 | Honors | 1 Credit | 5.0 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | Honors biology is a first year course in biology that provides an in-depth overview of <br> the study of living things. The framework for the course is on the big ideas and unifying <br> themes in biology. Topics include basic biological principles/cells, the chemical basis of <br> life, bioenergetics, homeostasis and cell transport, cell growth and reproduction, <br> genetics, ecology, and evolution. It is a rigorous course that requires daily reading and <br> review. Students will work both independently and in groups to apply biological <br> concepts. The course incorporates hand-on activities, role plays, and laboratory <br> exercises when appropriate. This course is intended for students that are highly <br> motivated, college bound, and typically will take one or more Advanced Placement <br> science courses throughout their high school career. |  |  |  |  |
| Prerequisites | - 93\% in 8th grade science <br> - Teacher recommendation |  |  |  |  |


| Physical Science |  | 3210 | 1 Credit | Unweighted |
| :--- | :--- | :--- | :--- | :---: | Year


| Explorations | Earth | 3209 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | Explorations of Life on Earth will examine a variety of topics, beginning with the astronomical evidence for the formation of the universe, to the history of early Earth, as well as the systems that have shaped and continue to shape life on Earth. As students investigate the history of and diversity of life on Earth, they will participate in laboratory investigations to observe different organisms and integrate current events to ensure a better understanding of the complexity of life. The topics will allow students to understand and appreciate the role of biodiversity and the importance of human sustainability in maintaining biological diversity in modern day society. The course is intended for students who may or may not be college bound. |  |  |  |  |
| Prerequisites | - Successful completion of Biology/Lab or Honors Biology |  |  |  |  |
| Chemistry w/ Lab |  | 3331 | 1 Credit | Unweighted | Year |
| Course Description | This is a $1^{\text {st }}$ year chemistry course intended for students planning to attend college in a non-science related field. This course provides students with an understanding of basic principles of chemistry through classroom lectures and discussions, PHET simulations, classroom activities, and laboratory techniques. This course should contribute to the development of the student's ability to think clearly and to express their ideas orally and in writing with clarity and logic. This course differs from the other courses by the depth and number of topics addressed, pace, the level of mathematical analysis required, the time commitment spent on the course by the students, and the nature and variety of weekly experiments done in the laboratory. Topics covered in this course are dimensional analysis, matter, atomic structure including radioactive decay, quantum mechanics, periodic law, nomenclature, reactions, stoichiometry, bonding, and gas laws |  |  |  |  |
| Prerequisites | - $70 \%$ in Biology OR pass Honors Biology <br> - $80 \%$ in Algebra 1 AND $70 \%$ or better in Geometry <br> - Teacher Recommendation |  |  |  |  |


| Honors Chemistry | 3332 | 1 Credit | 5.0 Weight | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | Honors Chemistry is a first year, preAP chemistry course. Designed to have an increased pace and rigor, this course allows students to learn more chemistry at a deeper level. This course provides students with an understanding of basic principles of chemistry through classroom lectures and discussions, classroom activities, and laboratory techniques. Honors chemistry covers topics such as matter, atomic structure, nomenclature, stoichiometry, reactions, thermochemistry, periodic trends, bonding and gases. |  |  |  |
| Prerequisit | - Grade 10 <br> - Passed Honors Geometry | an $80 \%$ | y Lab AND |  |

## (Back to All Course List)

| AP Chemistry | 3341 | AP | 1 Credit | 5.5 Weight | Year |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Course Description | $\begin{array}{l}\text { This elective course is a } 2^{\text {nd }} \text { year Advanced Placement chemistry course that is } \\ \text { equivalent to two semesters of college level chemistry and is intended for students } \\ \text { planning to attend college for chemistry, engineering, medical fields or other science } \\ \text { related areas in college. Laboratory work is an integral part of the course. This course } \\ \text { provides the rigorous training needed for success on the AP chemistry test and SAT II } \\ \text { Chemistry subject based test. This course should contribute to the development of the } \\ \text { student's ability to think clearly and to express their ideas orally and in writing with } \\ \text { clarity and logic. This is a rigorous course that requires a large time commitment since } \\ \text { the course itself is fast paced in order to have students prepared for the Advanced }\end{array}$ |  |  |  |  |
| Placement Exam offered in May of the school year. Students are expected to take the AP |  |  |  |  |  |$\}$| Exam as a component of this course. Summer reading and assignments are required. |
| :--- |
| Failure to complete summer assignments will result in a grade penalty. Failure to |
| complete summer assignments will result in a grade penalty. Topics covered in this |
| course are a more in-depth exploration of the areas of atomic structure, chemical |
| bonding, intermolecular forces, chemical kinetics, thermodynamics with |
| electrochemistry, equilibrium, and acid-base theory. |


| Anatomy \& Physiology |  | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This junior and senior human anatomy and p body systems will be cardiovascular, blood, be recommended for stu such as physicians, ph scientists, physical ther and bioinformatics. Th | designed to ucture, fun skin, mus ve and the rested in pu nurses, m 1 therapists, placement | a rigorous, in and imbalance oskeletal, nervo ial senses. This ng a career in th al technologist neticists, technic AP science cour | study of eases) of docrine, e would ical field amedics, forensics |
| Prerequisites | - Successful comp <br> - Teacher recomm |  |  |  |


| Practical Physics | 3421 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This is a first year Physics course intended for students planning to pursue a career in a non-science related field. This course provides students with a basic understanding of matter and energy through classroom lectures and discussions, online assignments, classroom activities, labs and projects throughout the year. Students will use mathematical analysis along with conceptual application of concepts to solve real world problems. A basic investigative approach dealing with the interrelationships of mass, motion and forces is studied. These topics lead to the investigations of various forms of energy such as light, sound, electricity, and magnets. |  |  |  |
| Prerequisites | - Successful completion of Honors Geometry or $75 \%$ or higher in Combined Geometry <br> - Completed chemistry <br> - Teacher Recommendation |  |  |  |


| AP Physics 1 | 3441 | AP | 1 Credit | 5.5 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | Advanced Placement Physics 1 is a first year physics course that is equivalent to a first <br> semester college course in algebra-based physics. This course will focus on students' <br> problem solving and lab skills. Students will cultivate their understanding of Physics <br> through inquiry-based investigations while integrating technology into the laboratory <br> environment. Topics covered will be Newtonian Mechanics (including rotational <br> motion), work, energy, power, mechanical waves, sound and introduction to simple <br> circuits. |  |  |  |  |
| Prerequisites | CIHS Chemistry or 80\% in Lab Chemistry <br> - Teacher recommendation |  |  |  |  |


| AP Physics 2 |  | 3445 | AP | 1 Credit | 5.5 Weight |
| :--- | :--- | :---: | :---: | :---: | :---: | Year | Course Description |
| :--- |
| Advanced Placement Physics 2 is a second year elective physics course that is <br> equivalent to a second semester introductory college-level physics course. This course <br> will focus on students' problem solving and lab skills. Students will cultivate their <br> understanding of Physics through inquiry-based investigations as they explore topics <br> such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams <br> and probability; electrostatics; electrical circuits with capacitors; magnetic fields; <br> electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear <br> physics. |
| Prerequisites |
| - Successful completion of AP Physics 1 or 90\% in Practical Physics |


| AP Physics C: Mechanics | 3450 | AP | . 5 Credit | 5.5 Weight | Semester |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | The Physics C: Mechanics elective course is equivalent to a one-semester, calculus- <br> based, college-level physics course. It is especially appropriate for students planning to <br> specialize or major in physical science or engineering. The course explores topics such <br> as kinematics; Newton's laws of motion; work, energy and power; systems of particles <br> and linear momentum; circular motion and rotation; and oscillations and gravitation. <br> Introductory differential and integral calculus is used throughout the course. |  |  |  |  |
| Prerequisites | Successful completion of AP Physics 1 <br> - Successful completion of AP Calculus or currently enrolled |  |  |  |  |


| AP Physics C: Electricity and <br> Magnetism | 3455 | AP | .5 Credit | 5.5 Weight | Semester |
| :--- | :--- | :--- | :--- | :--- | :--- |


| Course Description |
| :--- |
|  |
|  |
| Prerequisites |

Advanced Placement Physics C: Electricity and Magnetism is an elective onesemester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism. Introductory differential and integral calculus is used throughout the course.

- Successful completion of AP Physics 1
- Successful completion of AP Calculus or currently enrolled

| AP Biology | 3442 | AP | 1 Credit | 5.5 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | The Advanced Placement Biology course is an elective designed to be the equivalent of <br> a college biology course usually taken by biology majors during their first year of college. <br> The course aims to provide students with the conceptual framework, factual knowledge, <br> and analytical skills necessary to deal critically with the rapidly changing world of <br> biology. The curriculum is built around the four big ideas in AP Biology. They include <br> 1.) The process of evolution drives the diversity and unity of life. 2.) Biological systems <br> utilize free energy and molecular building blocks to grow, reproduce and maintain <br> dynamic homeostasis. 3.) Living systems store, retrieve, transmit and respond to <br> information essential to life processes. 4.) Biological systems interact. These systems and <br> their interactions possess complex properties. Extension homework and laboratory <br> work are required. Students are expected to perform extensive readings in biology and <br> are expected to take the AP Biology exam. |  |  |  |  |
| Prerequisites | Successful completion of Biology and concurrently enrolled or completion of <br> Chemistry |  |  |  |  |

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| Principles of Biom | Science (PBS) | 3355 | PLTW | 1 Credit | eigh | Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | This is the first course offering in the Project Lead the Way Biomedical Sciences curriculum. This rigorous elective course is offered to $9^{\text {th }}$ and $10^{\text {th }}$ grade students who may be interested in various professions in the medical field including, but not limited to physicians, physician assistant, nurses, medical technologists, paramedics, scientists, physical therapists, occupational therapists, geneticists, genetic counselors, technicians and bioinformatics. <br> Student work involves the study of human medicine, research processes, an introduction to bioinformatics, and the use of computer science, mathematics, and information theory to model and analyze biological systems. Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia and infectious disease. They determine the factors that led to the death of a fictional person, and investigate life-style choices and medical treatments that might have prolonged the person's life. Key biological concepts including homeostasis, metabolism, inheritance of traits, feedback systems and defense against disease are embedded in the curriculum. Engineering principles including the design process, feedback loops and the relationship of structure to function are incorporated in the curriculum. This course is designed to provide an overview of all the courses in the Biomedical Sciences program and lay the foundation for subsequent courses. |  |  |  |  |  |
| Prerequisites | - Science teac | or sch |  |  |  |  |


| Human Body Sy | BS) | 3360 | PLTW | 1 Credit | 5.0 Weight | Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | This is the $2^{\text {nd }}$ course offering in the Project Lead the Way Biomedical Sciences curriculum. This is a rigorous elective course offered to $10^{\text {th }}$ and $11^{\text {th }}$ graders that have completed Principles of Biomedical Science and are interested in professions in the medical field including physicians, physician assistants, nurses, medical technologists, paramedics, scientists, physical therapists, occupational therapists, geneticists, technicians, forensics and bioinformatics. <br> In the Human Body Systems (HBS) course, students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal Manikin, work through interesting real world cases, and often play the role of biomedical professionals to solve medical mysteries. Students practice problem solving with structured activities and progress to open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. |  |  |  |  |  |
| Prerequisites |  | on of P recomm | les of Bi tion | edical Scien | th a minimum |  |


| Medical Intervent | 3365 | PLTW | 1 Credit | 5.0 Weight | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | This is the third course offering in the Project Lead the Way Biomedical Sciences curriculum. This rigorous elective course is offered to $11^{\text {th }}$ and $12^{\text {th }}$ grade students that have completed Principles of Biomedical Science and Human Body Systems. In Medical Interventions, students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begins to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. |  |  |  |  |
| Prerequisites | - Completion of Principles of Biomedical Science and Human Body Systems with a minimum of $70 \%$ <br> - Teacher recommendation <br> - May be taken concurrently with Biomedical Innovation |  |  |  |  |


| Biomedical Innovation |  | 3370 | PLTW | 1 Credit | 5.0 Weight | Year |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| Course Description | In this capstone elective Project Lead the Way course, students apply their knowledge <br> and skills to answer questions or solve problems related to the biomedical sciences. <br> Students design innovative solutions for the health challenges of the 21st century as they <br> work through progressively challenging open-ended problems, addressing topics such <br> as clinical medicine, physiology, biomedical engineering, and public health. They have <br> the opportunity to work on an independent project and may work with a mentor or <br> advisor from a university, hospital, physician's office, or industry. Throughout the <br> course, students are expected to present their work to an adult audience that may <br> include representatives from the local business and healthcare community. <br> (PLTW website 2016) |  |  |  |  |  |
| Prerequisites | - Principles of Biomedical Science and Human Body Systems <br> - Currently enrolled or completion of Medical Interventions with a min of 70\% <br> - Teacher recommendation |  |  |  |  |  |

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## Social Studies

## (Back to All Course List)

Two years of American History are required for graduation from Chartiers Valley High School. This requirement in most cases, should be fulfilled in grades 9 and 11. One year of World Cultures is required for graduation and is usually completed in the $10^{\text {th }}$ grade.

Numerous interesting electives are offered. There are course offerings dealing with law and government, economics, psychology, famous personalities and time periods. These courses are designed to create an understanding of the human story to guide our civic, professional, and personal lives. Students are strongly encouraged to select one or more of these electives.

Advanced Placement courses in United States History, Law and Government, Macroeconomics, Microeconomics, and Psychology are available to students who have demonstrated proficiency in the disciplines and are recommended by the Social Studies faculty.

| ID | Course Name | ID | Course Name | ID | Course Name |
| :---: | :--- | :---: | :--- | :---: | :---: |
| 4000 | Development of the United <br> States | 4345 | Shaping of the Modern World | 4406 | Economics |
| 4002 | Honors - Development of the <br> United States | 4346 | AP U.S. Government and <br> Politics | 4407 | Law and Government |
| 4005 | World Cultures | 4347 | AP Psychology | 4409 | AP Macroeconomics |
| 4006 | Honors World Cultures | 4348 | AP United States History | 4410 | AP Microeconomics |
| 4010 | Contemporary US/Global <br> Studies | 4405 | Psychology |  |  |


| Development | ted States | 4000 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | This $9^{\text {th }}$ grade required course in social studies is a survey of United States history from 1800-1945. The century and a half is a pivotal period in our history when we developed as a world power. Students will examine the consolidation of the United States after the American Revolution, the epic struggle over the issue of slavery leading to the Civil War, the growth of the country through immigration, industrialization, urbanization, and the conquering of the frontier. Then, students will study the conflicts of the late $19^{\text {th }}$ (Spanish-American War) and early $20^{\text {th }}$ (World War I) centuries that catapulted the nation onto the world spotlight. The study ends with examining the two major challenges to the American state in the $20^{\text {th }}$ century, the Great Depression and World War II. Students will learn to take notes, write substantive essays, complete projectbased assignments, become involved in seminars, and other activities that make the course active learning. This course will be conducted at a moderate pace. |  |  |  |  |
| Prerequisites | - None |  |  |  |  |


| Honors - Development of the <br> United States | 4002 | Honors | 1 Credit | 5.0 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | This required 9th grade course provides students the opportunity to study the <br> development of the United States at a highly accelerated pace. The same years and <br> content described above will be the material for the course. Students in this course are <br> on track to take Advanced Placement courses so the study is rigorous and takes on more <br> of the complex concepts in American history. Students will also be challenged by the <br> high expectations of the College Board. |  |  |  |  |
| - 85\% or better in 8th grade Social Studies <br> Prerequisites |  |  |  |  |  |


| World Cultures | 4005 | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | This required course deals with the history and cultures of people in Europe, the Middle <br> East, Latin America, East Asia, and Africa from the 1700s through the present day. The <br> course explores various political ideologies; gender roles; social organizations; conflicts; <br> religious beliefs; and economic systems. Students will be expected to understand global <br> interdependence as it relates to culture, resource management, conflict and human <br> rights. Students will be regularly exposed to primary source documents in order to <br> better understand specific events or time periods from the perspective of the people who <br> experienced them firsthand. Students will refine their ability to read for comprehension <br> and critical analysis; summarize, categorize, compare, and evaluate information; write <br> in a concise manner; express facts and opinions orally; produce exhibitions in a <br> cooperative setting; and use technology appropriately to present information. |  |  |  |
| The first semester of the course will cover the Enlightenment, French Revolution, the <br> Industrial Revolution, Revolutions in Latin America, the Rise of Nationalism, New <br> Imperialism, World War I, and the Russian Revolution. The second semester of the <br> course will cover the Interwar Period, World War II, the Cold War, the Emergence of <br> New Nations, Regional Conflicts, and the Developing World. |  |  |  |  |
| Prerequisites | None |  |  |  |


| Honors World Cul | 4006 | Honors | 1 Credit | 5.0 Weight | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | Various themes including political ideologies, gender roles, social organizations, conflicts, revolutions, religious beliefs and economic systems will be explored throughout the course. Students will investigate global interdependence as it relates to culture, resource management, conflict and human rights. Students will be expected to understand the historical content and to make historical connections between the past and present through analysis of current affairs. Students will be exposed to primary source documents in order to better understand specific events or time periods from the perspective of the people who experienced them firsthand. Students will continue to refine their ability to read for comprehension and critical analysis; summarize, categorize, compare, contrast and evaluate information; write in a concise style; express facts and opinions, both in written and oral forms; produce exhibitions in a cooperative setting; and utilize technology appropriately to present and comprehend information. <br> The first semester of the course will be a comprehensive study of the Enlightenment, French Revolution, the Industrial Revolution, Revolutions in Latin America, the Rise of Nationalism, New Imperialism, the Great War and the Russian Revolution. The second semester of the course will cover the Interwar Period, World War II, the Cold War, the Emergence of New Nations, Regional Conflicts and the Developing World. |  |  |  |  |
| Prerequisites | - $85 \%$ in Honors <br> - $90 \%$ Advanced <br> - Teacher recomn | ican Cultu rican Cult ation |  |  |  |

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| Contemporary US/Global Studies | 4010 | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Course Description | This course will guide students from the beginning of World War II through the <br> early 21st century. Students will examine the political, economic, social and <br> cultural development of the United States from the end of World War II to present <br> times. The essential standards of American History will trace the change in the ethnic <br> composition of American society; the movement toward equal rights for racial <br> minorities and women; and the role of the United States as a major world power. An <br> emphasis is placed on the expanding role of the federal government and federal courts <br> as well as the continuing tension between the individual and the state. The desired <br> outcome of this course is for students to develop an understanding of the cause-and- <br> effect relationship between past and present events, recognize patterns of interactions, <br> and understand the impact of events on in the United States in an interconnected world. |  |  |  |
| Prerequisites | None |  |  |  |


| Shaping of the Mod | World | 4345 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | This Coll century and produced that of Eu will give have the k world. <br> Students they will used in co <br> Since this students w | This College in the High School elective course is a study of the world of the $20^{\text {th }}$ century and into the $21^{\text {st }}$ century. It will examine the forces and shaping agents that have produced great changes since circa 1900 and integrate the United States experience with that of Europe, Asia, Latin America, and Africa. An intense study of the last 50 years will give the students a better perspective and understanding of their own world and have the knowledge and skills to be able to project the foreseeable future of the modern world. | e course amine the and integrate Africa. An and unde project th <br> nary sourc ok" essays <br> quesne Un Students | tudy of the w and shaping a United States ense study of the nding of their eseeable future <br> ssignments an common asse <br> sity, there is a obtain three co | the $20^{\text {th }}$ hat have nce with 50 years orld and modern <br> king that that are <br> olved for redits. |
| Prerequisites |  | dvanc recom | Studies |  |  |


| AP U.S. Government and <br> Politics | 4346 | AP | 1 Credit | 5.5 Weight | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | Advanced Placement U.S. Government and Politics is an analytical perspective on <br> government and politics in the United States. This elective course includes the study of <br> general concepts used to interpret our political system and the analysis of specific <br> examples. The institutions, groups, beliefs, and ideas that constitute U.S. government <br> and politics will be studied. In addition, theories of government, political behavior and <br> consequences, and the structure and procedures of our government will be reviewed. <br> College-level texts and other college-level materials are used in the class. Preparation <br> for the annual A.P. exam, which is held in May, is an integral part of the class. |  |  |  |  |
| Prerequisites | $11^{\text {th }}$ and $12^{\text {th }}$ grade |  |  |  |  |

## (Back to All Course List)

| AP Psychology | 4347 | AP | 1 Credit | 5.5 Weight | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | Psychology is the scientific study of the human mind and behavior. The purpose of this Advanced Placement/College in the High School elective course is to further acquaint students with the field of psychology, promote critical thinking skills, explore crosscultural perspectives, analyze popular media claims, and examine published psychological research. The course is a combination of lecture, lab activities, cooperative activities, research essays, and presentations. Sample topics include personality, development, research, abnormal psychology, memory, and learning. Students who elect to purchase credits through the University of Pittsburgh will complete four quarterly exams and a cumulative final. Students who do not purchase the CiHS credits are expected to take the AP Psychology exam at the conclusion of the course. |  |  |  |  |
| Prerequisites | - $90 \%$ in Psychol <br> - $85 \%$ in AP Uni <br> - $85 \%$ in CIHS Sh <br> - Teacher Recom | Hi <br> f the <br> on | ern World |  |  |


| AP United States History |  | 4348 | AP | 1 Credit | 5.5 Weight | Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | Advanced Placement U.S. History (APUSH) is a rigorous college-level introductory course, which examines the nations' political, diplomatic, intellectual, cultural, social, and economic history from 1491- present. APUSH is arguably one of the most challenging of the courses offered by the College Board. As a result, a variety of instructional approaches are employed and a college level textbook is supplemented by primary and secondary sources. Significant outside reading and assignments are required for success in this course. <br> The curriculum of this course is designed to help students develop critical thinking skills and factual knowledge necessary to deal analytically with the complex history and documents presented in U.S. history. The complexity of topics, discussions and tempo of course will better prepare students for the rigors of college level courses. Students will conclude the year with a National Exam from College Board in May. |  |  |  |  |  |
| Prerequisites |  | $12^{\text {th }}$ gra <br> Hono <br> Adva |  |  |  |  |


| Psychology |  | 4405 | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Course Description | This elective course introduces the field of psychology and its basic concepts, theories, <br> research methods, and contributions to the understanding of human behavior. Topics <br> include scientific methods in psychology, biological psychology, sensation and <br> perception, states of consciousness, learning, memory, cognition and language. This <br> course will challenge students to use their metacognitive abilities in order to develop a <br> meaningful and useful understanding of their sense of self. |  |  |  |  |
| Prerequisites | $10^{\text {th }}$, 11th and 12th grade |  |  |  |  |


| Economics | 4406 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This elective course emphasizes analysis of the American economic system as it relates to the individual and other economic systems. Specific units will cover microeconomic issues such as the law of supply and demand, factors of production, and the business cycle. Macroeconomic issues will include money and banking, monetary and fiscal policy, international trade and comparative economic systems. We will be touching on the history of economic thought as well as current economic issues. The current uncertainty regarding the economy make this an exciting and challenging course. |  |  |  |
| Prerequisites | - $11^{\text {th }}$ or $12^{\text {th }}$ grade |  |  |  |


| Law and Government | 4407 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | Law and Government, an elective, is the study of the fundamentals of our American government along with a review of our justice system. Essentially, the class is divided into two components: Civics and Street Law. With the study of government, students will learn why we have government, types of government, and characteristics and principles of democracy. Studies will focus on our U.S. Constitution, specifically the Bill of Rights, and how these rights are exercised every day. <br> The class will then transition into a study of our criminal justice system with a focus on our due process rights. The criminal justice process will be reviewed from arrest through sentencing. Guest speakers will be utilized throughout the school year to compliment the curriculum and a field trip to the Allegheny County Courthouse will allow students to witness our justice system in action. Throughout the school year, students are encouraged to be aware of current events which will be discussed in class. |  |  |  |
| Prerequisites | - $11^{\text {th }}$ and $12^{\text {th }}$ grade |  |  |  |


| AP Macroeconomics | 4409 | AP | 1 Credit | 5.5 Weight | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | The goal of this elective course is to give students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economic system. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and the role of government in promoting greater efficiency and equity in the economy. This full year course will also integrate the study of both fiscal and monetary policies as they apply to the various levels of government. The course is a combination of lecture, cooperative activities, research projects, graph analysis, and presentations. Students should expect to take the AP Macroeconomics exam at the conclusion of the course. Summer reading and assignments are required. Failure to complete summer assignments will result in a weighted penalty. |  |  |  |  |
| Prerequisites | - 11 th or 12 grad <br> - $90 \%$ in Honors <br> - $85 \%$ in AP U.S <br> - Teacher recom |  |  |  |  |


| AP Microeconomics |  | 4410 | AP | 1 Credit |
| :--- | :--- | :---: | :---: | :---: |
| Course Description | Advanced Placement Microeconomics, an elective, is an introductory college-level <br> course that focuses on the principles of economics that apply to the functions of <br> individual economic decision-makers. The course also develops students' familiarity <br> with the operation of product and factor markets, distributions of income, market failure, <br> and the role of government in promoting greater efficiency and equity in the economy. <br> Students learn to use graphs, charts, and data to analyze, describe, and explain economic <br> concepts. |  |  |  |
| Prerequisites | - 11 th or 12 grade <br> - 90\% in Honors World <br> - <br> - Teacher recommendation |  |  |  |

## (Back to All Course List)

(Back to All Course List)
All students have the opportunity to study a modern language at some stage of their educational experience and should be allowed to continue the study as long as their abilities and interests keep them involved. Knowing a language is a matter of mastering basic habits of reacting to sounds, structures and vocabulary. It is recommended that students study one language until they have achieved proficiency. Advanced students are encouraged to study a second and even a third language.

All students who want to communicate in a modern language and learn the culture, characteristics, and customs of that particular language and its people can find a program that meets their needs. All World Language courses are electives

| ID | Course Name | ID | Course Name | ID | Course Name |
| :---: | :--- | :---: | :--- | :---: | :--- |
| 5011 | French 1 | 5022 | German 2 | 5112 | Spanish 3 |
| 5012 | French 2 | 5023 | German 3 | 5114 | CiHS Spanish 4 |
| 5013 | French 3 | 5024 | CiHS German 4 | 5116 | AP Spanish Language |
| 5014 | CiHS French 4 | 5108 | Spanish 1 | $5117^{*}$ | Spanish Communication through <br> Contemporary Topics |
| 5021 | German 1 | 5110 | Spanish 2 |  |  |


| French 1 | 5011 | 1 Credit Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | In this course geared to the general as well as the academic learner, students learn to <br> communicate on everyday topics in the present and near future, with particular <br> emphasis placed on the skills of listening, speaking and pronunciation. The French <br> culture, including study of the country as well as a unit on Paris, is a very important <br> component. Music and film clips are used to reinforce concepts and skills too. In <br> addition, students also take part in a variety of creative activities, including role-plays, <br> games, and projects. Integrated Performance Assessments (IPA) are used with every unit <br> to incorporate authentic materials, speaking opportunities and listening comprehension. <br> Also, students participate in cultural experiences such as making crêpes and croque <br> monsieur sandwiches, and learning about French holiday traditions. The course is <br> proficiency-based, and students are expected to communicate as much as possible in <br> French as well as understand and follow basic classroom directions in French. |  |  |
| Prerequisites | $\quad 75 \%$ in $8^{\text {th }}$ Grade French or Teacher recommendation |  |  |


| French 2 |  | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This elective course continues to develop the proficiency of previously mentioned skills. Dialogues, pattern practice, and question-answer exercises play an important role. Word placement and foundation grammar work into developing competency in both reading and writing. |  |  |  |
| Prerequisites | - $75 \%$ in French 1 ( $2^{\text {nd }}$ semester) <br> - Teacher recommendation |  |  |  |


| French 3 | 5013 | 1 Credit | Unweighted | Year |
| :--- | :--- | :--- | :---: | :---: |
| Course Description | This course continues to build proficiency in listening and speaking while increasing <br> emphasis on reading and writing. Students write longer and more complex sentences as <br> well as short essays. More emphasis is placed on independent reading of authentic <br> French literature and non-fiction cultural pieces relating to French Africa, 19th \& 20th <br> century French art, French heritage and other topics. A film study is included at this <br> level. Students use Integrated Performance Assessment lessons (interpretive reading, <br> interpersonal communication, presentational communication) to increase their <br> proficiency by integrating reading, writing, listening comprehension and speaking. New <br> grammar skills are introduced, but students are expected to apply skills already learned. <br> Students will participate in speaking proficiency assessments in accordance with the <br> ACTFL proficiency guidelines. |  |  |  |
| Prerequisites | - $75 \%$ in French 2 (second semester) <br> - Teacher Recommendation |  |  |  |


| CiHS French 4 |  | 5014 | CiHS | 1 Credit |
| :--- | :--- | :---: | :---: | :---: |
| Course Description | In this full year, College in the High School course, students learn to speak with more <br> fluency, practicing and expanding upon previously learned grammar concepts such as <br> past time (including imperfect tense and plus que parfait), future time, and pronouns <br> (relative, direct, indirect) as well as reinforce structures such as the subjunctive and the <br> conditional. Students read independently at a more advanced levels, keep a journal, and <br> writings are longer and more sophisticated. There is a focus on advanced conversation, <br> listening comprehension, and more extensive reading and writing. Film clips from the <br> text and authentic French films with detailed follow-up are used as a resource to enhance <br> proficiency. |  |  |  |
| This course is articulated through Duquesne University and students have the |  |  |  |  |
| opportunity to earn 3 credits in French 201. There is a fee involved for students opting |  |  |  |  |
| to earn the university credits. |  |  |  |  |


| German 1 | 5021 | 1 Credit | Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: |
| Course Description | This elective course is proficiency based in order to develop competency in <br> understanding, speaking, and writing in German within a restricted area of vocabulary. <br> Basic speech patterns are introduced and practiced orally. Students will then practice <br> these new speech patterns and adapt them to varying situations. Basic grammar <br> concepts are introduced. The student must assume responsibility of self-discipline and <br> self-direction in the classroom. |  |  |  |
| Prerequisites | 9th graders - 75\% in $8^{\text {th }}$ grade Modern Language class. <br> - Teacher recommendation |  |  |  |


| German 2 | 5022 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This proficiency based full-year elective course continues to develop the listening, speaking and writing skills. Vocabulary is introduced more rapidly, and the amount of controlled reading increases as the year progresses. Basic grammar concepts are expanded and completed. Conversation and other oral activities are stressed. The student must assume the responsibility of self-discipline and self-direction in the classroom. |  |  |  |
| Prerequisites | - $75 \%$ in German 1 ( $2^{\text {nd }}$ semester) <br> - Teacher recommendation |  |  |  |

## (Back to All Course List)

| German 3 | 5023 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This full-year elective course continues to build proficiency in listening and speaking while increasing emphasis on reading and writing. There is extensive building of both active and passive vocabulary. Grammar continues to be developed at an intermediate level. Supplementary audio excerpts, videos, and websites reinforce situational German vocabulary. The student must assume responsibility of self-discipline and self-direction in the classroom. |  |  |  |
| Prerequisites | - $75 \%$ in German <br> - Teacher Recomn |  |  |  |


| CiHS German 4 | 5024 | CiHS | 1 Credit | 5.0 Weight | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | This College in the High School elective course is designed to continue the development of oral and written skills. Students will read and discuss selected cultural and literary texts, review grammar in the context of situations and readings, and explore cultural trends and issues. <br> Since this course is articulated through Duquesne University, there is a fee involved for students who want to earn college credits. |  |  |  |  |
| Prerequisites | - $80 \%$ in German <br> - Teacher Recom |  |  |  |  |


| Spanish 1 | 5108 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This is a full year elective course designed for students to acquire basic proficiency skills in Spanish - listening, speaking, reading, and writing. A content based approach to language learning is introduced; knowledge of other subjects is reinforced through the use of Spanish. <br> Please note: Students who are new to Chartiers Valley School District have the option to test into Spanish 2. |  |  |  |
| Prerequisites | - Students who d <br> - Students with 1 <br> - Students who a <br> - Teacher Recom | in Grade <br> ade 8 at Ch <br> Valley Sc | Chartiers Valle rs Valley Spani District. |  |


| Spanish 2 | 5110 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This is a full-year elective course that incorporates a mix of everyday conversational topics and content-based lessons connected primarily to English and Social Studies themes. An increase in language proficiency is accomplished through reading, writing, listening, and speaking practice. |  |  |  |
| Prerequisites | - $75 \%$ Grade 8 Spanish at Chartiers Valley or Spanish 1 at Chartiers Valley-2nd semester <br> - Teacher Recommendation |  |  |  |


| Spanish 3 | 5112 | 1 Credit | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | This is a full-year elective course that incorporates a mix of everyday conversational topics and content-based lessons connected primarily to Humanities themes. Students will expand their vocabulary and grammar knowledge while building proficiency with more extensive reading, writing, listening, and speaking tasks. |  |  |  |
| Prerequisites | - $75 \%$ in Spanish <br> - Teacher Recon |  |  |  |

## (Back to All Course List)

| CiHS Spanish 4 | 5114 | CiHS | 1 Credit | 5.0 Weight | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | This College in the High School elective course offers an advanced curriculum with emphasis on extensive reading, writing, and communication skills. There is focus on listening for comprehension and promoting fluency in speech. An ability to demonstrate mastery of essential grammatical concepts is expected. Historical and cultural aspects of Hispanic countries are an integral part of the course. <br> Since this course is articulated through Duquesne University, there is a fee involved for students who want to earn college credits. |  |  |  |  |
| Prerequisites | - $80 \%$ in Spanish <br> - Teacher Recom |  |  |  |  |


| AP Spanish Language | 5116 | AP | 1 Credit | 5.5 Weight | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | The purpose of Advanced Placement (AP) Spanish Language is to guide students to greater proficiency and more accurate application of language skills by using authentic resources in meaningful situations. Listening, speaking, reading, and writing within thematic units will augment and enhance vocabulary and grammar acquisition. In AP Spanish Language, students will communicate in interpersonal, interpretive, and presentational scenarios within the five goal areas (Communication, Culture, Connections, Comparisons, and Communities) outlined in the Standards for Foreign Language Learning in the $21^{\text {st }}$ Century. The course is similar to most third-year college and university courses that focus on speaking and writing in the target language at an advanced level. Failure to complete the summer assignments will result in a grade penalty. |  |  |  |  |
| Prerequisites | - $80 \%$ in CIHS Spanish 4 <br> - Teacher Recommendation |  |  |  |  |


| Spanish Communication <br> through Contemporary Topics | 5117 |  | Yedit | Unweighted | Year |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Course Description | In this course, students will increase their Spanish proficiency in speaking, writing, <br> reading, and listening while considering contemporary topics related to the Spanish- <br> speaking world. Authentic resources such as films, novels, and current events will <br> inspire higher-level analysis and discussion. Critical thinking and writing composition <br> in this course will continue to prepare students for post-secondary education. |  |  |  |  |
| Prerequisites | • 75\% in CIHS/Spanish 4 or Teacher Recommendation or <br> - 75\% in AP Spanish Language or Teacher Recommendation |  |  |  |  |

## (Back to All Course List)

Parkway West

## Career \& Technical Center

Chartiers Valley School District is one of twelve school districts participating in the Parkway West Career and Technology Center. Parkway West offers specialized trade and technical courses that are not available at the high school. During their freshman, sophomore, junior and senior year, selected students will attend Chartiers Valley High School (afternoon) for a half-day and the other half will be spent at Parkway West (morning). The personnel of Parkway West will select students based on their abilities, grades, maturity, aptitudes, and interests. Upon completing the course of studies at the technical school and the high school, the student will receive a certificate from Parkway West Career and Technology Center and a diploma from Chartiers Valley High School. Parkway West aids graduates with job placement in their fields of study.

Students attending Parkway West Career and Technology Center will not be scheduled for electives at CVHS.
Students who successfully complete Parkway West CTC programs may be eligible to earn articulated college credit from the following post-secondary institutions:

Belmont Technical College Butler County Community College
California University Community College of Allegheny County
Empire Education Group
New Castle School of Trades
Pittsburgh Culinary Arts Institute
ITT Technical Institute
Pennsylvania College of Technology
Pittsburgh Technical Institute
Rosedale Technical Institute
Triangle Tech. Inc.
University of Northwest Ohio
Scholarships from the above post-secondary institutes and from industry
Career \& Technical Specialties: (Back to All Course List)

| ID |  | Course Name | ID |  | Course Name |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|l\|} \hline 9113: 4 \\ 9313: 36 \end{array}$ | Credits Credits | Auto Body Repair | 9173: 4 Credits 9373: 3 Credits |  | Health Occupations Technology |
| $\begin{aligned} & \text { 9119: } 4 \\ & \text { 9319: } 3 \end{aligned}$ | Credits Credits | Automotive Technology | 9155: 4 credits 9355: 3 credits |  | Cyber Security \& Network Technology |
| $\begin{aligned} & \text { 9137: } 4 \text { C } \\ & \text { 9337:3 } \end{aligned}$ | Credits Credits | Construction Technology Cluster | 9185: 4 credits 9385: 3 credits |  | Public Safety Technology |
| $\begin{aligned} & 9143: 4 \\ & 9343: 3 \\ & \hline \end{aligned}$ | Credits Credits | Cosmetology | 9375: 4 credits 9376: 3 credits |  | Sports Medicine and Rehabilitation Therapy Technology (SMARTT) |
| $\begin{aligned} & \text { 9161: } 4 \\ & 9361: 3 \end{aligned}$ | Credits Credits | Culinary Arts | 9193: 4 credits 9402: 3 credits |  | Veterinary Assistant Technology |
| $\begin{aligned} & 9190: 4 C \\ & 9389: 3 \text { C } \end{aligned}$ | Credits Credits | Graphic Arts \& Production Technology | 9120: 4 credits 9320: 3 credits |  | Diesel Technology |
| $\begin{array}{\|l\|} \hline 9225: 4 \\ 9224: 3 \\ \hline \end{array}$ | Credits Credits | Power Motorsports Technology* |  |  |  |
| - = New Course Academic Courses Available at Parkway |  |  |  |  |  |
| ID |  | Course Name | $\begin{gathered} \hline \text { ID } \\ \hline 9220 \end{gathered}$ | Course Name |  |
| 9238 | Chemi <br> - Co | Properties in Practice parable to Applied Chemistry |  | US History <br> - Comparable to Development of the U.S. |  |
| 9234 | Princip <br> - Co | es of Technology parable to Practical Physics | 9223 | World History <br> - Comparable to World Cultures |  |
|  |  |  | $9221$ | U.S. History II <br> - Comparable to Contemporary US History |  |


| Auto Body Repair |  | 9113 <br> 9313 | 4 Credits <br> 3 Credits | Unweighted | Year |
| :--- | :--- | :--- | :--- | :--- | :---: |
| Course Description | The Auto Body Repair program is certified by the National Automotive Technology <br> Education Foundation (NATEF) and provides instruction in the most current techniques <br> for repair and replacement of damaged automobile parts. Students learn to repair <br> collision damage and replace quarter panels, door skins, and fenders. The curriculum <br> also includes painting, MIG welding, collision repair, frame straightening, and damage <br> analysis. Students gain experience in mixing and tinting paint, custom painting, <br> computerized estimating, and auto detailing. Practical experience is provided through <br> a full-service auto body repair shop. Students have the opportunity to earn PPG Blue <br> Level Paint and I-Car MIG Welding certifications. They are eligible to earn I-Car Points. |  |  |  |  |
| Prerequisites | None |  |  |  |  |


| Automotive Technology |  |  | 4 Credits | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | Automotive Technology is certified by the National Automotive Technology Education Foundation (NATEF) and affiliated with all of the major automotive manufacturers through Automotive Youth Educational Systems (AYES). Students prepare to take the Pennsylvania State Inspection License examination. Students learn basic vehicle maintenance, repair, and replacement of drive trains, brake systems, chassis components, and fuel and electrical systems. Special emphasis is placed on troubleshooting and engine performance via the use of state-of-the-art electronic diagnostic equipment. Practical experience is also provided in the auto repair shop. Under the Automotive Youth Educational Systems (AYES) apprenticeship program, students may qualify to become an apprentice working under mentor technicians. Students can earn certifications from AYES, the National Institute for Automotive Service Excellence (ASE), and the Coordinating Committee for Automotive Repair (CCAR). |  |  |  |  |
| Prerequisites |  |  |  |  |  |


| Construction Technology Cluster |  | 9137 <br> 9337 | 4 Credits <br> 3 Credits | Unweighted |
| :--- | :--- | :--- | :--- | :--- |


|  | covered. Adherence to the National Electric Code is emphasized throughout this course <br> as well as trade safety procedures. This program may lead to additional career pathways <br> such as an Electrical Drafter, Electrical Technicians, Electrical Engineers, Electrical <br> Power-Line Installers and Repairers, Meter Readers/Utilities, Control and Valve <br> Installers/Repairs, and Locomotive Engineers, to just name a few. Additionally, <br> students will be given the opportunity to earn a 10-hour Occupational Safety and Health <br> Administration (OSHA) Construction Card and may have a greater opportunity to join <br> the International Brotherhood of Electrical Workers' Union (BAC) after graduation. |
| :--- | :--- |
| HVAC/R <br> Heating, Ventilation, Air-Conditioning, and Refrigeration, which has been newly <br> renovated with state-of-the-industry equipment, provides instruction in basic and <br> advanced electrical theory, troubleshooting and repair of residential and commercial <br> heating, air-conditioning, and refrigeration systems. Students will be given the <br> opportunity to earn a 10-hour Occupational Safety and Health Administration (OSHA) <br> Construction Card. |  |
| Welding Technology <br> Welding Technology covers several types of welding by which metal may be bent, cut, <br> or welded together, including oxy-fuel, shielded metal arc, gas metal arc, gas tungsten <br> arc, flux core welding, carbon arc, plasma cutting, and oxy-fuel brazing. Students will <br> learn the importance of industry safety, measuring instruments, hand tools, grinders, <br> metallurgy, blueprint reading, electrical principles, layout/design, and fabrication, as <br> well as how to prepare materials lists for cost estimates. Students have the opportunity <br> to earn several American Welding Society (AWS) certifications. |  |
| Pre None |  |


| Cosmetology | 9143 <br> Course Description | The Cosmetology program prepares students to perform technical services including all <br> 3 Credits |
| :--- | :--- | :--- | :--- |
| aspects of hair, skin/nail beautification, and personal maintenance. These skills are |  |  |
| supported and reinforced with theoretical background including sanitation, chemistry, |  |  |
| anatomy and physiology, as well as structure, function, and disorders of the hair, skin, |  |  |
| nails, and scalp. This program helps students develop into well-rounded professionals, |  |  |
| who practice real-world services in Parkway's salon, which is open to the public two |  |  |
| days a week. Utilizing an integrated approach to teaching and learning, students learn |  |  |
| about interpersonal relations, professional attitude, and career fundamentals along with |  |  |
| technical knowledge and skills. Techniques and abilities are practiced and tested on |  |  |
| mannequins, classmates, and the general public. Students who are able to attend this |  |  |
| program for three years will have the opportunity to earn 1,250 hours of state-regulated |  |  |
| course requirements to take the state licensing exam to be a licensed cosmetologist, |  |  |
| which encompasses providing services to the public for hair, skin, and nails. Students |  |  |
| who are able to take one or two years of instruction in this program may choose from |  |  |
| the following specialized licensed fields: |  |  |$|$| Nail Technician License: This license requires 200 hours of instruction and can be |
| :--- |
| completed within one year. An individual holding a nail technician license is qualified |
| to perform nail technology services only. |
| Cosmetology Teacher License: Prerequisite for this course is having successfully passed |
| at least one of the above licensures. This license requires 500 hours of required studies |
| and can be completed within one year. An individual holding a teacher's license is |
| qualified to perform the functions of a teacher in whichever specialized area the |
| individual has obtained licensure. |


| Culinary Arts |  | 9161 <br> 9361 | 4 Credits <br> 3 Credits | Unweighted | Year |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Course Description | The Culinary Arts program provides practical instruction in the preparation of banquet, <br> buffet, and a la carte styles of food preparation. Practical experience is provided through <br> the operation and management of an in-house, full-service restaurant and beyond the <br> restaurant environment to provide goods and services for Parkway's food store, where <br> pastries and select meats are sold. Students learn to design cakes, sculpt ice, and prepare <br> many different types of cuisine. First-year students spend one school year in Culinary |  |  |  |  |
| Arts Level I. Second and third-year students will advance into Culinary Arts Levels II <br> and III. Senior students who have completed at least two years of Culinary Arts will <br> have the opportunity to earn both the National Restaurant Association's ServSafe <br> certification and the American Culinary Federation certification. |  |  |  |  |  |
| Prerequisites | None |  |  |  |  |



| Graphic Arts \& Technology |  | $\begin{aligned} & \hline 9190 \\ & 9389 \end{aligned}$ | 4 Credits 3 Credits | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | Graphic Arts \& Production Technology is an instructional program that prepares individuals to apply technical knowledge and skills to plan, prepare, and execute commercial and industrial visual image and print products using mechanical and digital graphic and printing equipment. Students learn desktop publishing, layout, composition, digital printing and bindery as well as photography and other graphic arts techniques. Emphasis is on typographical layout and design using computer graphics, digital printing, bindery and finishing techniques, ink and color preparation. Students will also learn large format digital printing with application of a wide variety of output and vinyl applications including heat press and apparel design. |  |  |  |  |
| Prerequisites |  |  |  |  |  |


| Health Occupations Technology |  | 9173 <br> 9373 | 4 Credits <br> 3 Credits | Unweighted | Year |
| :--- | :--- | :--- | :--- | :--- | :---: |
| Course Description | Health Occupations Technology students have the opportunity to participate in a wide <br> range of real-world clinical and job shadowing experiences at many different local <br> healthcare providers. Clinical experiences may include: child care, long term care, <br> emergency nursing, recovery room nursing, radiology, medical records, operating room <br> observation, pharmacy, physical/occupational therapy, and/or lab technician. Students <br> will have the opportunity to earn and complete the American Heart Association "CPR <br> for Healthcare Providers" certification and the following certifications in relation to the |  |  |  |  |
|  | Health Care industry: Pennsylvania State Nurse Aid Registry (C.N.A.). For first and <br> second year students, instruction begins with anatomy, physiology, and medical |  |  |  |  |


|  | terminology. Special attention is given to medical office examinations, treatment, and <br> patient care. Personal Care Home Direct Care Staff: For first and second year students, <br> this component offers a competency test from the PA Department of Public Welfare and <br> it prepares students to work in a personal care home as a direct care giver. |
| :--- | :--- |
|  | Pharmacy Technician Certification (CPhT): After successful completion of this one-year, <br> $122^{m}$ grade course, students will assist the pharmacist in a variety of tasks. Module and <br> lab work includes: controlled substances, laws and regulations, drug classifications, <br> frequently prescribed medications, prescription information, preparing/dispensing <br> prescriptions, calculations, sterile products, unit dose, and repackaging. |
|  | Phlebotomy Technician Certification (CPT): This is a one semester certification course <br> directed towards 12 <br> physiology, infection control, safety. Module and lab work includes: anatomy and <br> techniques, and processing of collected samplesce, patient preparation, collection <br> minimum of 30 successful venipunctures and 10 successful capillary must demonstrate a a punctures. |
| Prerequisites None |  |


| Cyber Security \& Technology |  | $\begin{aligned} & 9155 \\ & 9355 \end{aligned}$ | 4 Credits <br> 3 Credits | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | This program prepares students who are interested in networking and computer diagnostics. It begins with Cisco IT Essentials, PC Hardware and software, and networking operating systems. Students initially prepare for CompTIA A+ and Comp TIA Server + certifications and then, through Cisco CCNA Discovery course, students learn networking concepts based on typical networks that one might encounter in home or small office, or in larger more complex enterprise models. Finally, students can prepare for the Cisco CCENT and Cisco CCNA certifications. |  |  |  |  |
| Prerequisites |  |  |  |  |  |


| Public Safety Technology |  | 9185 | 4 Credits | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Description | The Public safety Technology program focuses on careers relating to emergency medical services, firefighting, law enforcement, and emergency management services. In order to successfully complete the program, students must meet minimum proficiency levels in all public safety areas. Instruction is provided in disaster situations/management, hazardous materials handling, pre-hospital medical care, map reading, firefighting, the judicial system, and emergency dispatching. Students have the opportunity to earn the following certifications: <br> Emergency Medical Technician - Basic (EMT-B), Basic Vehicle Rescue (BVR), Emergency Vehicle Operators Course (EVOC), Hazardous Materials Recognition and Identification (Haz-Mat R\&I), and multiple Federal Emergency Management Agency certifications. |  |  |  |  |
| Prerequisites |  |  |  |  |  |


| Sports Medicine and Rehabilitation Therapy Technology (SMARTT) | $\begin{aligned} & 9375 \\ & 9376 \end{aligned}$ | 4 Credits 3 Credits | Unweighted | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | The Sports Medicine and Rehabilitation Therapy Technology (SMARTT) Program prepares students to work in the field of physical therapy, occupational therapy and sports medicine. Students will develop skills in prevention, diagnosis, differential diagnosis, assessment, prognosis and the rehabilitation of injuries and other health conditions. Students will learn the principles of developing a plan of care including: evaluation, interventions (exercise, manual therapy, modalities and neuro re-education), assessment, goal setting and discharge. Students will also learn how to develop a proper |  |  |  |


|  | diet for healthy individuals and tailor it for special populations through a <br> comprehensive understanding of nutrition. Upon successful completion, students <br> should be able to assist in the development and implementation of a plan of care for <br> healthy and special populations. |
| :--- | :--- |
| Careers available directly out of the program could include: Personal Trainer, Coach, |  |
| and Physical Therapy Aid. This program also provides a solid educational base on |  |
| which to build a post-secondary degree or advanced certification. Careers available |  |
| with additional post-secondary schooling include: Personal Trainer, Athletic Trainer, |  |
| Physical Therapist, Physical Therapist Assistant, Occupational Therapist, Certified |  |
| Occupational Therapist Assistant, Strength and Conditioning Coach, Medical and |  |
| Exercise Physiology Researcher, Sports Psychologist, Dietitian and Exercise |  |
| Physiologist. |  |$\quad$| • None |
| :--- |


| Veterinary Assistant Technology |  |  | 4 Credits <br> 9402 | Unweighted | Year |
| :--- | :--- | :--- | :--- | :---: | :---: |
| 3 Credits |  |  |  |  |  | \left\lvert\, | Course Description |
| :--- | | In the Veterinary Assistant Technology program students will learn to keep medical |
| :--- |
| records, schedule, offer client education, practice laboratory procedures, assist with |
| nursing duties, prepare for surgeries, and assist during a routine exam. Students will |
| also gain a solid educational base on which to build a post-secondary degree. This |
| program may lead to additional career pathways such as Animal Trainer, Animal |
| Breeders, Non-Farm Animal Caretakers, Laboratory Animal Caretakers, Groomers, |
| Animal Control Worker, Veterinary Technician, Veterinary Technologist and |
| Veterinarian. Upon accreditation, students may earn the Purina Certified Weight Coach, |
| Pharmacy Technician, and Veterinary Assistant certifications. |\right.


| Power Motor Sports | 922 | 4 Credits 3 Credits |  | Year |
| :---: | :---: | :---: | :---: | :---: |
| Course Description | ..the growing popularity of power motorsports has created an increasing demand for highly skilled technicians. PMS Technology teaches students to diagnose, maintain and repair utility vehicles, all-terrain vehicles, including side-by-sides, motorcycles, water crafts as well as outdoor power machines, including lawn and garden equipment. Students will learn the principles of engine operation, understand basic electricity, service and maintain fuel and carburetor systems, transmissions, and powertrain systems used on various types of recreational and lawn \& garden equipment. Students may have the opportunity to earn the following certifications: PA Emissions Certification; S/P2, OSHA 10. <br> *other notable certifications I have found: <br> Equipment \& Engine Training Council (eetc.org) <br> PA Safety Inspector Category 1, 2, 3 <br> Category 1 (Passenger cars/trucks $17,000 \mathrm{lbs}$ or less/trailers $10,000 \mathrm{lbs}$ or less) <br> Category 2 Motorcycles (must hold a valid Motorcycle license) <br> Category 3 (Buses/trucks over 17,000lbs/trailers over 10,000 lbs. |  |  |  |
| Prerequisites | - None |  |  |  |

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Darren Mariano (President)
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Herb Ohliger
Megan Sexton
Sonja Svihla
Lisa Trainor
Sandra Zeleznik (Vice President)

## Central Office Administration

Johannah Vanatta, Ed.D., Superintendent
Scott Seltzer, Assistant Superintendent

High School Administration<br>Patrick Myers, Principal<br>Tim Murray, Assistant Principal Meghan Watelet, Assistant Principal

