

CHARTIERS VALLEY

SCHOOL DISTRICT

Inspiring excellence.



Chartiers Valley High School



2021-2022 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:** Red & Blue
- **Motto:** Character, Virtue, Honor and Scholarship
- **Mascot:** 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)



Table of Contents



***Click on the section title to go to that section**

<u>General Program Information</u>	Page 4
Graduation Requirements	4
Graduation Credit Planner	5
Keystone Requirements	6
Daily Schedules	7
<u>Student Services</u>	Page 8
Scheduling & Course Request Procedures	8
How to Request Courses	8
Scheduling Considerations	9
Schedule Change Requests	9
Withdrawal from a Course	9
Course Waivers	9
Cancelled Courses	9
Career Exploration & Student Portfolios	10
Advisory Program	10
Naviance Student	11
<u>Grading and Reporting of Progress</u>	Page 12
Grade Reporting	12
Grade Calculation	12
Grading Scale	12
Weighted Courses	13
Online Tools (Infinite Campus & Schoology)	14
Appeal of Grade	14
Homework	15
Class Participation	15
Absence from Class	15
Class Rank and Commencement (Class of 2023)	15
Class Rank (2020, 2021, & 2022 Classes only)	15
<u>Engineering Academy</u>	Page 16
Engineering Academy Requirements	16
Engineering Academy Certificates	17
<u>Departments and Courses</u>	Page 18
Complete Course Listing by Department	18
Applied Engineering & Technology (AET)	21
Art	27
Business	31
Career & Community Learning Opportunities	34

Computer Science	35
English	38
Family & Consumer Science	45
Mathematics	47
Performing Arts	51
Physical Education	57
Science	59
Social Studies	65
World Languages	70
Parkway West Career & Technical Center	74

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	
At a minimum, each student is required to successfully complete the following:	
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 9 th and 10 th grades)
Arts & Humanities Electives	3 Credits
Electives	9 (7 required starting with class of 2023)
Advisory	1 Credit (.25 per year)
26 Credits are required for graduation beginning with the Class of 2023	
28 Credits are required for graduation for Classes 2021 & 2022	

**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

9th grade	8.00 credits (includes 0.25 Advisory units)
10th grade	8.00 credits (includes 0.25 Advisory units)
11th grade	7.50 credits (includes 0.25 Advisory units)
12th grade	7.50 credits (includes 0.25 Advisory units)

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 (2021, 2022)

Course/Credits Required	9th	10th	11th	12th
<i>English (4)</i>				
<i>Math (3)</i>				
<i>Social Studies (3)</i>				
<i>Science (3)</i>				
<i>Health (1)</i> <i>(.5 - 9th .5 - 10th)</i>				
<i>Physical Education (1)</i> <i>(.25 per year 9-12)</i>				
<i>Arts & Humanities (3)</i>				
<i>Electives (9)</i>				
<i>Advisory (1)</i> <i>(.25 per year 9-12)</i>				
<i>Total Required (28)</i>				

Graduation Credit Planner (2023 and beyond)

Course/Credits Required	9th	10th	11th	12th
<i>English (4)</i>				
<i>Math (3)</i>				
<i>Social Studies (3)</i>				
<i>Science (3)</i>				
<i>Health (1)</i> <i>(.5 - 9th .5 - 10th)</i>				
<i>Physical Education (1)</i> <i>(.25 per year 9-12)</i>				
<i>Arts & Humanities (3)</i>				
<i>Electives (7)</i>				
<i>Advisory (1)</i> <i>(.25 per year 9-12)</i>				
<i>Total Required (26)</i>				

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.

The class of 2021 will have no Keystone requirement in order to graduate. Students in the class of 2021 will need only to meet Chartiers Valley High School graduation requirements.

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 2019.
- 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

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

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	11:15-11:19
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

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	412.429.2268	lkunkel@cvsd.net
Mrs. Leah O'Malley, Counselor last names G - N	412.429.2629	lomalley@cvsd.net
Mrs. Danyelle Boyd, Counselor last names O - Z	412.429.2271	dboyd@cvsd.net
Ms. Melissa Demchak, Social Worker	412.429.7036	mdemchak@cvsd.net
Ms. Molly Clokey, Attendance Secretary	412.429.2270	mclokey@cvsd.net
Ms. Sherri Gillim, Secretary	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, 2021.

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 five (5) 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 5th 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, 2021. 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
<i>Financial Literacy</i>	<i>Job Searching & Interviewing</i>	<i>College or Alternative Scavenger Hunt</i>	<i>Job Interviewing, Resume Review and Mock Interviews</i>
<i>Personality Type and Career Exploration</i>	<i>Financial Literacy</i>	<i>Local Career Opportunities</i>	<i>Financial Literacy</i>
<i>Intro to Resumes</i>	<i>Career Clusters</i>	<i>Resume Writing Review</i>	
<i>Parkway West CTC Informational Presentation</i>	<i>Roadtrip Nation Career Exploration</i>	<i>Career Relocation Project</i>	
<i>Entrepreneurship</i>	<i>Career Interest Inventory</i>		
<i>Career Interview</i>	<i>Career Research Paper</i>		

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>



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 Point Average*	Honors & CiHS Courses	Advanced 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		Mathematics	
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), Carlow University 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:

- Advanced Video Broadcasting (*Point Park*)
- AP Psychology (*Dual Described –University of Pgh*)
- AP Spanish 4 (*Dual Described Duquesne University*)
- AP Statistics (*Dual Described – Duquesne University*)
- C++ (*Duquesne University*)
- Calculus (*Duquesne University*)
- Chemistry (*Duquesne University*)
- All PLTW Courses (*Rochester Institute of Technology*)
- Communications/Rhetoric (*University of Pittsburgh*)
- Computer Assisted Design 1 & 2 (CCAC)
- French 4 (*Duquesne University*)
- German 4 (*Duquesne University*)
- Principles of Accounting (*Carlow University*)
- Shaping of the Modern World (*Duquesne University*)
- CiHS Advanced Video Broadcasting (*Point Park*)

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

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.

Honors Courses

5.0 Weighted Scale

English		Science		Mathematics	
1132	Honors English 9/Composition 1	3133	Honors Biology	2143	Honors Algebra 2
1232	Honors English 10/Composition 2			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 consultation with the teachers.

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.

As of 2019-2020 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. 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.

Class Rank (2021 & 2022 Classes only) ([Back to Menu](#)) ([Go to Course Lists](#))

Official class rank is determined three times, at the end of the junior year, at the end of the third quarter during the senior year, and at the end of the senior year. All students are ranked together.



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 |
| ● Digital Electronic (DE) | 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 | Full Year | |

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 <i>Intro to Engineering Design</i>	6601	Manufacturing Tech 1 <i>Materials & Construction</i>	6503	MMT 3A <i>Advanced Graphic Design & Photography</i>
6801	Engineering 2 <i>Principles of Engineering</i>	6602	Manufacturing Tech 2A <i>Mass Production</i>	6509	CiHS Advanced Video Broadcasting
6611	Engineering 3 <i>Computer Integrated Manufacturing</i>	6302	Manufacturing Tech 2B <i>Metals & More</i>	6800	MakerLab@AET
6815	Engineering 4 <i>Engineering Design & Development</i>	6605	Manufacturing Tech 3 <i>Product Factory</i>	6823	CiHS Computer Assisted Design 1 (CAD1)
6825	Environmental Sustainability	6501	MMT 1 <i>VisCom & Video Basics</i>	6824	CiHS Computer Assisted Design 2 (CAD2)
6802	Civil Engineering & Architecture	6502	MMT 2A <i>Graphic Design & Photography</i>	6301	Transportation Systems
6612	Digital Electronics	6826	Applied Environmental Sustainability	6813	Robotics

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	7480	Advanced Digital Art & Design
7116*	Ceramics 2	7114*	Painting 2	7455	Honors Digital Art
7117*	Ceramics 3	7115*	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 Accounting	6070	Business Law	6009	Succeeding in the World of Work
6055	Accounting 1B	6060	Design, Multimedia, & Web Technologies	6080*	Sports and Entertainment Marketing
6005	Financial Accounting	6015	CiHS Principles of Accounting		
6051	Foundations of Personal Finance	6065	Marketing Dynamics		
6050	Introduction to Business Concepts	6088	GD3: Advanced Game Marketing & School Store		

Career & Community Learning Opportunities

6092	Peer Learning Assistant	6090	Work Experience		
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<u>Computer Science</u>					
6062	AP Computer Science Principles	2653	CiHS C++	2612	Introduction to Computer Programming
2635	AP Computer Science A	6021	Cybercrime and Digital Forensics	2614	Computer Programming Applications
2613	GD3: Game Development	2650	Introduction to C#		

<u>English</u>					
1111	English 9/Composition 1	1350	AP Language & Composition	1365	AP Research
1131	English 9 Advanced/Composition 1	1422	World Literature 12/Composition 4	1509	Media Writing and Public Relations
1132	Honors English 9/Composition 1	1426*	Advanced World Literature 12: Voices in World Lit & College Writing	1503	SAT Prep
1211	English 10/Composition 2	1355	AP Literature & Composition	1506	Public Speaking
1231	English 10 Advanced/Composition 2	1502	CiHS Communications/Rhetoric	1507	Creative Writing
1232	Honors English 10/Composition 2	1532	Journalism/Yearbook	1508	Shakespeare and the Origins of the Modern Hero
1322	American Literature Composition 3/11	1542	Yearbook Production	1504	CiHS Introduction to Film
1325	Advanced Language & Composition/11	1360	AP Seminar	1510*	Introduction to Screenplay Writing

<u>Family & Consumer Science</u>					
8511	Introduction to the World of Food and Nutrition 1	8501	Child Development and Family Relations	8506	Early Childhood Practicum 2
8512	Ethnic and Regional Cuisine and Nutrition 2	8505	Early Childhood Practicum 1	8508	Primary School Practicum
8513*	Culinary Arts & Food Science	8520*	Introduction to Interior Design		

<u>Mathematics</u>					
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 & Statistics in Sports
2143	Honors Algebra 2	2403	Honors Pre-Calculus		

<u>Performing Arts</u>					
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
7531	Jazz Ensemble	8055	Modern & Jazz Dance 5		
8040	Introduction to Dance	8051	Majorettes – Drill Team – Dance Troupe – Dance Production		

Physical Education

8032	Physical Education (4 days)	8034	Lifetime Activities (2 days)	8038	Partners in Physical Education (2 Days)
8025	Health (4 days)	8027	Drivers Theory (5 days)		Dance (See Performing Arts)
8033	Adventure Activities (2 days)	8036	Sports Officiating and Principles of Coaching		

Science

3221	Biology Lab	3341	AP Chemistry	3455	AP Physics C: Electricity and Magnetism
3133	Honors Biology	3350	Anatomy & Physiology	3442	AP Biology
3222	Biological Applications	3421	Practical Physics	3355	Principles of Biomedical Science (PBS)
3321	Applied Chemistry	3441	AP Physics 1	3360	Human Body Systems (HBS)
3331	Chemistry w/ Lab	3445	AP Physics 2	3365	Medical Interventions
3340	CiHS Chemistry	3450	AP Physics C: Mechanics	3370	Biomedical Innovation

Social Studies

4000	Development of the United States	4345	Shaping of the Modern World	4406	Economics
4002	Honors - Development of the United States	4346	AP U.S. Government and 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 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 through Contemporary Topics
5021	German 1	5110	Spanish 2		

Parkway West Career & Technical Center

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

* = 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 Tech@AET	Make and Model@AET
Engineering 1 <i>Intro to Engineering Design</i>	Manufacturing Tech 1 <i>Materials & Construction</i>	MMT 1 <i>VisCom & Video Basics</i>	MakerLab@AET
Engineering 2 <i>Principles of Engineering</i>	Manufacturing Tech 2A <i>Mass Production</i>	MMT 2A <i>Graphic Design & Photography</i>	CiHS Computer Assisted Design 1 (CAD1)
Engineering 3 <i>Computer Integrated Manufacturing</i>	Manufacturing Tech 2B <i>Metals & More</i>	MMT 3A <i>Advanced Graphic Design & Photography</i>	CiHS Computer Assisted Design 2 (CAD2)
Engineering 4 <i>Engineering Design & Development</i>	Manufacturing Tech 3 <i>Product Factory</i>	CiHS Advanced Video Broadcasting	Transportation Systems
Environmental Sustainability			Robotics
Civil Engineering & Architecture			AG@AET
Digital Electronics			Applied Environmental Sustainability

Engineering @AET

Engineering 1 *Intro to Engineering Design	6811	PLTW CiHS	1 Credit	5.0 Weight	Year
Course Description	Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3-D modeling software, and use an engineering notebook to document their work.				
Prerequisites	<ul style="list-style-type: none"> Completed Algebra 1 or Teacher Recommendation Grades 9, 10, 11, 12 				

Engineering 2 *Principles of Engineering	6801	PLTW CiHS	1 Credit	5.0 Weight	Year
Course Description	Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.				
Prerequisites	<ul style="list-style-type: none"> Algebra 2 with a 70% or higher. Open to grades 10, 11, & 12 				

Engineering 3 *Computer Integrated Manufacturing		6611	PLTW CiHS	1 Credit	5.0 Weight	Year
Course Description	Manufactured items are part of everyday life, yet most students have not been introduced to the high-tech, innovative nature of modern manufacturing. This course illuminates the opportunities related to understanding manufacturing. At the same time, it teaches students about manufacturing processes, product design, robotics, and automation. Students can earn a virtual manufacturing badge recognized by the National Manufacturing Badge system.					
Prerequisites	<ul style="list-style-type: none"> Completion of Intro to Engineering Design Teacher recommendation 					

Engineering 4 *Engineering Design & Development		6815	PLTW CiHS	1 Credit	5.0 Weight	Year
Course Description	The knowledge and skills students acquire throughout PLTW Engineering come together in Engineering Design and Development as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing Engineering Design and Development ready to take on any post-secondary program or career.					
Prerequisites	<ul style="list-style-type: none"> Completion of IED & POE Concurrent enrollment in college preparatory mathematics. 					

Environmental Sustainability		6825	PLTW CiHS	1 Credit	5.0 Weight	Year
Course Description	In Environmental Sustainability, students investigate and design solutions in response to real-world challenges related to clean and abundant drinking water, food supply, and renewable energy. Applying their knowledge through hands-on activities and simulations, students research and design potential solutions to these true-to-life challenges.					
Prerequisites	<ul style="list-style-type: none"> Students will have completed Biology with a 70% or higher. Open to grades 10, 11, & 12 					

Civil Engineering & Architecture		6802	PLTW CiHS	1 Credit	5.0 Weight	Year
Course Description	Students learn important aspects of building and site design and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3-D architectural design software.					
Prerequisites	<ul style="list-style-type: none"> Open to grades 10, 11, & 12 Teacher Recommendation 					

Digital Electronics		6612	PLTW CiHS	1 Credit	5.0 Weight	Year
Course Description	From smartphones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices.					
Prerequisites	<ul style="list-style-type: none"> Completion of Principles of Engineering Open to grades 11, & 12 Teacher recommendation 					

Manufacture@AET

Manufacturing Tech 1 *Materials & Construction		6601		1 Credit	NonWeighted	Year
Course Description	<p>This year long course provides a foundation for the AET department and introduces students to the proper use of tools in the laboratory. This course is designed to instruct students in the areas of reading project drawings, knowledge of materials and uses, calculations of materials, and project procedures. A major emphasis will be placed on shop safety, proper hand and power tool usage.</p> <p>This course provides students with an in-depth introduction to the shop and students will gain practical knowledge needed to work on their own projects or continue on with lifelong skills in fabrication and construction. Students will construct various teacher assigned projects, as well as create, design and build personal projects of their choice with teacher guidance and close supervision.</p> <p>The course also provides students with a broad analysis of the organization and structure of the residential construction industry and the many career choices the industry offers. Students will study the current construction methods and materials used for various types of residential structures. This course introduces site development, preparation, job layout, materials and methods for construction.</p>					
Prerequisites	<ul style="list-style-type: none"> • None • Grades 9, 10, 11 & 12 					

Manufacturing Tech 2A *Mass Production		6602		1 Credit	NonWeighted	Year
Course Description	<p>Students will explore manufacturing systems and the development of small, mass produced projects in the lab. Students will learn the safe operation of tools and machines to process various materials. The use of automated CNC technology, such as routers, plasma cutters, laser engravers and the associated software for both wood and metal, will be utilized by the students. Students may be asked to work on projects in a mass production setting, where each student completes one part of a production in an assembly line, as well as individual and small group projects.</p>					
Prerequisites	<ul style="list-style-type: none"> • Successful completion of Manufacturing Tech 1 • Teacher Recommendation • Grades 10, 11, 12 only 					

Manufacturing Tech 2B *Metals and More		6302		1 Credit	NonWeighted	Year
Course Description	<p>Metals and More is a course focused on the techniques of metal design and fabrication Coursework will be based upon current trends in the industrial world with a focus on MIG Welding and CNC Plasma cutting. Successful students will be able to work through a problem, design a solution, and build the answer. Students will be exposed to many different industrial technologies such as cutting, welding, bending, threading, shearing and soldering all with a strong emphasis on industrial safety. Students will also learn about and integrate current technologies into their projects, such as CNC, 3D Printing, CAD, CNC Laser and more. Students may be asked to work alone or in teams to create quality products to be displayed with pride knowing it was created with their own hands.</p>					
Prerequisites	<ul style="list-style-type: none"> • Successful completion of Manufacturing Tech 1 • Grades 10, 11 & 12 only • Teacher recommendation 					

Manufacturing Tech 3 *Product Factory		6605		1 Credit	NonWeighted	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 routing, that are available in the AET department					
Prerequisites	<ul style="list-style-type: none"> • Makerlab@AET or CADD 1 • Manufacturing Tech 1 • Manufacturing Tech 2A or Manufacturing Tech 2B 					

MultiMedia Tech@AET

MMT 1 *VisCom & Video Basics		6501		1 Credit	NonWeighted	Year
Course Description	This year long course is intended to give each student experience and exposure to different areas of visual communication and video production. Topics include: digital Photography, image manipulation, screen printing t-shirts, vinyl decal production, video production and offset press printing. All projects will be designed using Adobe ® CC products, including Photoshop, Illustrator and Premiere Pro. If you enjoy taking pictures, designing, creating, filming, making and doing things, this course is for you. The video aspect of this course will teach students how to make and edit video clips using Adobe Premiere Pro. Students will work individually and collaboratively to create and present a weekly morning show that will air on YouTube and Twitter.					
Prerequisites	<ul style="list-style-type: none"> • None 					

MMT 2A *Graphic Design & Photography		6502		1 Credit	NonWeighted	Year
Course Description	This year-long course is an extension of the popular VisCom section of VisCom and Video Basics. This exciting course encourages creativity with projects that are challenging, rewarding and fun. Each student will learn advanced techniques in Adobe Illustrator, Photoshop and Lightroom. Projects include multi-colored vinyl decals and t-shirts, glass etching, photography, image manipulation and 3D Printing. Digital photography is covered for one semester and you will do many projects using a high-end digital camera. If you enjoyed VisCom this course is for you, or if you are considering a career in graphics/photography then this course is a must. This course is a Technology Credit.					
Prerequisites	<ul style="list-style-type: none"> • 75% or better in MMT 1 (VisCom and Video Basics) 					

MMT 3A *Advanced Graphic Design & Photography		6503		1 Credit	NonWeighted	Year
Course Description	This year-long course is an extension of the Graphic Design and Photography course. This course expects a high level of creativity and a willingness to “think outside the box”. Projects are challenging and require more time and thought to complete. Projects include multi-colored vinyl decals and t-shirts, glass etching, photography, image manipulation and 3D Printing. Each student will continue to learn advanced techniques in Adobe Illustrator, Photoshop and Lightroom. This is the perfect course for the designer, artist, and creator. This course is a must if you are considering a career in graphic design, photography, marketing or advertising. This course is a Technology Credit.					
Prerequisites	<ul style="list-style-type: none"> Teacher Recommendation 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 of film production, and act in many rolls throughout the course. Students will operate a program play out server, and a graphic generator for the message board. Students will need leadership skills to effectively produce high level television shows to air on Comcast and Verizon local broadcast.					
Prerequisites	<ul style="list-style-type: none"> Teacher Recommendation 75% or better in Introduction to VisCom and Video Basics 					

Make and Model@AET

MakerLab@AET		6800		1 Credit	NonWeighted	Year
Course Description	<p>Makerspaces are creative, DIY spaces where people can gather, to create, invent, and learn. Students will be able to use 3D printers, software, electronics, craft supplies, and tools to develop their designs and bring them to life. Drawings that previously ended on paper will transform into 3D products. Students will learn the process of solving a technological problem, model a solution, and develop a working prototype.</p> <p>This introductory level course is appropriate for 9-12 grade students who are interested in design and engineering. Students will have the opportunity to develop skills and understanding of course concepts through activity, project, as well as problem-based learning, used in combination with a teaming approach. This course assumes no previous knowledge or prerequisite.</p>					
Prerequisites	<ul style="list-style-type: none"> None Open to grades 9, 10, 11, & 12 					

CIHS Computer Assisted Drawing 1 (CAD1)		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 to use the computer as a drafting tool to meet today's demand for computer literate draftsmen and engineers. Students will implement industry standard Autodesk applications. Students will create scaled 3d models of some of their designs using various materials to simulate a working architectural model.					
Prerequisites	<ul style="list-style-type: none"> Open to grades 9, 10, 11, & 12 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 applications in Computer Aided Drafting and Architectural Design Technologies. Areas of study will include, but are not limited to: geometric construction, orthographic projection, advanced practices in dimensioning, sectioning, auxiliary view systems, pictorial systems, architectural drawings, and computer aided drafting. This will result in the development of skills for a career in architectural planning, design, and drawing. Students will also be given the opportunity to receive a certificate of proficiency through Autodesk.					
Prerequisites	<ul style="list-style-type: none"> 75% or better in CAD 1 Teacher Recommendation 					

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

Robotics		6813		1 Credit	NonWeighted	Year
Course Description	This year long course will introduce students to the design, construction, and programming of robotic systems. Students will acquire a basic understanding of the many types and operational capabilities of robots, as well as the programming, and use of robots in manufacturing. Teamwork and problem solving will be emphasized throughout the course. Students will also have the opportunity to compete in various robotic competitions. This course provides a great foundation for students interested in the extra-curricular activity, FIRST Robotics, that allows students to designs and build a robot for competition					
Prerequisites	<ul style="list-style-type: none"> Open to grades 9, 10, 11, & 12 					

AG@AET

Applied Environmental Sustainability		6826		1 Credit	NonWeighted	Year
Course Description	This year-long project-based course focuses on the development of environmentally sustainable systems and their integration into our lives, schools, and communities. The guiding principles in this course are the designing, building, and testing of various systems that could potentially resolve real-world problems while expanding upon Global Standards. Specifically, the goal of the course is to afford students the opportunity to gain hands-on experience in the areas of environmental sustainability for a better tomorrow, safe and abundant water, food security and renewable energy. Students will use content and concepts from the Environmental Sustainability course to design and create systems that reinforce the concepts previously learned. A review of the relevant material will help all students succeed, thus, any student in grades 9-12 will be able to participate in the course.					
Prerequisites	<ul style="list-style-type: none"> Open to grades 9, 10, 11, & 12 					

[\(Back to All Course List\)](#)



Art



[\(Back to All Course List\)](#)

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 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. <ol style="list-style-type: none"> Video Game Art (Art Department Offering) Game Development (Computer Science Department Offering) Advanced Game Marketing (Business Department Offering) 				

* = New Course



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

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

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

Ceramics	7104		.5 Credit	NonWeighted	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	<ul style="list-style-type: none"> • None 				

Ceramics 2	7116		.5 Credit	NonWeighted	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	<ul style="list-style-type: none"> • 10th, 11th and 12th Grade • Student must receive 90% or better in Ceramics 1 • Teacher Recommendation 				

Ceramics 3	7117		.5 Credit	NonWeighted	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	<ul style="list-style-type: none"> • 10th, 11th and 12th Grade • Student must receive 90% or better in Ceramics 2 • Teacher Recommendation 				

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

Digital Art & Design		7476		.5 Credit	NonWeighted	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	<ul style="list-style-type: none"> None 					


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

Drawing 2		7112		.5 Credit	NonWeighted	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	<ul style="list-style-type: none"> None 					

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

Painting		7108		.5 Credit	NonWeighted	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	<ul style="list-style-type: none"> None 					

Painting 2		7114		.5 Credit	NonWeighted	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 gouache, watercolor pencils and oil paints.					
Prerequisites	<ul style="list-style-type: none"> 10th, 11th and 12th Grade Student must receive 90% or better in Painting 1 Teacher Recommendation 					

Painting 3		7115		.5 Credit	NonWeighted	Semester
Course Description		A Semester long course that will enable the student to develop and hone his/her skills in their area of interest in regards to paint medium, subject matter and style. Emphasis will be placed on creating a cohesive and coherent body of work and artist statement explaining rational for work.				
Prerequisites		<ul style="list-style-type: none">● 10th, 11th and 12th Grade● Student must receive 90% or better in Painting 2● Teacher Recommendation				

Printmaking		7109		.5 Credit	NonWeighted	Semester
Course Description	Printmaking is an introductory studio course that will provide students with the opportunity to learn the various methods of creating multiple copies from a single image through the printmaking process. Drypoint etching, linoleum reduction print, monoprint and collagraph printmaking are a few of the techniques that will be practiced in class. Students will be immersed in the distinctive nature of printmaking including the study of tools, inks, paper, plate preparation, registration, printing processes and qualities of prints e.g overlays, transparency, offset, and multiple images. Historical relevance and contemporary interpretation of the printmaking process will be discussed in relation to student work.					
Prerequisites	<ul style="list-style-type: none"> • None 					

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

Senior Studio Art		7401		1 Credit	NonWeighted	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	<ul style="list-style-type: none"> • Must be a senior • Successfully completed 3 prior art courses • Teacher recommendation 					

AP Studio Art		7460	AP	1 Credit	5.5 Weight	Year
Course Description	This course is designed for the student seriously interested in the practical experience of art. Students will create a portfolio of works including drawing, painting, printmaking and mixed media, which will be submitted to the College Board for evaluation at the end of the year. For a full course description please visit: http://apcentral.collegeboard.com					
Prerequisites	<ul style="list-style-type: none"> • 80% in Art 3 • Teacher recommendation 					

Advanced Digital Art & Design		7480		1 Credit	NonWeighted	Year
Course Description	Along with deeper exploration into digital fine art techniques, styles and processes, this course will focus on design principles and elements to advance students' digital vocabulary. Individual style and artistic voice will be examined and developed as students delve into the digital art realm. Students will utilize digital painting, image manipulation, compositing, vector drawing, animation, image transfer, and traditional/digital art hybrids will be explored and students will develop their own work methods and processes.					
Prerequisites	<ul style="list-style-type: none"> 90% in Digital Art & Design Teacher recommendation 					

Honors Studio Art		7445	Honors	1 Credit	5.0 Weight	Year
Course Description	This is a preparatory course designed for 11 th grade students who are interested in taking AP Studio Art in their senior year. Students will build upon and utilize prior drawing and painting skills and techniques in order to begin creating a personalized Drawing Portfolio. All course work will foster individualized creative problem solving, wherein students will be responsible for theme ideas and drawing styles. This course will lay the groundwork for the AP Studio Art course by giving students a head start in creating a portfolio that is reflective of a unique and personal artistic voice.					
Prerequisites	<ul style="list-style-type: none"> 90% in any previous art course and teacher recommendation 					

Honors Digital Art		7455	Honors	1 Credit	5.0 Weight	Year
Course Description	This is a preparatory course designed for 11 th grade students who are interested in taking AP Digital Art in their senior year. Students will build upon and utilize prior digital multimedia concepts and techniques in order to begin creating a personalized design portfolio. All course work will foster individualized creative problem solving, wherein students will be responsible for all stylistic and design considerations. This course will lay the groundwork for the AP Digital Art course by giving students a head start in creating a portfolio that is reflective of a unique and personal artistic voice.					
Prerequisites	<ul style="list-style-type: none"> 90% in Digital Art & Design 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. Students will create a portfolio of works that focus on utilizing techniques in digital art and multimedia. Please visit http://apcentral.collegeboard.com for a full course description.					
Prerequisites	<ul style="list-style-type: none"> 12th grade 80% in Digital Art Teacher recommendation 					

Game Design Triad (GD3): Video Game Art		7481		1 Credit	NonWeighted	Year
Course Description	The Character & Graphic Development course will serve as the asset creation leg of the courses. Students will learn about, create, and develop the various visual graphic elements (characters, backgrounds, objects, start screens, etc.) needed for a multitude of game styles. In the end, students will provide the necessary handmade assets that their peers in the Game Creation course will use in the final game itself.					
Prerequisites	<ul style="list-style-type: none"> None 					

[\(Back to All Course List\)](#)



Business



[\(Back to All Course List\)](#)

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	6070	Business Law
6055	Accounting 1B	6015	CiHS Principles of Accounting
6005	Financial Accounting	6065	Marketing Dynamics
6051	Foundations of Personal Finance	6009	Succeeding in the World of Work
6050	Introduction to Business Concepts	6080*	Sports and Entertainment Marketing
6060	Design, Multimedia, & Web Technologies		
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. <ul style="list-style-type: none"> a. Character & Graphic Development (Art Department Offering) b. Game Development (Computer Science Department Offering) c. Advanced Game Marketing & School Store (Business Department Offering) 		

* = New Course



Introduction to Accounting		6010		1 Credit	NonWeighted	Year
Course Description	Since it is known as the <i>Language of Business</i> , 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	<ul style="list-style-type: none"> None 					

Accounting 1B		6055		1 Credit	NonWeighted	Year
Course Description	Accounting 1B is a continuation and expansion of the concepts introduced in Introduction to Accounting. However, the emphasis is on understanding the complete accounting cycle for a business operated as a corporation. Corporate business transactions will be analyzed, classified, and recorded using both manual and computerized accounting systems. The fundamental principles of double-entry bookkeeping along with subsidiary ledgers and special journals, payroll accounting, planning and recording account allowances and adjustments, and preparing and analyzing corporate financial information will be discussed. Enrollment in this course will add to your solid foundation of accounting basics and further assist with the transition to college-level accounting principles.					
Prerequisites	<ul style="list-style-type: none"> Introduction to Accounting 					

Financial Accounting		6005		1 Credit	NonWeighted	Year
Course Description	Highly motivated accounting students will most benefit from Financial Accounting. This course will provide the theoretical background necessary for students who are planning on a career in any business-related field. Students will be introduced to the basic concepts of financial accounting that includes the preparation, interpretation, and utilization of financial statement data. A working knowledge of accounting and financial reports is an asset to any enterprise with which one is associated. Prerequisites					
Prerequisites	<ul style="list-style-type: none"> Teacher recommendation 					

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

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

Design, Multimedia, & Web Technologies		6060		.5 Credit	NonWeighted	Semester
Course Description	Students will gain a basic understanding of effective digital communication skills and the importance of the design process as it pertains to communicating via the web. Exploration of the design process from the development of the original idea to the implementation of the final working website will be a focus. Additionally, students will create websites using HTML (Hyper Text Markup Language) as well as utilize state of the art software that will allow further customization of their websites. This course is open to all grade levels.					
Prerequisites	<ul style="list-style-type: none"> None 					

Business Law		6070		1 Credit	NonWeighted	Year
Course Description	Business Law is a yearlong course designed to introduce students to the principles of law and the ethics involved, the processes of our legal system, and the impact of legal decisions and their relevance to employers in the daily operation of a business. This project based course focuses on 4 major operations research based projects.					
Prerequisites	<ul style="list-style-type: none"> Intro to Business (recommended) 					


[\(Back to All Course List\)](#)

CiHS Principles of Accounting		6015	CiHS	1 Credit	5.0 Weight	Year
Course Description	This College in the High School course is an introduction to the basic concepts of accounting, emphasizing the accounting cycle; principles and concepts governing the recording and reporting of accounting data; journal entries including adjusting and closing entries; trial balances; and financial statements. Accounting for assets is covered in detail. The focus of this course is on sole proprietorships. College credit may be earned if all requirements are met; a fee is attached to earning college credit. (from Carlow University Undergraduate Course Catalog 2014-2015)					
Prerequisites	<ul style="list-style-type: none"> None 					

Game Design Triad (GD3): Advanced Game Marketing & School Store		6087		1 Credit	NonWeighted	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	<ul style="list-style-type: none"> 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	NonWeighted	Year
Course Description	Designed for students who are interested in the field of marketing, this course provide an in-depth look into marketing theories, approaches and functions. Students will also have the opportunity to investigate the marketing approaches used in various media. Also incorporated are the development of the thought process and skills needed to successfully market a new product, develop new products, and gather product and customer research. The second half of the year will focus on implementing and analyzing the concepts learned through projects, simulations, and hands-on applications. Students will be given the opportunity to expand their acquired basic knowledge by exploring more specific concepts, career opportunities, and current issues facing many different areas of marketing (including sports and entertainment, hospitality, travel and tourism, internet, and retail). This course is open to all grade levels.					
Prerequisites	<ul style="list-style-type: none"> None 					

Succeeding in the World of Work		6009		1 Credit	NonWeighted	Year
Course Description	<i>Succeeding in the World of Work</i> is a year-long course that provides students who are currently working or who plan to gain employment in the near future with the fundamentals of employment and strategies for success in the workforce utilizing a co-teaching model. Students explore and study areas including on-the-job and employment skills, communication and personal skills, daily work skills, ethics, diversity, personal finance, the job cycle, and independent living. <i>Succeeding in the World of Work</i> provides students with the knowledge and skills needed to make a smooth transition into the workforce. This class is geared to help students become intellectually energized in a dynamic and challenging atmosphere that engages and motivates students to a higher academic and personal level.					
Prerequisites	<ul style="list-style-type: none"> None 					

Sports and Entertainment Marketing		6080		.5 Credit	NonWeighted	Semester
Course Description		Sports and Entertainment Marketing is a semester specialized course designed to offer students an opportunity to gain knowledge and develop skills related to the growing sports and entertainment industry. In this course, students acquire transferable knowledge and skills related to the industry of sports, entertainment, and event marketing. Students will develop skills in the areas of merchandising, advertising, public relations/ publicity, event marketing, sponsoring, ticket distribution, and career opportunities as they relate to the sports and entertainment industry.				
Prerequisites		<ul style="list-style-type: none"> Intro to Business (recommended) 				



Career & Community Learning Opportunities



ID	Course Name	ID	Course Name	ID	Course Name
6092	Peer Learning Assistant	6090	Work Experience		

Peer Learning Assistant		6092		.5 Credit	NonWeighted	Year
Course Description	This junior/senior level course will afford students the opportunity to develop and apply their leadership and academic skills that can be transferred to life beyond high school. Specifically, students can apply to become a technology support assistant, library peer manager, and/or academic tutor during available class periods. Designated students will help other students and assist instructors in these areas. This opportunity includes a competitive application and interview process with limited spots available based on set criteria and schedule availability. For more information, please go to: www.cvsd.net/1/Content/peerlearningassistant					
Prerequisites	<ul style="list-style-type: none"> • Must be in 11th or 12th grade • Recommendation from application committee 					

Work Experience		6090		1-3 Credits	NonWeighted	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	<ul style="list-style-type: none"> • 12th grade • Enrolled in 5 classes (including PE) • Counselor recommendation • Student training agreement 					

[\(Back to All Course List\)](#)



Computer Science



[\(Back to All Course List\)](#)

The Computer programming courses have strong connection to engineering, mathematics, and the sciences. Often, students choosing an engineering career in college will encounter a programming 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	2650	Introduction to C#
2653	CiHS C++	2612	Introduction to Computer Programming
		2614*	Computer Programming Applications
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. <ul style="list-style-type: none"> 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	6062	AP	1 Credit	5.5 Weight	Year
Course Description	<p>AP Computer Science Principles is designed to introduce students to the central ideas of computer science, instilling the ideas and practices of computational thinking and inviting students to understand how computing changes the world. This rigorous course promotes deep learning of computational thinking skills, and engages students in the creative aspects of the field.</p> <p>This course is unique in its focus in fostering on students to be creative. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using simulations to explore questions that interest them. Rather than teaching a particular programming language or tool, the course focuses on using technology and programming as a means to solve computational problems and creating exciting and personally relevant artifacts. Students design and implement innovative solutions using an iterative process similar to what artists, writers, computer scientists, and engineers use to bring ideas to life. <i>This course may be used as a math or science credit.</i></p>				
Prerequisites	<ul style="list-style-type: none"> • Successful completion of Geometry • Or Teacher Recommendation 				

AP Computer Science A	2635	AP	1 Credit	5.5 Weight	Year
Course Description	<p>A highly challenging course that is designed for the motivated student who is planning a career in computer science, business or any science-related fields. The Advanced Placement (AP) curriculum will be followed and includes an in-depth case study. Students are expected to participate in the AP exam which occurs in May. This exam requires a thorough knowledge of Java and its programming techniques. <i>This course may be used as a math or science credit.</i></p>				
Prerequisites	<ul style="list-style-type: none"> • Introduction to Computer Programming • Teacher recommendation 				

Game Design Triad (GD3): Game Development		2613		1 Credit	NonWeighted	Year
Course Description	Game Development is designed for aspiring game developers who want to gain a solid foundation in the game development/design process. Students will gain real world experience as they work in student teams to design games from the ground up in the Unity game engine. The Game Development class will serve as the design, development, and implementation of the game leg of the Game Design Triad. The Game development course should appeal to individuals who are good problem solvers and able to work as a productive member of a team.					
Prerequisites	<ul style="list-style-type: none"> None 					


CiHS C++		2653	CiHS	1 Credit	5.0 Weight	Year
Course Description	College in the High School C++ is affiliated with Duquesne University and college credit may be earned (purchased) for successful completion of this course. C++ is an advanced programming language that introduces the concepts of objects. This highly structured language enables the student to write code that is organized, precise, and clear. A prior programming language will be very useful in understanding the routines presented in the course. Often, C++ is the first course a freshman engineering/science major will encounter.					
Prerequisites	<ul style="list-style-type: none"> Introduction to Computer Programming Teacher recommendation 					

Cybercrime & Digital Forensics		6021		.5 Credit	4.0 Weight	Semester
Course Description	 The cybercrime & digital forensics course explores how existing criminal activity is conducted and how new criminal opportunities have been created. Students will examine the history and nature of computer-related crime and how societies have attempted to respond. Students will discuss the different types of cybercriminals, including motives, rationale, and methods of attack. Students will also evaluate various legal issues cyberspace including surveillance, sting operations, current and proposed legislation, user-reporting initiatives, identity filtering/blocking technologies, vigilante movements, individual rights, and international law enforcement cooperation.					
Prerequisites	<ul style="list-style-type: none"> None 					

Introduction to C#		2650		.5 Credit	NonWeighted	Semester
Course Description	This course is an introduction to fundamental computer concepts and includes programming techniques that use arrays and objects. The language syntax will be similar to C++ but will have a visual environment similar to Visual Basic. Students will have the necessary knowledge to conduct research into Microsoft's gaming component in C#. Upon successful completion of this course, students will be prepared for CIHS C++. Students will build a solid foundation for <u>game design and game development</u> that will help them to build their own games using the Unity game engine. This class will use C#, a powerful modern language. Upon successful completion of this course, students will be better prepared for the Game Design Triad.					
Prerequisites	<ul style="list-style-type: none"> Introduction to Computer Programming Teacher recommendation 					

[\(Back to All Course List\)](#)

Introduction to Computer Programming		2612		1 Credit	NonWeighted	Year
Course Description	This course will use curriculum written in partnership with professors and students at Carnegie Mellon University. In this course, Chartiers Valley students will have the opportunity to work with faculty and/or students from Carnegie Mellon University. Students will get a general introduction to programming techniques by studying errors, graphics, functions, events, loops, and strings. Students will begin learning python, and then the second semester will focus on broader topics and languages.					
Prerequisites	<ul style="list-style-type: none"> Enrolled in or completed Algebra 1 					

Computer Programming Applications		2614		1 Credit	NonWeighted	Year
Course Description	 This course will use curriculum written in partnership with professors and students at Carnegie Mellon University. It builds on the programming skills learned in introduction to computer science course covering additional programming and CS topics (such as sets and maps), and then applying and extending computational problem-solving skills in a variety of application areas. Units will apply computation to such areas as art, science, music, math, data analysis and visualization, simulations, game design, web applications, security, machine learning and artificial intelligence, and more.					
Prerequisites	<ul style="list-style-type: none"> Introduction to Computer Programming 					

[\(Back to All Course List\)](#)



English



[\(Back to All Course List\)](#)

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 Composition 3/11
1131	English 9 Advanced/ Composition 1	1231	English 10 Advanced/ Composition 2	1325	Advanced Language & Composition/11
1132	Honors English 9/Composition 1	1232	Honors English 10/ 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 12/Composition 4	1532	Journalism/ Yearbook	1509	Media Writing and Public Relations
1426	Advanced World Literature 12: Voices in World Literature & College Writing	1542	Yearbook Production	1503	SAT Prep
1350	AP Language & Composition	1502	CIHS Communications/ Rhetoric	1506	Public Speaking
1355	AP Literature & Composition			1507	Creative Writing
1360	AP Seminar			1508	Shakespeare and the Origins of the Modern Hero
1365	AP Research			1504	CIHS Introduction to Film
				1510*	Intro to Screenplay Writing

* = New Course



English 9/Composition 1	1111	1 Credit	NonWeighted	Year
Course Description	This course is an introduction to high school level composition and literature curriculum. Each student will further develop those skills needed for the rigors of high school level writing and critical thinking in response to fiction and non-fiction texts. Instruction will be geared to students' ability, such that they can develop the skills necessary to succeed at this level.			
Prerequisites	<ul style="list-style-type: none"> 8th grade performance data Teacher recommendation 			

English 9/Advanced Composition 1	1131	1 Credit	NonWeighted	Year
Course Description	This course is an introduction to high school level advanced composition and literature curriculum. Each student will further develop the skills necessary in accordance with PDE requirements, as well as those skills needed for the rigors of high school level writing and critical thinking in response to fiction and non-fiction texts. 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.			
Prerequisites	<ul style="list-style-type: none"> 8th grade performance data 			

	<ul style="list-style-type: none"> Teacher recommendation
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Honors English 9/Composition 1	1132	Honors	1 Credit	5.0	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	<ul style="list-style-type: none"> 85% or higher in 8th Grade Literature and English Teacher recommendation 				

English 10/Composition 2	1211		1 Credit	NonWeighted	Year
Course Description	The tenth grade English course is a continuation of the composition and literature curriculum of the high school. Students will read examples of all genres and begin to study them analytically. During this study, they will be encouraged to develop high school level writing, critical thinking and rhetorical methods in response to fiction and non-fiction texts.				
Prerequisites	<ul style="list-style-type: none"> 9th grade performance data Teacher recommendation 				

English 10 Advanced/Composition 2	1231	AP	1 Credit	NonWeighted	Year
Course Description	This course is a continuation of high school level advanced composition and literature curriculum. Students will explore the advanced elements of analytical writing as well as grammar and usage. Each student will further those skills needed for the rigors of high school level writing, critical thinking and rhetorical methods in response to fiction and non-fiction texts.				
Prerequisites	<ul style="list-style-type: none"> 9th grade performance data 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 Honors English 9 curriculum and is designed to prepare students for AP courses. An in-depth analysis of literary elements will be emphasized with a focus on traditional as well more modern selections of fiction and non-fiction. Students will learn more advanced methods of poetry analysis and be introduced to rhetorical methods and elements.				
Prerequisites	<ul style="list-style-type: none"> 80% in Honors English 9 or 90% in Advanced English 9 Teacher recommendation 				

American Literature Composition 3/11	1322		1 Credit	NonWeighted	Year
Course Description	The emphasis of this course is placed on the reading, writing, and research element of the Pennsylvania Core Standards. The course follows a thematic element of the "Coming of Age", which students often experience during this period of their life. Each unit will focus, reflect, and revolve around these unique themes associated with the coming of age in reference to direction in life, the responsibilities of a young adult, discovering oneself, etc. Literature will include novels, short stories and poetry selections from American literature.. Critical analysis essays, practical and career writing and projects, objective tests, and project based learning assignments will be utilized to evaluate student understanding as it correlates to the Common Core Standards.				
Prerequisites	<ul style="list-style-type: none"> 10th grade performance data Teacher recommendation 				

[\(Back to All Course List\)](#)

Advanced Language & Composition/11		1325		1 Credit	NonWeighted	Year
Course Description	The goal of this course is to have students read complex fiction and nonfiction texts and respond in writing that conveys depth of understanding and meaning. Students will develop close reading and critical thinking skills in order to identify and understand a writer's argument and methods of persuasion. Students will learn to construct original argumentation through the analysis of the techniques of rhetorical analysis, argumentation and synthesis. In addition, students will learn to write persuasively with evidence and meaningful commentary. Based on the curriculum for AP Language and Composition, the skills mastered in this course provide students with an analytical base which can be applied to all subject areas.					
Prerequisites	<ul style="list-style-type: none"> • 10th grade performance data • Teacher recommendation 					

World Literature 12/ Composition 4		1422		1 Credit	NonWeighted	Year
Course Description	Each unit of the course focuses on building literary skills that are needed in the post-secondary world. Analysis of fiction and non-fiction selections, in conjunction with grammar, vocabulary, and writing skills, will further develop student comprehension and the ability to communicate in both written and oral forms as required by the Pennsylvania core standards. In addition, students are prepared for post-secondary communication skills through project oriented assessments and career and practical writing assignments. These assessments reflect the student's ability to think critically, work independently as well as in a group, and to comprehend and respond to prompts related to fiction and non-fiction sources.					
Prerequisites	<ul style="list-style-type: none"> • 11th grade performance data • Teacher recommendations 					

Advanced World Literature 12 <i>Voices in World Literature & College Writing</i>		1426		1 Credit	NonWeighted	Year
Course Description	<p>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.</p> <p> 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.</p> <p>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.</p>					
Prerequisites	<ul style="list-style-type: none"> • 11th Grade Teacher Recommendation 					

[\(Back to All Course List\)](#)

AP Seminar		1360	AP	1 Credit	5.5 Weight	Year
Course Description	<p>AP Seminar is an elective course for 10th, 11th or 12th grade students taken on its own or as part of the AP Capstone™ Program. In AP Seminar, students investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop credible and valid evidence-based arguments. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, as well as design and deliver oral and visual presentations both individually and as part of a team. (AP Seminar, <i>College Board</i>, May 2016)</p> <p>In AP Seminar, students are assessed with two through-course performance tasks due at the end of April and a 2-hour end-of-course exam during the AP Exam administration window. All three assessments are summative and will be used to calculate a final AP score (using the 1 to 5 scale) for AP Seminar. (AP Seminar, <i>College Board</i>, May 2016)</p> <p>In order to be successful in this course, students must be able to manage their time effectively and to work productively and independently during class time.</p> <p>AP Seminar is a pre-requisite for AP Research. Sophomores and Juniors may elect to take the AP Research the following year as part of the AP Capstone™ Program requirements.</p>					
Prerequisites	<ul style="list-style-type: none"> 80% in Honors English, 75% in an AP English course or 90% in Advanced English Instructor approval required. Student must have demonstrated a strong work ethic and the ability to complete self-directed projects and to work well in a group. 					

AP Research		1365	AP	1 Credit	5.5 Weight	Year
Course Description	<p>AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000-5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense. (AP Research, <i>College Board</i>, 2017)</p>					
Prerequisites	<ul style="list-style-type: none"> AP Seminar is a prerequisite for AP Research. Completing AP Seminar and all its required assessment components is necessary for students to develop the skills to be successful in AP Research. (AP Research, <i>College Board</i>, 2017) Students must score a 3 or higher on the AP Seminar End of Course Exam to be eligible to take AP Research. Students need to sign an enrollment contract at the beginning of the year. If at the end of the first nine weeks the student is not progressing, the student must withdraw from the course and will be enrolled in another English class if AP Research is meeting the student's English requirement for the year or another elective. 					

[\(Back to All Course List\)](#)

AP Language & Composition		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 <i>AP Language and Composition Course and Exam Description</i> , 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	<ul style="list-style-type: none"> 80% in Honors English 10, 75% in an AP English course or 90% in Advanced English Teacher recommendation 					

AP Literature and Composition		1355	AP	1 Credit	5.5 Weight	Year
Course Description	Advanced Placement Literature and Composition is designed to develop reading, analysis and composition skills needed for college bound seniors. In this course, the students learn how to read works of literature perceptively and how to express their responses orally and in written compositions. Students will read novels, dramas, short stories and poetry from many literary periods, from the Renaissance to the very modern. Composition, primarily critical and expository, stresses frequent writing and careful revision, training the student to think and organize clearly and to be direct, lucid and supported by the text. Participation in whole class and small group discussions is essential. Students are expected to take the Advanced Placement exam given in May.					
Prerequisites	<ul style="list-style-type: none"> 80% in Honors English, 75% in an AP English course or 90% in Advanced English Teacher Recommendation 					

CiHS Communications/Rhetoric		1502	CiHS	1 Credit	5.0 Weight	Year
Course Description	<p>This course examines argument through the examination of various forms of communicative argumentation and debating techniques. Each unit will follow a series of themes or related issues in order to better understand and apply various forms of argumentation and debate. The development of argument techniques will be examined through classroom debates and forms of argument, visual/audible/published expression of argument, and development of critical thinking skills. In depth discussions in and out of the classroom setting, analysis and argumentation of socially charged documentaries and other forms of expression, as well as real life situational project challenges are an integral part of the course.</p> <p>The class is a College in High School course and there is an option to receive three credits from The University of Pittsburgh. Since this course is articulated through the University of Pittsburgh, there is a fee involved for students who want to earn college credits. Class attendance is imperative to receive college credits.</p>					
Prerequisites	<ul style="list-style-type: none"> 75% in English English teacher recommendation 					

[\(Back to All Course List\)](#)

Journalism/Yearbook		1532		1 Credit	NonWeighted	Year
Course Description	This course will teach the basic skills needed to produce the Chartiers Valley yearbook, <i>Nexus</i> . Students will gain an understanding of how to use desktop publishing software to create the book. Students will also learn skills including creating layouts, writing copy and captions, editing photos, interviewing techniques, taking pictures and managing a business. As yearbook production is a business, fundraising is a required part of the curriculum. Additionally, students must be available to attend events outside of the school day to take photographs and report on school events. This course will also emphasize an understanding of the concepts of a yearbook as a story of one year, as a history or permanent record of one school year, as a reference book, and as a public relations tool. 10th and 11th grade students are expected to take Yearbook Production the following year.					
Prerequisites	<ul style="list-style-type: none"> • 10th and 11th grade • 80% in English • Teacher recommendation 					

Yearbook Production		1542		1 Credit	NonWeighted	Year
Course Description	Students who select this elective course will assume the responsibility as staff editors of the yearbook. They will design, manage, seek advertising, and produce the Chartiers Valley yearbook. Organizing, running and participating in fundraisers is a requirement of this course. Also, attendance at weekly afterschool meetings is required.					
Prerequisites	<ul style="list-style-type: none"> • 80% in Journalism/Yearbook 1 • Teacher recommendation 					

Media Writing and Public Relations		1509		.5	NonWeighted	Semester
Course Description	Media writing will focus on different modes of writing related to career opportunities, including press releases, news scripts, copy, social media, and radio/television/podcasts. We will stress clear communication of an idea through voice, word choice, speech, body language, delivery technique, and organization. This course would allow students to continue their development as writers. Media writing reinforces many of the skills required of students in their regular English courses - researching, word choice, style, organization. In this course, students will strengthen these skills as they combine them with a more nuanced form of writing for media. The ability to communicate effectively, concisely, and appropriately is important regardless of career choice, and this course will provide experience in a multitude of modes to create intentional communication.					
Prerequisites	<ul style="list-style-type: none"> • None 					

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

[\(Back to All Course List\)](#)

SAT Prep		1503		.5	NonWeighted	Semester
Course Description	This semester SAT Prep course is specific to <u>college bound students who plan to take the SAT in the next few months or have taken the SAT and plan to re-take it</u> . 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.					
Prerequisites	<ul style="list-style-type: none"> Students must have completed Honors 9 or 10 English coursework with a C+ or higher, advanced 10 with a B or higher, AP 11 English coursework with a C+ or higher or advanced 11 English with a B or higher. 					

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

Shakespeare and the Origins of the Modern Hero		1508		.5	NonWeighted	Semester
Course Description	This course is a semester course in which students will read and watch renditions of Shakespeare's plays. The focus of our study will be on the development of the heroes and villains in Julius Caesar, King Lear, Othello, etc. We will then compare these characters to the modern heroes of today's literature and films such as Batman, The Joker, Snow White, and Maleficent. Students will learn to synthesize the core elements that go into creating a hero or villain through journal writing, presentations, and critical thinking activities.					
Prerequisites	<ul style="list-style-type: none"> None 					

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

Intro to Screenwriting		1510		.5	4.0 Weight	Semester
Course Description	This course will introduce students to the fundamentals of film and television screenplay writing. Units will range from format structure to story building. The modern world is a world of digital screens. Large corporations need content to fill those screens. A screenwriting course would give Chartiers Valley students a gateway into a billion dollar industry. Companies such as Netflix, Amazon, Hulu, etc. are willing to pay for well-written content. Additionally, this class would give students a chance to discover their own creative talents.					
Prerequisites	<ul style="list-style-type: none"> None 					



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	8506	Early Childhood Practicum 2
8512	Ethnic and Regional Cuisine and Nutrition 2	8508	Primary School Practicum
8501	Child Development and Family Relations	8513	Culinary Arts & Food Science
8505	Early Childhood Practicum 1	8520	Introduction to Interior Design

Introduction to the World of Food and Nutrition 1	8511		1 Credit	NonWeighted	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	<ul style="list-style-type: none"> None 				

Ethnic and Regional Cuisine and Nutrition 2	8512		1 Credit	NonWeighted	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	<ul style="list-style-type: none"> 75% in Intro to World of Foods 				


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


[\(Back to All Course List\)](#)

Early Childhood Practicum 1		8505		2 Credits	NonWeighted	Year
Course Description	<p>This double-period course is designed to explore advanced child development concepts and theories through an actual interactive experience. Students plan lessons in the areas of the arts, science, literacy and math to develop a child's physical, mental, social and emotional growth. This is a performance-based class that integrates all academic skills. Students who choose this course need to have an interest in children and strive to understand their needs. This course is a great introduction to the teaching profession.</p> <p>This course requires a \$12 per semester snack fee to cover the high school student's snack during Learning Center sessions.</p>					
Prerequisites	<ul style="list-style-type: none"> 75% or better in Child Development and Family Relations Teacher Recommendation 					

Early Childhood Practicum 2		8506		2 Credits	NonWeighted	Year
Course Description	<p>This double-period course expands student childcare skills obtained in Early Childhood Practicum 1. Students will continue to plan, carry out and supervise lessons with young children as well as aid their physical, mental, social and emotional development. Expanded leadership responsibilities include: special projects, record keeping, peer tutoring, parent newsletters, administrative tasks, and completing observations of children.</p> <p>This course requires a \$12 per semester snack fee to cover the high school student's snack during learning center sessions.</p>					
Prerequisites	<ul style="list-style-type: none"> 75% in Early Childhood Education 1 Teacher recommendation 					

Primary School Practicum		8508		2/3 Credits	NonWeighted	Year
Course Description	<p>This two or three credit course is designed to provide students on-the-job experience in the field of education. Students are placed at the primary school under the supervision of a co-operating teacher. The student will assist the cooperating teacher in a variety of activities including lesson preparation, teaching, testing, grading, tutoring, etc. This is a great opportunity to experience the teaching profession. This course must be taken with the Primary School Service course as a pre-student teaching experience. <i>Students will be required to walk across the bridge to the Primary School.</i></p>					
Prerequisites	<ul style="list-style-type: none"> 80% in Early Childhood Education 1 12th grade students only Teacher recommendation 					

Culinary Arts & Food Science		8513		1 Credit	NonWeighted	Year
Course Description	<p> This course is designed to provide students with higher level skills in the culinary field with an emphasis on the sciences in food preparation. Students will analytical skills in food safety and sanitation, the chemistry of food, functional and nutritional components of food, evaluate food sensory and the psychology of food and eating. Students must successfully complete Introduction to Food and Nutrition and Ethnic and Regional Cuisine course with a 75% or better or by teacher recommendation.</p>					
Prerequisites	<ul style="list-style-type: none"> Grades 11 & 12 					

Introduction to Interior Design		8520		.5 Credit	NonWeighted	Semester
Course Description	<p> This course is designed to teach students the elements of design. Students will create an impact using color, fabrics, and textures. Instruction will focus on the history of interior design, furniture styles and design theory through projects and presentations.</p>					
Prerequisites	<ul style="list-style-type: none"> None 					

[\(Back to All Course List\)](#)



Mathematics



[\(Back to All Course List\)](#)

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 Sports
2143	Honors Algebra 2	2403	Honors Pre-Calculus		

* = New Course



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

Algebra 1		2122		1 Credit	NonWeighted	Year
Course Description	Students will formalize and expand on algebraic concepts established in previous coursework. Students will deepen and extend their understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend. They will engage in methods for analyzing, and using functions. Students will fluently move between multiple representations of functions including but not limited to linear, exponential and quadratics.					
Prerequisites	<ul style="list-style-type: none"> Successful completion of Algebra Essentials Teacher recommendation 					

Cognitive Algebra 1		2123		1 Credit	NonWeighted	Year
Course Description	Cognitive Algebra 1 is designed to strengthen Algebra 1 skills in preparation for the PA State Algebra 1 Keystone Exam. The course will explore the two modules: (1) Operations and Linear Equations & Inequalities and (2) Linear Functions & Data Organizations focusing on the following six anchors: Operations with Real Numbers and Expressions, Linear Equations, Linear Inequalities, Functions, Coordinate Geometry and Data Analysis. All students that have scored basic or below basic on the Algebra Keystone Exam will be recommended to take this course.					
Prerequisites	<ul style="list-style-type: none"> Algebra 1 					

Cognitive Algebra 2		2132		1 Credit	NonWeighted	Year
Course Description	The course will begin with an extensive review of linear functions and systems of equations. Students will study quadratic functions and use these to model real-world scenarios. Students will be introduced to polynomial, rational, and trigonometric functions, and do some work in the field of descriptive statistics. The course will move at a slower pace than Algebra 2 and topics covered will have a broader approach.					
Prerequisites	<ul style="list-style-type: none"> Below 70% in Algebra 1 Below 85% in Cognitive Algebra 1 Teacher recommendation 					

Algebra 2		2132		1 Credit	NonWeighted	Year
Course Description	Students extend their repertoire of functions to include polynomial, rational, trigonometric, and radical functions. Working closely with families of functions, students will apply their understanding of transformations. Students will model situations and solve equations including quadratics over the set of complex numbers and exponential equations using the properties of logarithms. Students will use descriptive statistics and probability as a tool for making inferences about data.					
Prerequisites	<ul style="list-style-type: none"> 80% in Algebra 1 85% in Cognitive Algebra 1 Teacher recommendation 					

Honors Algebra 2		2143	Honors	1 Credit	5.0 Weight	Year
Course Description	Students extend their repertoire of functions to include polynomial, rational, trigonometric, and radical functions. Working closely with families of functions, students will apply their understanding of transformations. They will model situations and solve equations including quadratics over the set of complex numbers and exponential equations using the properties of logarithms. Students will use descriptive statistics and probability as a tool for making inferences about data. Some topics will have accelerated coverage, while some will be covered in greater depths than the regular Algebra II course.					
Prerequisites	<ul style="list-style-type: none"> 93% in Algebra 1 Teacher recommendation 					

Cognitive Geometry		2111		1 Credit	NonWeighted	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.					
Prerequisites	<ul style="list-style-type: none"> Below 75% in Algebra 1 Teacher recommendation 					

Combined Geometry		2212		1 Credit	NonWeighted	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.					
Prerequisites	<ul style="list-style-type: none"> 75% in Algebra 1 Teacher recommendation 					

Honors Combined Geometry		2244	Honors	1 Credit	5.0 Weight	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. Some topics will have accelerated coverage, while some will be covered in greater depths than the Combined Geometry course.					
Prerequisites	<ul style="list-style-type: none"> • 93% in Algebra 1 • Teacher recommendation 					

Algebra 3		2145		1 Credit	NonWeighted	Year
Course Description	Students will gain an in-depth understanding of algebraic principles and learn how to use them to solve problems that we encounter in everyday life. Students will learn about linear and quadratic functions, systems of equations, polynomials, graphing, and complex numbers. Students will also be introduced to basic trigonometry. The course emphasizes applications by exploring real-world scenarios.					
Prerequisites	<ul style="list-style-type: none"> • Successful completion of Cognitive Algebra 2 • Teacher recommendation 					

Trigonometry/Analysis		2313		1 Credit	NonWeighted	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	<ul style="list-style-type: none"> • 75% or better in Algebra 2 • Teacher recommendation 					

Honors Pre-Calculus		2403	Honors	1 Credit	5.0 Weight	Year
Course Description	Honors Trigonometry/Pre-Calculus is a course designed for students planning to further their studies in mathematics to include calculus, notably, AP Calculus. Topics covered include a review of basic algebraic concepts; polynomial, rational, exponential and logarithmic functions; trigonometric functions and identities; polar coordinates; analytical Geometry; sequences and an introduction to calculus. Students will develop logical thinking and imagination through the experience of mathematical patterns and will become familiar with the fundamentals of pre-calculus.					
Prerequisites	<ul style="list-style-type: none"> • 90% in Honors Algebra 2 • 95% in Algebra 2 • Teacher recommendation 					

CiHS Calculus		2313	CiHS	1 Credit	5.0 Weight	Year
Course Description	This is a course for college-bound students expecting to major in business, the arts, or related fields. It contains a thorough review of algebra 2 and differential calculus with emphasis on problem solving rather than theory. This course may be scheduled concurrently with Trigonometry/Analysis with teacher and counselor approval.					
Prerequisites	<ul style="list-style-type: none"> • Successful completion of 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 <u>expected</u> to take the Advanced Placement Exam in May.					
Prerequisites	<ul style="list-style-type: none"> 90% in Honors Algebra 2 88% in Honors Pre-Calculus Teacher recommendation 					

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	<ul style="list-style-type: none"> 93% in Honors Algebra 2 93% in Honors Trig Teacher recommendation 					

AP Statistics		2515	AP	1 Credit	5.5 Weight	Year
Course Description	<p>Students will explore methods of collecting, organizing, and interpreting (inferring) data produced by others and themselves. Solving everyday problems and utilizing technology will be emphasized throughout the course. The student is <u>expected</u> to take the Advanced Placement Exam in May of the school year. Students enrolled in this course also have the option to purchase college credits through Duquesne University.</p> <p>An assignment involving basic statistical concepts will be required for students to complete over the summer. Course units will include: Measures of Central Tendency, Displaying Distributions, Normal Distributions, Correlation and Regression, Probability, Tests of Significance, and Analysis of Variance.</p>					
Prerequisites	<ul style="list-style-type: none"> Successful completion of Algebra 2 					

Analytics & Statistics in Sports		2516		1 Credit	NonWeighted	Year
Course Description	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.					
Prerequisites	<ul style="list-style-type: none"> 11th or 12th 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		
7531	Jazz Ensemble	8055	Modern & Jazz Dance 5		
8040	Introduction to Dance	8051	Majorettes – Drill Team – Dance Troupe – Dance Production		

Cadenza Chorus		7501	1 Credit	NonWeighted	Year
Course Description	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>				
Prerequisites	<ul style="list-style-type: none"> Director's signature 				

Select Chorus		7505		1 Credit	NonWeighted	Year
Course Description	<p>The select chorus consists of mainly juniors and seniors who are deeply committed to choral study and performance. These students will be recognized as having good attitudes and work ethics. They will be expected to practice outside of class and will be encouraged to study privately.</p> <p>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.</p> <p>Select chorus will study advanced theory, music history, music appreciation, correct vocal technique and sight reading in their pursuit of excellence in choral performance. There will be on-line theory study and quizzes to check understanding of concepts and 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 chorus has prescribed concert attire that is mandatory.</p> <p>Students that desire to be in Select chorus audition in late December/early January of their 9th grade year or at a further advanced grade level.</p> <p>The chorus groups often take spring performance trips. Although students are encouraged to go because they are educational and fun they are not mandatory. Performance in more than one chorus is possible depending on the student's schedule. Students interested in this class should approach Mrs. Kipp to discuss audition procedures and times.</p>					
Prerequisites	<ul style="list-style-type: none"> An audition that includes sight reading, theory quiz and a vocal solo. 					

Band		7511		1 Credit	NonWeighted	Year
Course Description	<p>Band is a performance based ensemble with both marching and concert bands. First year students are expected to develop basic playing skills while participating in rehearsals and performances with the ensembles. Notation reading, rhythm decoding, correct intonation as well as developing and applying fundamental vocabulary is taught.</p> <p>Students will analyze the effect of rehearsal/practice sessions and apply various pedagogies during this time. Students will understand a piece based on the historical, cultural and social context and interpret these selections by classifications. Second year band is designed to further develop marching and concert band skills. Intermediate playing skills are expected as the students continue to strive for excellence in ensemble and performance. Third and fourth year band further develops marching and playing skill while encouraging students to assume leadership roles in ensembles. All music techniques are further developed. Students are required to participate in all concerts.</p>					
Prerequisites	<ul style="list-style-type: none"> Audition and/or Director's recommendation for all band classes. 					

Orchestra		7521		1 Credit	NonWeighted	Year
Course Description	<p>Orchestra is a performing ensemble for instrumentalists of all levels. This course offers musicians the opportunity to explore the formal qualities of music, to perform a variety of musical styles, and to understand the aesthetic value of music. Emphasis is placed on the alternative fiddling repertoire with continual study and reference to the classics. Students acquire musical knowledge and appreciation by building their orchestral repertoire. Students are expected to develop advanced skills that are necessary to interpret and perform music and model these techniques. <u>Students are required to participate in all concerts.</u></p>					
Prerequisites	<ul style="list-style-type: none"> Audition and/or Director's recommendation for all Orchestra classes. 					

Jazz Ensemble		7531		1 Credit	NonWeighted	Year
Course Description	Jazz Ensemble is designed to develop in students an appreciation of and proficiency in the musical medium of Jazz. Students rehearse and perform as an ensemble while developing skills in rhythmic accuracy, dynamics, articulation, intonation and improvisation. <u>Students are required to participate in all concerts.</u> Prerequisites: -					
Prerequisites	<ul style="list-style-type: none"> This is an audition only ensemble. 					

Introduction to Dance		8040		1 Credit	NonWeighted	Year
Course Description	This course is designed for students who are interested in body movement and self-expression 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 th , 10 th , 11 th and 12 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	<ul style="list-style-type: none"> All students must dress in appropriate dance wear (black leotards and black tights purchased by the student) 					

Modern & Jazz Dance 1		8041		1 Credit	NonWeighted	Year
Course Description	<p>The course is designed to develop beginner-intermediate technique in both modern and jazz dance forms. Emphasis is on refining and enhancing technical awareness after being introduced to these forms in the Introduction to Dance class. The student will have opportunities to learn about movement elements, styles and principles of choreography.</p> <p>Evaluation for the course is based on performance tasks and rubric assessments, daily class participation, selected response testing, open ended test, choreographic tasks. Videotaping and peer assessment will also be used to elevate progress. Students are responsible for a \$120 costume fee for Showcase.</p>					
Prerequisites	<ul style="list-style-type: none"> Introduction to Dance and have pre-approval for the class from the Department. All students must dress in appropriate dance wear (black leotards and black tights ...dance wear must be 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. Those 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. Teacher recommendation 					

[\(Back to All Course List\)](#)

Modern & Jazz Dance 2		8042		1 Credit	NonWeighted	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	<ul style="list-style-type: none"> • Modern Jazz 1 and have pre-approval from 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). • Able to physically 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. • Teacher Recommendation 					

Modern & Jazz Dance 3		8043		1 Credit	NonWeighted	Year
Course Description	The course is designed to develop intermediate-advanced technique in both modern and jazz dance forms. Emphasis is on refining and enhancing technical performance at a more advanced level. The student will have opportunities to analyze movement elements, styles and principles of choreography and to create a performance composition. A variety of dance techniques will be explored-ranging from Graham and Cunningham in modern to Luigi, Fosse and Tremaine in Jazz. 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 \$120 costume fee for Showcase.					
Prerequisites	<ul style="list-style-type: none"> • 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	NonWeighted	Year
Course Description	This course offers the advanced dance student/performer the opportunity to further develop his/her skill, technique, choreographic expertise, analytical reasoning and peer mentoring opportunities. This course accommodates the needs of the few students who have higher-level dance skills when entering the dance department at C.V. (students who are exempt from Intro to Dance in their freshman year). The student will work to refine advanced dance techniques and genres. The student will act as a teaching assistant/student choreographer, role model, etc. There would also be a component requiring the student to work independent of the class by choreographing a self-directed dance piece and/or working as an apprentice with professional dance teachers and choreographers. Students are responsible for a \$120 costume fee for Showcase.					
Prerequisites	<ul style="list-style-type: none"> • Modern and Jazz Dance • Appropriate dance wear (black leotards and black tights or Nike pros...dancewear purchased by the student.) • Teacher recommendation 					

Modern & Jazz Dance 5		8055		1 Credit	NonWeighted	Year
Course Description	This course offers the advanced dance student/performer the opportunity to further develop his/her skill, technique, choreographic expertise, analytical reasoning and peer mentoring opportunities at a more advanced level. The course accommodates the needs of the few students who have higher-level dance skills when entering the dance department at C.V. (students who exempt Intro to Dance in their freshman year). The student will work to refine advanced dance techniques and genres. The student will act as a teaching assistant/student choreographer, role model, etc. There would also be a component requiring the student to work independently of the class by choreographing a self-directed dance piece and/or working as an apprentice with professional dance teachers and choreographers. All students must dress in a black leotard and black tights. These items must be purchased at the student's expense. Students are responsible for a \$120 costume fee for Showcase.					
Prerequisites	<ul style="list-style-type: none"> • Modern and Jazz Dance 4 • Appropriate dance wear (black leotards and black tights or Nike Pros...dancewear purchased by the student.) • Teacher recommendation 					

Majorettes Drill Team Dance Troupe Dance Production		8051		1 Credit	NonWeighted	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.					
Prerequisites	<ul style="list-style-type: none"> • Audition & Recommendation only 					

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

[\(Back to All Course List\)](#)

Acting 1		8201		1 Credit	NonWeighted	Year
Course Description	<p>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.</p> <p>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.</p>					
Prerequisites	<ul style="list-style-type: none"> • Introduction to Theatre Arts 					

Acting 2 & 3		8202		1 Credit	NonWeighted	Year
Course Description	<p>This course is 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.</p> <p>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.</p>					
Prerequisites	<ul style="list-style-type: none"> • Acting 1 and/or Intro to Theater Arts • Audition and teacher recommendation 					

[\(Back to All Course List\)](#)



Physical Education



[\(Back to All Course List\)](#)

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)	8036	Sports Officiating & Principles of Coaching (5 Days)
8025	Health 9-10 (4 days)	8038	Partners in Physical Education (2 Days)
8033	Adventure Activities (2 days)	8039	Adaptive Physical Education
8034	Lifetime Activities (2 days)		Dance (Descriptions in Performing Arts)
8027	Drivers Theory (5 days)		

Physical Education **Required for 9 th & 10 th Grades		8032		.25 Credit	NonWeighted	Semester (4 days)
Course Description	The curriculum focus for 9 th and 10 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	<ul style="list-style-type: none"> None 					

Health (9 th & 10 th Grades)		8025		.25 Credit	NonWeighted	Semester (4 days)
Course Description	Chartiers Valley Health curriculum is designed to provide students with an opportunity to learn about physical, mental and social aspects of health. Emphasis is placed on the importance of making healthy decisions that will lead to a higher quality of life. Students are encouraged to develop optimal health through recognizing health issues and applying preventative strategies. Students will connect academic content to real life scenarios and understand the impact of personal choices. Units of study include; stress, mental health, mental disorders, healthy relationships, abuse, bullying prevention, school violence, nutrition, physical fitness, non-communicable diseases, SDI's, human sexuality, CPR, first Aid, environmental health, tobacco, alcohol and drugs.					
Prerequisites	<ul style="list-style-type: none"> None 					

Adventure Activities (2 days) **11 th & 12 th Grades		8033		.25 Credit	NonWeighted	Year (2 days)
Course Description	The curriculum focus for 11 th and 12 th grade Physical Education is lifetime fitness, sports, adventurous activities 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 be offered a variety of activities to include: physical fitness, ultimate Frisbee, archery, kayaking/canoeing, volleyball, rollerblading/hockey, team building activities, orienteering, biking, recreational racquet sports (pickleball, badminton, table tennis) and drug and alcohol unit.					
Prerequisites	<ul style="list-style-type: none"> 11th & 12th grade 					

Lifetime Activities		8034		.25 Credit	NonWeighted	Year 2 Days
Course Description	The curriculum focus for <u>11th and 12th</u> 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 be offered a variety of activities to include: physical fitness, volleyball, tennis, recreational racquet sports (pickleball, badminton, and table tennis), diamond sports, ultimate Frisbee/razzle football, and drug and alcohol unit.					
Prerequisites	<ul style="list-style-type: none"> 11th and 12th grade students 					

Drivers Theory		8027		.5 Credit	NonWeighted	Semester 5 Days
Course Description	This curriculum will develop the knowledge and attitudes necessary for safe driving techniques. The elective course introduces students to the theory and practical application of how to operate an automobile, rules and regulations. Curriculum is in accordance with PA driver guidelines and information from the PA driver's handbook; including strategies for identifying risks, of driving and their consequences.					
Prerequisites	<ul style="list-style-type: none"> 10th, 11th, and 12th grade students 					

Sports Officiating and Principles of Coaching		8036		.5 Credit	NonWeighted	Semester (5 Days)
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	<ul style="list-style-type: none"> 9th, 10th, 11th 12th grades 					

Partners in Physical Education		8038		.25 Credit	NonWeighted	Year (2 Days)
Course Description	This course is designed for students who are interested in exploring a career path that involves working with students with special needs. The Partner in Physical Education course (Partner PE) is an inclusive approach to physical education that pairs students with special needs with their general education peers (peer partner). The peer partner demonstrates PE activities, motivates and supports the students with special needs to fully participate in PE class. The activities are designed to help promote leisure-time activities and awareness of the importance of good personal fitness. Activities include but are not limited to weight training, racquet sports, fitness, diamond sports, kayaking, swimming and team building.					
Prerequisites	<ul style="list-style-type: none"> 11th 12th grades 					

Dance						
Course Description	Students may choose any dance course in the Performing Arts section of the Academic Handbook. Please see the Performing Arts section or course numbers and prerequisites. Dance will meet PE requirements for all grade levels.					
Prerequisites	<ul style="list-style-type: none"> All grade levels 					

[\(Back to All Course List\)](#)



Science



ID	Course Name	ID	Course Name	ID	Course Name
3221	Biology Lab	3341	AP Chemistry	3455	AP Physics C: Electricity and Magnetism
3133	Honors Biology	3350	Anatomy & Physiology	3442	AP Biology
3222	Biological Applications	3421	Practical Physics	3355	Principles of Biomedical Science (PBS)
3321	Applied Chemistry	3441	AP Physics 1	3360	Human Body Systems (HBS)
3331	Chemistry w/ Lab	3445	AP Physics 2	3365	Medical Interventions
3340	CiHS Chemistry	3450	AP Physics C: Mechanics	3370	Biomedical Innovation

Biology Lab		3221		1 Credit	NonWeighted	Year
Course Description	This is a one year course in which students are given a solid foundation of the study of living things. The emphasis for the course is on the big ideas and unifying themes in biology, such as basic biological principles/cells, chemical basis of life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, theory of evolution and ecology. Students will work independently, in small groups and large groups to understand and apply their skills. Application to real world concepts are emphasized through the use of case studies, role plays, hands on activities and laboratory exercises. This course is intended for students who may or may not be college bound and successful completion of it can be a pre-requisite for higher level science electives and AP courses.					
Prerequisites	<ul style="list-style-type: none"> 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 the study of living things. The framework for the course is on the big ideas and unifying themes in biology. Topics include basic biological principles/cells, the chemical basis of life, bioenergetics, homeostasis and cell transport, cell growth and reproduction, genetics, ecology, and evolution. It is a rigorous course that requires daily reading and review. Students will work both independently and in groups to apply biological concepts. The course incorporates hand-on activities, role plays, and laboratory exercises when appropriate. This course is intended for students that are highly motivated, college bound, and typically will take one or more Advanced Placement science courses throughout their high school career.					
Prerequisites	<ul style="list-style-type: none"> 93% in 8th grade science Teacher recommendation 					

Biological Applications		3222		1 Credit	NonWeighted	Year
Course Description	Biological Applications is a one year course that builds on basic biological concepts to explore the diversity of life on Earth. The emphasis of the course is to investigate the traits of bacteria, viruses, protists, fungi, plants, and animals, as well as the role of biotechnology. The students will participate in various laboratory investigations in order to observe the various forms of life and will also integrate current events to better understand the complexity of life. The topics will allow students to understand and appreciate the role of biodiversity, as well as the importance of biological diversity in modern day society. The course is intended for students who may or may not be college bound.					
Prerequisites	<ul style="list-style-type: none"> Biology Lab or Honors Biology 					

Applied Chemistry		3321		1 Credit	NonWeighted	Year
Course Description	<p>This is a 1st year chemistry course intended for students planning to pursue careers in a non-science related field. This course provides students with an understanding of basic principles of chemistry through classroom lectures and discussions, online assignments, classroom activities, small scale labs and research assignments. 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, slower pace, the minimal level of mathematical analysis required and the nature and variety of experiments done in the laboratory. Topics covered in this course are dimensional analysis, matter, atomic structure, nomenclature, reactions, stoichiometry, and gas laws.</p> <p>This course does not meet the prerequisite requirement for Advanced Placement Chemistry.</p>					
Prerequisites	<ul style="list-style-type: none"> 70% or better in Algebra 1 OR successful completion of Biological Applications 					

Chemistry w/ Lab		3331		1 Credit	NonWeighted	Year
Course Description	<p>This is a 1st 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</p>					
Prerequisites	<ul style="list-style-type: none"> 70% in Biology OR pass Honors Biology 80% in Algebra 1 AND 70% or better in Geometry Teacher Recommendation 					

CiHS Chemistry		3340	CiHS	1 Credit	5.0 Weight	Year
Course Description	<p>This is a 1st year College in the High School chemistry course that is equivalent to a first semester college level chemistry course and is intended for students planning to attend college in a science or non-science related field. This course provides students with an understanding of basic principles of chemistry through classroom lectures and discussions, 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, fast pace, high level of mathematical analysis required, and a greater time commitment than all other first year courses by the students. The nature and variety of experiments done in the laboratory are at college level. Topics covered in this course are matter, dimensional analysis, atomic structure, nomenclature, stoichiometry, reactions, solutions, thermochemistry, quantum mechanics, periodic table, periodic trends, bonding, molecular geometries, and gases.</p> <p>Since this course is articulated through Duquesne University, there is a fee involved for students who want to earn 5 college credits. CiHS Chemistry is highly recommended for students taking AP Chemistry.</p>					
Prerequisites	<ul style="list-style-type: none"> 80% in Honors Biology or 92% in Biology 93% or better in Algebra 1 AND 88% or better in Geometry Teacher Recommendation 					

AP Chemistry		3341	AP	1 Credit	5.5 Weight	Year
Course Description	This elective course is a 2 nd year Advanced Placement chemistry course that is equivalent to two semesters of college level chemistry and is intended for students planning to attend college for chemistry, engineering, medical fields or other science related areas in college. Laboratory work is an integral part of the course. This course provides the rigorous training needed for success on the AP chemistry test and SAT II Chemistry subject based test. 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 is a rigorous course that requires a large time commitment since the course itself is fast paced in order to have students prepared for the Advanced 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.					
Prerequisites	<ul style="list-style-type: none"> 70% in CIHS Chemistry or 90% in Chemistry w/Lab 					

Anatomy & Physiology		3350		1 Credit	NonWeighted	Year
Course Description	This junior and senior elective course is designed to be a rigorous, in depth study of human anatomy and physiology. The structure, function and imbalances (diseases) of body systems will be studied including skin, musculoskeletal, nervous, endocrine, cardiovascular, blood, respiratory, digestive and the special senses. This course would be recommended for students that are interested in pursuing a career in the medical field such as physicians, physician assistants, nurses, medical technologists, paramedics, scientists, physical therapists, occupational therapists, geneticists, technicians, forensics and bioinformatics. This course is not a replacement for AP science courses.					
Prerequisites	<ul style="list-style-type: none"> Successful completion of Chemistry Teacher recommendation 					

Practical Physics		3421		1 Credit	NonWeighted	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	<ul style="list-style-type: none"> Successful completion of Honors Geometry or 75% or higher in Combined Geometry Completed chemistry 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 semester college course in algebra-based physics. This course will focus on students' problem solving and lab skills. Students will cultivate their understanding of Physics through inquiry-based investigations while integrating technology into the laboratory environment. Topics covered will be Newtonian Mechanics (including rotational motion), work, energy, power, mechanical waves, sound and introduction to simple circuits.					
Prerequisites	<ul style="list-style-type: none"> CIHS Chemistry or 80% in Lab Chemistry 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 equivalent to a second semester introductory college-level physics course. This course will focus on students' problem solving and lab skills. Students will cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics.					
Prerequisites	<ul style="list-style-type: none"> • Successful completion of AP Physics 1 or 90% in Practical Physics • Teacher Recommendation 					

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-based, college-level physics course. It is especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Introductory differential and integral calculus is used throughout the course.					
Prerequisites	<ul style="list-style-type: none"> • Successful completion of AP Physics 1 • Successful completion of AP Calculus or currently enrolled 					

AP Physics C: Electricity and Magnetism		3455	AP	.5 Credit	5.5 Weight	Semester
Course Description	Advanced Placement Physics C: Electricity and Magnetism is an elective one-semester, 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.					
Prerequisites	<ul style="list-style-type: none"> • 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 a college biology course usually taken by biology majors during their first year of college. The course aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing world of biology. The curriculum is built around the four big ideas in AP Biology. They include 1.) The process of evolution drives the diversity and unity of life. 2.) Biological systems utilize free energy and molecular building blocks to grow, reproduce and maintain dynamic homeostasis. 3.) Living systems store, retrieve, transmit and respond to information essential to life processes. 4.) Biological systems interact. These systems and their interactions possess complex properties. Extension homework and laboratory work are required. Students are expected to perform extensive readings in biology and are <u>expected</u> to take the AP Biology exam.					
Prerequisites	<ul style="list-style-type: none"> • Successful completion of Biology and concurrently enrolled or completion of Chemistry • Teacher Recommendation 					

[\(Back to All Course List\)](#)

Principles of Biomedical Science (PBS)		3355	PLTW	1 Credit	5.0 Weight	Year
Course Description	<p>This is the first course offering in the Project Lead the Way Biomedical Sciences curriculum. This rigorous elective course is offered to 9th and 10th grade students who may be interested in various professions in the medical field including, but not limited to <i>physicians, physician assistant, nurses, medical technologists, paramedics, scientists, physical therapists, occupational therapists, geneticists, genetic counselors, technicians and bioinformatics</i>.</p> <p>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.</p>					
Prerequisites	<ul style="list-style-type: none"> Science teacher or school counselor recommendation 					

Human Body Systems (HBS)		3360	PLTW	1 Credit	5.0 Weight	Year
Course Description	<p>This is the 2nd course offering in the Project Lead the Way Biomedical Sciences curriculum. This is a rigorous elective course offered to 10th and 11th 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.</p> <p>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.</p>					
Prerequisites	<ul style="list-style-type: none"> Completion of Principles of Biomedical Science with a minimum of 70% Teacher recommendation 					

Medical Interventions		3365	PLTW	1 Credit	5.0 Weight	Year
Course Description	<p>This is the third course offering in the Project Lead the Way Biomedical Sciences curriculum. This rigorous elective course is offered to 11th and 12th grade students that have completed Principles of Biomedical Science and Human Body Systems.</p> <p>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.</p>					
Prerequisites	<ul style="list-style-type: none"> Completion of Principles of Biomedical Science and Human Body Systems with a minimum of 70% Teacher recommendation May be taken concurrently with Biomedical Innovation 					

Biomedical Innovation		3370	PLTW	1 Credit	5.0 Weight	Year
Course Description	<p>In this capstone elective Project Lead the Way course, students apply their knowledge and skills to answer questions or solve problems related to the biomedical sciences. Students design innovative solutions for the health challenges of the 21st century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project and may work with a mentor or advisor from a university, hospital, physician's office, or industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community.</p> <p>(PLTW website 2016)</p>					
Prerequisites	<ul style="list-style-type: none"> • Principles of Biomedical Science and Human Body Systems • Currently enrolled or completion of Medical Interventions with a min of 70% • Teacher recommendation 					

[\(Back to All Course List\)](#)



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 10th 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 States	4345	Shaping of the Modern World	4406	Economics
4002	Honors - Development of the United States	4346	AP U.S. Government and 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 Studies	4405	Psychology		

Development of the United States		4000		1 Credit	NonWeighted	Year
Course Description	This 9 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 th (Spanish-American War) and early 20 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 th century, the Great Depression and World War II. Students will learn to take notes, write substantive essays, complete project-based assignments, become involved in seminars, and other activities that make the course active learning. This course will be conducted at a moderate pace.					
Prerequisites	<ul style="list-style-type: none"> None 					

Honors - Development of the United States		4002	Honors	1 Credit	5.0 Weight	Year
Course Description	This required 9 th grade course provides students the opportunity to study the development of the United States at a highly accelerated pace. The same years and content described above will be the material for the course. Students in this course are on track to take Advanced Placement courses so the study is rigorous and takes on more of the complex concepts in American history. Students will also be challenged by the high expectations of the College Board.					
Prerequisites	<ul style="list-style-type: none"> 85% or better in 8th grade Social Studies Teacher recommendation 					

World Cultures		4005		1 Credit	NonWeighted	Year
Course Description	<p>This required course deals with the history and cultures of people in Europe, the Middle East, Latin America, East Asia, and Africa from the 1700s through the present day. The course explores various political ideologies; gender roles; social organizations; conflicts; religious beliefs; and economic systems. Students will be expected to understand global interdependence as it relates to culture, resource management, conflict and human rights. Students will be regularly 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 refine their ability to read for comprehension and critical analysis; summarize, categorize, compare, and evaluate information; write in a concise manner; express facts and opinions orally; produce exhibitions in a cooperative setting; and use technology appropriately to present information.</p> <p>The first semester of the course will cover the Enlightenment, French Revolution, the Industrial Revolution, Revolutions in Latin America, the Rise of Nationalism, New Imperialism, World War I, 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.</p>					
Prerequisites	<ul style="list-style-type: none"> None 					

Honors World Cultures		4006	Honors	1 Credit	5.0 Weight	Year
Course Description	<p>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.</p> <p>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.</p>					
Prerequisites	<ul style="list-style-type: none"> 85% in Honors American Cultures 90% Advanced American Cultures Teacher recommendation 					

[\(Back to All Course List\)](#)

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

Shaping of the Modern World		4345		1 Credit	NonWeighted	Year
Course Description	<p>This College in the High School elective course is a study of the world of the 20th century and into the 21st 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.</p> <p>Students will be exposed to rigorous primary sources, assignments and thinking that they will experience in college. "Blue book" essays are a common assessment that are used in colleges.</p> <p>Since this course is articulated through Duquesne University, there is a fee involved for students who want to earn college credits. Students may obtain three college credits.</p>					
Prerequisites	<ul style="list-style-type: none"> 85% in Advanced or Honors Social Studies Teacher recommendation 					

AP U.S. Government and Politics		4346	AP	1 Credit	5.5 Weight	Year
Course Description	Advanced Placement U.S. Government and Politics is an analytical perspective on government and politics in the United States. This elective course includes the study of general concepts used to interpret our political system and the analysis of specific examples. The institutions, groups, beliefs, and ideas that constitute U.S. government and politics will be studied. In addition, theories of government, political behavior and consequences, and the structure and procedures of our government will be reviewed. College-level texts and other college-level materials are used in the class. Preparation for the annual A.P. exam, which is held in May, is an integral part of the class.					
Prerequisites	<ul style="list-style-type: none"> 11th and 12th 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 cross-cultural 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	<ul style="list-style-type: none"> • 90% in Psychology or • 85% in AP United States History • 85% in CIHS Shaping of the Modern World • Teacher Recommendation 					

AP United States History		4348	AP	1 Credit	5.5 Weight	Year
Course Description	<p>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.</p> <p>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.</p>					
Prerequisites	<ul style="list-style-type: none"> • 11th and 12th grade • 90% in an Honors course or • 95% in an Advanced social studies 					

Psychology		4405		1 Credit	NonWeighted	Year
Course Description	This elective course introduces the field of psychology and its basic concepts, theories, research methods, and contributions to the understanding of human behavior. Topics include scientific methods in psychology, biological psychology, sensation and perception, states of consciousness, learning, memory, cognition and language. This course will challenge students to use their metacognitive abilities in order to develop a meaningful and useful understanding of their sense of self.					
Prerequisites	<ul style="list-style-type: none"> • 10th, 11th and 12th grade 					

Economics		4406		1 Credit	NonWeighted	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	<ul style="list-style-type: none"> • 11th or 12th grade 					

[\(Back to All Course List\)](#)

Law and Government		4407		1 Credit	NonWeighted	Year
Course Description	<p>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.</p> <p>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.</p>					
Prerequisites	<ul style="list-style-type: none"> • 11th and 12th grade 					

AP Macroeconomics		4409	AP	1 Credit	5.5 Weight	Year
Course Description	<p>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.</p>					
Prerequisites	<ul style="list-style-type: none"> • 11th or 12 grade • 90% in Honors World • 85% in AP U.S. or CIHS Shaping • Teacher recommendation 					

AP Microeconomics		4410	AP	1 Credit	5.5 Weight	Year
Course Description	<p>Advanced Placement Microeconomics, an elective, is an introductory college-level course that focuses on the principles of economics that apply to the functions of individual economic decision-makers. The course also develops students' familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts.</p>					
Prerequisites	<ul style="list-style-type: none"> • 11th or 12 grade • 90% in Honors World • 85% in AP U.S. or CIHS Shaping • Teacher recommendation 					

[\(Back to All Course List\)](#)



World Languages



[\(Back to All Course List\)](#)

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 Contemporary Topics
5021	German 1	5110	Spanish 2		

* = New Course



French 1		5011		1 Credit	NonWeighted	Year
Course Description	In this course geared to the general as well as the academic learner, students learn to communicate on everyday topics in the present and near future, with particular emphasis placed on the skills of listening, speaking and pronunciation. The French culture, including study of the country as well as a unit on Paris, is a very important component. Music and film clips are used to reinforce concepts and skills too. In addition, students also take part in a variety of creative activities, including role-plays, games, and projects. Integrated Performance Assessments (IPA) are used with every unit to incorporate authentic materials, speaking opportunities and listening comprehension. Also, students participate in cultural experiences such as making crêpes and croque monsieur sandwiches, and learning about French holiday traditions. The course is proficiency-based, and students are expected to communicate as much as possible in French as well as understand and follow basic classroom directions in French.					
Prerequisites	<ul style="list-style-type: none"> 75% in 8th Grade French or Teacher recommendation 					

French 2		5012		1 Credit	NonWeighted	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	<ul style="list-style-type: none"> 75% in French 1 (2nd semester) Teacher recommendation 					

French 3		5013		1 Credit	NonWeighted	Year
Course Description	This course continues to build proficiency in listening and speaking while increasing emphasis on reading and writing. Students write longer and more complex sentences as well as short essays. More emphasis is placed on independent reading of authentic French literature and non-fiction cultural pieces relating to French Africa, 19th & 20th century French art, French heritage and other topics. A film study is included at this level. Students use Integrated Performance Assessment lessons (interpretive reading, interpersonal communication, presentational communication) to increase their proficiency by integrating reading, writing, listening comprehension and speaking. New grammar skills are introduced, but students are expected to apply skills already learned. Students will participate in speaking proficiency assessments in accordance with the ACTFL proficiency guidelines.					
Prerequisites	<ul style="list-style-type: none"> 75% in French 2 (second semester) Teacher Recommendation 					

CiHS French 4		5014	CiHS	1 Credit	5.0 Weight	Year
Course Description	<p>In this full year, College in the High School course, students learn to speak with more fluency, practicing and expanding upon previously learned grammar concepts such as past time (including imperfect tense and plus que parfait), future time, and pronouns (relative, direct, indirect) as well as reinforce structures such as the subjunctive and the conditional. Students read independently at a more advanced levels, keep a journal, and writings are longer and more sophisticated. There is a focus on advanced conversation, listening comprehension, and more extensive reading and writing. Film clips from the text and authentic French films with detailed follow-up are used as a resource to enhance proficiency.</p> <p>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.</p>					
Prerequisites	<ul style="list-style-type: none"> 80% in French 3 (second semester) 					

German 1		5021		1 Credit	NonWeighted	Year
Course Description	This elective course is proficiency based in order to develop competency in understanding, speaking, and writing in German within a restricted area of vocabulary. Basic speech patterns are introduced and practiced orally. Students will then practice these new speech patterns and adapt them to varying situations. Basic grammar concepts are introduced. The student must assume responsibility of self-discipline and self-direction in the classroom.					
Prerequisites	<ul style="list-style-type: none"> 9th graders - 75% in 8th grade Modern Language class. Teacher recommendation 					

German 2		5022		1 Credit	NonWeighted	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	<ul style="list-style-type: none"> 75% in German 1 (2nd semester) Teacher recommendation 					

[\(Back to All Course List\)](#)

German 3		5023		1 Credit	NonWeighted	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	<ul style="list-style-type: none"> 75% in German 2 (2nd semester) Teacher Recommendation 					

CiHS German 4		5024	CiHS	1 Credit	5.0 Weight	Year
Course Description	<p>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.</p> <p>Since this course is articulated through Duquesne University, there is a fee involved for students who want to earn college credits.</p>					
Prerequisites	<ul style="list-style-type: none"> 80% in German 3 Teacher Recommendation 					

Spanish 1		5108		1 Credit	NonWeighted	Year
Course Description	<p>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.</p> <p>Please note: Students who are new to Chartiers Valley School District have the option to test into Spanish 2.</p>					
Prerequisites	<ul style="list-style-type: none"> Students who did not take Spanish in Grade 8 at Chartiers Valley; or Students with less than 75% in Grade 8 at Chartiers Valley Spanish; or Students who are new to Chartiers Valley School District. Teacher Recommendation 					

Spanish 2		5110		1 Credit	NonWeighted	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	<ul style="list-style-type: none"> 75% Grade 8 Spanish at Chartiers Valley or Spanish 1 at Chartiers Valley-2nd semester Teacher Recommendation 					

Spanish 3		5112		1 Credit	NonWeighted	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	<ul style="list-style-type: none"> 75% in Spanish 2 – 2nd semester Teacher Recommendation 					

CiHS Spanish 4		5114	CiHS	1 Credit	5.0 Weight	Year
Course Description	<p>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.</p> <p>Since this course is articulated through Duquesne University, there is a fee involved for students who want to earn college credits.</p>					
Prerequisites	<ul style="list-style-type: none"> 80% in Spanish 3 Teacher Recommendation 					

AP Spanish Language		5116	AP	1 Credit	5.5 Weight	Year
Course Description	<p>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 21st 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.</p>					
Prerequisites	<ul style="list-style-type: none"> 80% in CIHS Spanish 4 Teacher Recommendation 					

Spanish Communication through Contemporary Topics		5117		1 Credit	Unweighted	Year
Course Description	<p>In this course, students will increase their Spanish proficiency in speaking, writing, reading, and listening while considering contemporary topics related to the Spanish-speaking world. Authentic resources such as films, novels, and current events will inspire higher-level analysis and discussion. Critical thinking and writing composition in this course will continue to prepare students for post-secondary education.</p>					
Prerequisites	<ul style="list-style-type: none"> 75% in CIHS/Spanish 4 or Teacher Recommendation <u>or</u> 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

California University

Empire Education Group

New Castle School of Trades

Pittsburgh Culinary Arts Institute

Rosedale Technical Institute

University of Northwest Ohio

Butler County Community College

Community College of Allegheny County

ITT Technical Institute

Pennsylvania College of Technology

Pittsburgh Technical Institute

Triangle Tech. Inc.

Scholarships from the above post-secondary institutes and from industry

Career & Technical Specialties: [\(Back to All Course List\)](#)

ID	Course Name	ID	Course Name
9113: 4 Credits 9313: 3 Credits	Auto Body Repair	9173: 4 Credits 9373: 3 Credits	Health Occupations Technology
9119: 4 Credits 9319: 3 Credits	Automotive Technology	9155: 4 credits 9355: 3 credits	Cyber Security & Network Technology
9137: 4 Credits 9337: 3 Credits	Construction Technology Cluster	9185: 4 credits 9385: 3 credits	Public Safety Technology
9143: 4 Credits 9343: 3 Credits	Cosmetology	9375: 4 credits 9376: 3 credits	Sports Medicine and Rehabilitation Therapy Technology (SMARTT)
9161: 4 Credits 9361: 3 Credits	Culinary Arts	9193: 4 credits 9402: 3 credits	Veterinary Assistant Technology
9190: 4 Credits 9389: 3 Credits	Graphic Arts & Production Technology	9120: 4 credits 9320: 3 credits	Diesel Technology

Academic Courses Available at Parkway

ID	Course Name	ID	Course Name
9238	Chemical Properties in Practice • Comparable to Applied Chemistry	9220	US History • Comparable to Development of the U.S.
9234	Principles of Technology • Comparable to Practical Physics	9223	World History • Comparable to World Cultures
		9221	U.S. History II • Comparable to Contemporary US History

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

Automotive Technology		9119 9319		4 Credits 3 Credits	NonWeighted	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	<ul style="list-style-type: none"> None 					

Construction Technology Cluster		9137 9337		4 Credits 3 Credits	NonWeighted	Year
Course Description	<p>First-year students spend nine weeks in the following four courses offered in the Construction Technology Cluster. They are <i>Building Construction Technology</i>, <i>Electrical Systems Technology</i>, <i>Welding Technology</i>, and <i>Masonry</i>. Upon successful completion of the rotation, second-year students may choose to pursue certification in one of the following areas for the remainder of their time at PWCTC:</p> <p><u>Carpentry</u> A student in the carpentry program will apply technical knowledge and skills to layout, fabricate, erect, install and repair structures and fixtures using hand and power tools, scaffolding, and specialty tools used in the construction trade. This program includes instruction in common systems of framing, construction materials, estimating, blueprint reading and finish carpentry techniques. Students will be given the opportunity to earn a 10-hour Occupational Safety and Health Administration (OSHA) Construction Card. Students have the potential to earn 17 certifications through NCCER.</p> <p><u>Electrical Systems Technology</u> The Electrical Systems Technology program teaches students the integral components of the electrical industry for entry level employment in residential, commercial, and/or light industrial locations. The basis of instruction is in the layout, assembly, installation, wiring, maintenance, and trouble-shooting of electrical systems. Understanding programmable logistical controls (PLC's) and how transformers operate are also covered. Adherence to the National Electric Code is emphasized throughout this course as well as trade safety procedures. This program may lead to additional career pathways</p>					

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

Cosmetology		9143 9343		4 Credits 3 Credits	NonWeighted	Year
Course Description	<p>The Cosmetology program prepares students to perform technical services including all 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:</p> <p>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.</p> <p>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.</p>					
Prerequisites	<ul style="list-style-type: none"> • None 					

[\(Back to All Course List\)](#)

Culinary Arts		9161 9361		4 Credits 3 Credits	NonWeighted	Year
Course Description	The Culinary Arts program provides practical instruction in the preparation of banquet, buffet, and a la carte styles of food preparation. Practical experience is provided through the operation and management of an in-house, full-service restaurant and beyond the restaurant environment to provide goods and services for Parkway's food store, where pastries and select meats are sold. Students learn to design cakes, sculpt ice, and prepare 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 and III. Senior students who have completed at least two years of Culinary Arts will have the opportunity to earn both the National Restaurant Association's ServSafe certification and the American Culinary Federation certification.					
Prerequisites	<ul style="list-style-type: none"> None 					

Diesel Technology		9120 9320		4 Credits 3 Credits	NonWeighted	Year
Course Description	Diesel Technology is part of every aspect of today's transportation, construction, and manufacturing industries. In Diesel Technology, students will learn about the operation, maintenance, and overhaul of diesel powered equipment. Diesel engines are found in military vehicles, trucks, trains, buses, construction and agricultural equipment. As the diesel equipment industry expands, the demand for mechanics and technicians to repair and maintain diesel equipment will continue to grow. Students will learn the fundamentals of hydraulics and have the opportunity to earn an Air Conditioning Recovery Certification. Students can earn certifications from the National Institute for Automotive Service Excellence (ASE), Refrigeration 609, Class I & III State Inspection, Forklift Operations					
Prerequisites	<ul style="list-style-type: none"> None 					

Graphic Arts & Production Technology		9190 9389		4 Credits 3 Credits	NonWeighted	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	<ul style="list-style-type: none"> None 					

Health Occupations Technology		9173 9373		4 Credits 3 Credits	NonWeighted	Year
Course Description	Health Occupations Technology students have the opportunity to participate in a wide range of real-world clinical and job shadowing experiences at many different local healthcare providers. Clinical experiences may include: child care, long term care, emergency nursing, recovery room nursing, radiology, medical records, operating room observation, pharmacy, physical/occupational therapy, and/or lab technician. Students will have the opportunity to earn and complete the American Heart Association "CPR 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 second year students, instruction begins with anatomy, physiology, and medical terminology. Special attention is given to medical office examinations, treatment, and patient care. Personal Care Home Direct Care Staff: For first and second year students,					

	<p>this component offers a competency test from the PA Department of Public Welfare and it prepares students to work in a personal care home as a direct care giver.</p> <p>Pharmacy Technician Certification (CPHT): After successful completion of this one-year, 12th grade course, students will assist the pharmacist in a variety of tasks. Module and lab work includes: controlled substances, laws and regulations, drug classifications, frequently prescribed medications, prescription information, preparing/dispensing prescriptions, calculations, sterile products, unit dose, and repackaging.</p> <p>Phlebotomy Technician Certification (CPT): This is a one semester certification course directed towards 12th grade students. Module and lab work includes: anatomy and physiology, infection control, safety and compliance, patient preparation, collection techniques, and processing of collected sample(s). Students must demonstrate a minimum of 30 successful venipunctures and 10 successful capillary punctures.</p>
Prerequisites	<ul style="list-style-type: none"> None

Cyber Security & Network Technology	9155 9355		4 Credits 3 Credits	NonWeighted	Year
Course Description	<p>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.</p>				
Prerequisites	<ul style="list-style-type: none"> None 				

Public Safety Technology	9185 9385		4 Credits 3 Credits	NonWeighted	Year
Course Description	<p>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:</p> <p>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.</p>				
Prerequisites	<ul style="list-style-type: none"> None 				

Sports Medicine and Rehabilitation Therapy Technology (SMARTT)	9375 9376		4 Credits 3 Credits	NonWeighted	Year
Course Description	<p>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 comprehensive understanding of nutrition. Upon successful completion, students</p>				

	<p>should be able to assist in the development and implementation of a plan of care for healthy and special populations.</p> <p>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.</p>
Prerequisites	<ul style="list-style-type: none"> None

Veterinary Assistant Technology		9193 9402		4 Credits 3 Credits	NonWeighted	Year
Course Description	<p>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.</p>					
Prerequisites	<ul style="list-style-type: none"> None 					

[\(Back to All Course List\)](#)

[Back to Main Menu](#)



Charters Valley School District

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