

RIVER VALLEY SCHOOL DISTRICT



HIGH SCHOOL PROGRAM OF STUDIES

(Revised 3-6-23)

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River Valley High School
102 School Lane
Blairsville, PA 15717
(724) 459-5500

Superintendent:	Mr. Philip Martell
Principal:	Mr. Michael Leasure
School Counselors:	Ms. Kaitlyn Figurelli
	Ms. Ally Riley

River Valley School District Mission Statement

The River Valley School District has an obligation to ensure that all River Valley students will have equal access to a high-quality education that will allow them to reach their full potential in all career paths that prepare them for the challenges of the 21st century and global economy.

River Valley School District Vision Statement

The vision of the River Valley School District is to champion all district stakeholders to inspire excellence through high-quality, personalized learning in an inclusive and safe environment.



Counseling Department

The counseling department welcomes River Valley students, staff, parents/guardians and community members. Our goal is to help you make the most of your academic, social/emotional, and career experience. All students will have the opportunity to have academic planning meetings with their counselor. During this time, students will have the opportunity to see their current and previous academic standing, discuss future plans such as career or college preparation, discuss any concerns, along with much more. If students need to see a counselor, our doors are always open.

Schedule Change Requests

River Valley High School students will receive their schedules for the 2023-2024 school year prior to the first day of school. If a student would like to request a schedule change they will have to complete a schedule change request form located in the guidance office. This form will require the current course instructors signature, the desired course instructors signature, and a parent/guardian signature. Schedule change requests must be requested within the first two weeks of school, after the first two weeks we can not make changes to student schedules.

CIHS Courses

River Valley offers a variety of College in High School (CIHS) courses to students 9th-12th grade. These courses can be taken to earn a college credit and can be taken without earning a college credit. If the student is seeking to earn a college credit there will be a cost associated with the class, this will be based on what the college charges. Below is a table of courses we offer and through what college.

University	Course	Course	Course	Course	Course	Course
<u>Seton Hill University</u>	Chemistry	English Topics in Literature	College Algebra	Pre-Calculus	Physics	
<u>Penn College</u>	Sanitation and Baking	American Government	Psychology	English Composition	Intro Medical Terminology	Anatomy and Physiology
<u>Penn Highlands Community College</u>	Western Civilization 2	Calculus I	Spanish I	Spanish II	Spanish III	
<u>Westmoreland County Community College</u>	Sociology	Developing Educators-Exceptional Persons				
<u>University of Pittsburgh</u>	Statistics					

*In order to receive college credit for Spanish 2 and 3, Spanish 1 needs to be taken for a college credit.

*CIHS courses require a teacher recommendation.

*Online courses are NOT eligible for CIHS credits.

AP Courses

At this time River Valley offers one Advance Placement (AP) course, AP United States History. AP courses enable academically prepared students to pursue college-level studies. By taking an AP course it will help students stand out on their college applications and can eliminate introductory courses in college. Students have the opportunity to take the AP exam at the end of each school year, there is a fee associated with taking this course.

*AP courses require a teacher recommendations

Graduation Requirements

The River Valley School District defines graduation on the basis of the following criteria:

1. Completion of the courses and credits with passing grades (68% or above)
2. Demonstration of proficiency in Literature, Mathematics, and Biology as measured by state and/or local assessments

*See below regarding “State Requirements - ACT 158”

River Valley Requirements:

Students must have completed a minimum of 25 credits in grades nine through twelve to graduate and receive a diploma from the River Valley School District.

The required breakdown is as follows:

English Requirements	4 Courses
Social Studies Requirements	4 Courses
Mathematics Requirements	3 Courses
Science Requirements	3 Courses
Physical Education Requirements	3 Courses
Health Requirement	1 Course
Elective Requirements	8 Courses
Total Courses	25

1 Credit = Year long course that meets every day

.50 Credit = Semester courses that meet every day

.25 Credit= Quarter Course

Pennsylvania State Graduation Requirements - ACT 158:

Act 158 was put into place by Governor Tom Wolf in October of 2018 and will be effective statewide starting with the 2023 graduating class. Act 158 is a state requirement for graduation. Seniors must complete at least one of the five pathways in order to graduate, this will demonstrate postsecondary career preparedness. Each student will have a meeting with their school counselor to review which pathway is best for them to pursue. As the Pennsylvania Department of Education finalizes plans for future Keystone Exams or changes these graduation requirements, the High School Program of Studies will be revised to reflect the changes.

Pathway #1: Keystone Proficiency

Proficiency Pathway (Goal proficient or advanced on each exam)

**Must receive a passing grade of a 68%*

- ☐ Algebra 1- must achieve at least 1500
- ☐ Biology- must achieve at least 1500
- ☐ Literature- must achieve at least 1500

Pathway #2: Keystone Composite Score

Composite Score Pathway

**Must receive a passing grade of a 68%*

- ☐ Biology, Algebra 1, and Literature must have a combined score of at least 4452
- ☐ At least one of these scores is proficient or advanced, none can be below basic

Pathway #3: Career and Technical Education (CTE) Concentrator

Grade passing requirements for Keystone content areas (Algebra I, Biology and Literature and one of the following:

**Must receive a passing grade of a 68%*

- ☐ Satisfactory completion of local requirements
- ☐ Program continuation readiness
- ☐ Industry-based assessment potential for success

(NOCTI exam)

Pathway #4: Alternate Assessment

Grade Passing Requirement for Keystone Content Areas (Biology, Algebra 1, and Literature)

**Must receive a passing grade of a 68%*

- ☐ Have a passing grade in Biology, Algebra 1, and Literature

AND one of the following:

- ☐ ACT Composite score of 21
- ☐ ACT WorkKeys NCRC Gold Level
- ☐ ASVAB Composite score of 31
- ☐ PSAT/NMSQT Total Score of 970
- ☐ SAT Composite Score (Goal 1010)
- ☐ Transfer Student (Grad Report) Algebra Score
- ☐ Transfer Student (Grad Report) Algebra Performance Level
- ☐ Transfer Student (Grad Report) Biology Score
- ☐ Transfer Student (Grad Report) Biology Performance Level
- ☐ Transfer Student (Grad Report) Literature Score
- ☐ Transfer Student (Grad Report) Literature Performance Level
- ☐ Successfully complete Concurrent Enrollment Course(s) related to each Keystone Exam in which less than Proficient
- ☐ 4 Year College Acceptance
- ☐ Successfully complete a Pre-Apprenticeship Program

Pathway #5: Evidence Based

Grade passing requirements for Keystone content areas (Algebra I, Biology and Literature) AND 3 pieces of evidence including one of the following:

**Must receive a passing grade of a 68%*

- ☐ Attainment of SAT subject test score of 630
- ☐ AP exam score of 3
- ☐ IB exam score of 3
- ☐ Attainment of Silver Level or better on ACT WorkKeys
- ☐ Postsecondary Acceptance (other than a 4-year institution)
- ☐ Industry recognized credential

Successful completion of concurrent enrollment or post-secondary course AND two of the following:

- ☐ Attainment of Proficient or Advanced on any Keystone Exam
- ☐ Satisfactory completion of service project (Listed at bottom of the page under Act 158 Resources).
- ☐ Satisfactory completion of an internship, externship, or cooperative education program
- ☐ Documentation of full-time employment or military enlistment
- ☐ Satisfactory compliance with NCAA core courses with a minimum GPA of 2.0

Student Attendance

Attendance in school is required by law and should be encouraged by parents/guardians. Students are able to turn in ten written parent/guardian excuses for absences. Any amount of absences after those 10 written excuses will have to be medical excuses. Students with three or more illegal absences will be required to have a truancy meeting.

Grades

Grades are determined by assessing the student's academic achievement based on the established curriculum and individual classroom guidelines. Report cards document this level of achievement and also determine the student's grade point average (GPA) for each marking period. Grade point averages are not rounded for reporting for honor roll, academic awards, or any other purpose.

Grade Reporting

Grades will be issued at the conclusion of each marking period. Interim progress reports will be sent home with each student at the midpoint of each marking period. Tentative dates for mid-marking period and end of marking period appear on the school calendar on the District homepage.

Grade Scale

Letter	Percentage	Meaning
A	93-100	Outstanding
B	85-92	Above Average
C	76-84	Average
D	68-75	Poor (Not eligible for Honor Roll)
F	0-67	Failing (Not eligible for Honor Roll)
I	Incomplete	Not eligible for Honor Roll or Class Rank
P/F	Pass/Fail	Not eligible for Honor Roll or Class Rank

*Passing CIHS and/or AP courses will increase a student's calculated percent average by an additional 1.3 percent for that class for the year.

Honor Roll Levels

Distinguished Honors	95% or higher
High Honors	90% - 94.99%
Honors	85% - 89.99%

River Valley Career Pathway Icons

All River Valley High School Course Offerings align with Career and Education Workforce Standards. Each Pathway is associated with the Future Readiness Career Clusters.



Agriculture, Food, and Natural Resources



Arts and Communications



Business, Management, and Education

Engineering, Manufacturing, and Technology



Health Science Technology

The River Valley School District is committed to ensuring all students are prepared to be college and career ready as citizens in a global and changing economy and job marketplace. To fulfill this goal, we have developed a College and Career Pathways system that amplifies our rigorous academic program, expands our course offerings, enhances students' instructional opportunities, and integrates access to industry experiences.

Through the College and Career Pathways program students will:

- Plan for their future through personal interest mapping (RIASEC Model), guidance lessons, project based learning opportunities, college interviews and visits, job site visits through the WIB program, and career learning experiences.
- Invest in their future through the purposeful use of instructional technology, increased availability of authentic learning experiences, and integration of enriched educational experiences focused on critical thinking, collaboration, communication, and creativity.
- Experience their future through STEAM ACADEMY programs at our Saltsburg Campus, mentorships, research, service learning, College in High School courses and internships. The College and Career Pathways program at River Valley School District will ensure all students are prepared for success in our dynamic and evolving world.



RVSD Program Career Pathways

RAISEC



Realistic

People with Realistic interests like work that includes practical, hands-on problems and answers. People with Realistic interests often avoid careers involving paperwork or working closely with others. They like working with plants and animals; real-world materials like wood, tools, and machinery; and outside work.

RVSD Career Clusters that may be a good fit for people with Realistic interests:

- Agriculture, food, and natural resources
- Arts, A/V technology, and communications
- Health Science
- Information technology
- Law, public safety, corrections, and security
- Manufacturing
- Science, technology, engineering, and mathematics
- Transportation, distribution, and logistics

Recommended Coursework:

Technical Design

Principles of Manufacturing

Applied Robotics

Advanced Robotics

Electrical and Powerline (STEAM ACADEMY)

Pathway to Health Professions (STEAM ACADEMY)

Investigative

People with Investigative interests like work that has to do with ideas and thinking rather than physical activity or leading people. They like searching for facts and figuring out problems.

RVSD Career Clusters that may be a good fit for people with Investigative interests:

- Health Science
- Information technology
- Law, public safety, corrections, and security
- Science, technology, engineering, and mathematics

Recommended Coursework:

CIHS Psychology

CIHS English Composition

CIHS Topics in Literature

CIHS Political Science

CIHS Sociology

CIHS Spanish I/II/III

Homeland Security

Computer Science

Intro to Cybersecurity

Cybersecurity (STEAM ACADEMY)

Teacher Education Program (STEAM ACADEMY and RVHS)

Biomedical Engineering (STEAM ACADEMY and RVHS)

Artistic

People with Artistic interests like work that deals with the artistic side of things, such as acting, music, art, and design. They like creativity and work that can be done without following rules.

RVSD Career Clusters that may be a good fit for people with Artistic interests:

- Arts, A/V technology, and communications
- Education and training
- Marketing, sales, and service

Recommended Coursework:

Audio Production I/II

Video Production I/II

Digital Media

Painting I/II

Illustration/Graphic Design

Pottery and Sculpture

Chorus

Band

Intro to Esports/Cybersecurity

ESPORTS (STEAM ACADEMY)

Teacher Education Program (STEAM ACADEMY)

Sports and Entertainment Communications (STEAM ACADEMY)

Social

People with Social interests like working with others to help them learn and grow. They like working with people more than with objects, machines, or information. They enjoy teaching, giving advice, and supporting and serving people.

RVSD Career Clusters that may be a good fit for people with Social interests:

- Arts, A/V technology, and communications
- Education and training
- Government and public administration
- Health Science
- Law, public safety, corrections, and security
- Marketing, sales, and service positions

Recommended Coursework:

CIHS Psychology

CIHS English Composition

CIHS Topics in Literature

CIHS Sociology

CIHS Spanish I/II/III

Homeland Security

Intro to Cybersecurity/Esports

Cybersecurity (STEAM ACADEMY)

Teacher Education Program (STEAM ACADEMY and RVHS)

Biomedical Engineering (RVHS)

SMART Program (STEAM ACADEMY)

Enterprising

People with Enterprising interests like work that involves starting and carrying out business projects. These people like acting rather than thinking about things. They like persuading and leading people, making decisions, and taking risks for profits.

RVSD Career Clusters that may be a good fit for people with Enterprising interests:

- Arts, A/V technology, and communications
- Business, management, and administration
- Finance
- Government and public administration
- Law, public safety, corrections, and security
- Marketing, sales, and service

Recommended Coursework:

Accounting

CIHS Psychology

CIHS English Composition

CIHS Topics in Literature

CIHS Sociology

CIHS Spanish I/II/III

Homeland Security

Intro to Cybersecurity/Esports

Cybersecurity (STEAM ACADEMY)

Teacher Education Program (STEAM ACADEMY and RVHS)

Conventional

People with Conventional interests like work that follows set procedures and routines. They prefer working with information and paying attention to details rather than working with ideas. They like working with clear rules and following a strong leader.

RVSD Career Clusters that may be a good fit for people with Conventional interests:

- Business, management, and administration
- Finance
- Health Science
- Manufacturing
- Transportation, distribution, and logistics

Recommended Coursework:

CIHS Intro to Anatomy and Physiology

CIHS Medical Terminology

Fitness and Sport

Human and Growth Development

Biology II

Intro to Manufacturing

SMART program (STEAM ACADEMY)

Biomedical Engineering (STEAM ACADEMY)

Pathways to Health Professions (STEAM ACADEMY)

ADVANCED ACADEMIC

9th Grade

English 9 (KE)	1.000
Advanced Geometry	1.000
Biology I (KE)	1.500
US History I	1.000
Health	0.25
Physical Education	0.25
CMU CS1	0.50
Block 9	1.000
Spanish I	1.000
Elective Credit	<u>1.000</u>
Total:	8.500

10th Grade

English 10	1.000
Advanced Algebra II	1.000
Chemistry and/or Env & Eco	1.500
US History II/AP US History	1.000
Physical Education	0.500
Spanish II	1.000
Elective Credit	<u>2.000</u>
Total:	8.500

11th Grade

CIHS Eng Comp	
1.000 CIHS College Algebra or	
CIHS Pre-Calculus	1.000
Physics	1.500
World Cultures/AP World Cult.	
1.000 Physical Education	0.500
Elective Credit	<u>3.000</u>
Total:	8.000

12th Grade

CIHS Topics in Literature	
1.000 CIHS Calculus I/CIHS CALC II	
1.000	
CIHS College Chemistry or	
CIHS College Physics	1.500
CIHS Government & Economics	
1.000	
Physical Education	0.500
Elective Credit	<u>2.000</u>
Total:	7.000

ACADEMIC

9th Grade

English 9 (KE)	1.000
Algebra I (KE)	2.000
Biology I (KE)	1.500
US History I	1.000
I	
	0.25
Health	0.25
Physical	0.50
Education	1.00
CMU CS1	<u>8.500</u>
Block 9	
Spanish I	

Total

10th Grade

English 10	1.000
Geometry or Algebra II	1.000
Chemistry and/or Env & Eco	1.500
Eco US History II	1.000
Physical Education	0.500
Spanish II	1.000
Elective Credit	<u>1.000</u>
Total:	8.500

11th Grade

English	1.000
11	1.000
Algebra II	1.500
Physics	1.000
World Cultures	0.500
Physical	<u>3.000</u>
Education	8.000
Elective Credit	

Total:

12th Grade

English 12	1.000
Statistics or	
College Algebra	1.000
CIHS College Chemistry or	
CIHS College Physics	1.500
CIHS Government & Economics	
1.000 Physical Education	0.500
Elective Credit	<u>3.000</u>
Total:	7.000

CTE/STEAM

9th Grade

English 9 (KE)	1.000
Algebra I (KE)	2.000
Biology I (KE)	1.500
US History I	1.000
Health	0.25
Physical Education	0.25
CMU CS1	0.50
Block 9	1.000
Spanish I	<u>1.000</u>
Total:	8.500

10th Grade

English 10	1.000
Geometry or Algebra II	1.000
Chemistry and/or Env & Eco	1.500
US History II	1.000
Physical Education	0.500
ICTC/STEAM 10	<u>3.000</u>
Total:	8.000

11th Grade

English 11	1.000
Algebra II	1.000
World Cultures	1.000
Physics	1.000
Physical Education	0.500
ICTC/STEAM 11	<u>3.000</u>
Total:	7.500

12th Grade

English 12	1.000
Government & Economics	1.000
Physical Education	0.500
Elective Credit	1.000
ICTC/STEAM 12	<u>3.000</u>
Total:	6.500

Courses marked with “(KE)” are Keystone Examination courses.

ENGLISH LANGUAGE ARTS

Course #	Course Name	Year	Semester	9	10	11	12	Potential Credit	CIHS	
0110	English 9 (Lit)	X		X				1		<i>*Keystone Course</i>
0120	English 10 (Comp)	X			X			1		
0130	English 11	X				X		1		
0138	CIHS English Composition 1	X				X		1	X	
0140	English 12	X					X	1		
0148	CIHS Topics in Literature	X					X	1	X	
0170	Yearbook	X			X	X	X	1		

*CIHS - College in High School Course

*Keystone Course - Graduation Requirement

Course #:	0110	Credit:	1.000
Course Title:	ENGLISH 9 (COMP)	Prerequisite(s):	None

The freshman English course focuses on the areas of *writing, speaking, literature, vocabulary, grammar, and portfolios*. Students will write narrative, persuasive, descriptive, and expository paragraphs and compositions. Writing assignments may be in the form of a biographical paper, a research paper, and/or written responses to literature. Students will be required to speak before an audience. Speaking assignments may include summaries of their written work, responses to literary works, and/or a formal speech. Students will study a variety of literary genres; these may include novels, short stories, non-fiction works, poetry, contemporary and/or Shakespearean drama. Students will study literary terminology and lists of vocabulary words taken from literary and/or independent lists. In grammar, students will study such areas as sentence structure, agreement, usage, and writing mechanics. Each student will create an English portfolio, which will demonstrate the student's performance according to district academic standards.

Course #:	0120	Credit:	1.000
Course Title:	ENGLISH 10 (LIT)	Prerequisite(s):	Completion of English 9 (COMP)

English 10 is a comprehensive course that includes and integrates the study of literature and composition. The study of world literature will enhance students' reading, comprehension, and analytical thinking skills. A survey of literature will include studies in short stories, poetry, novels, drama, and nonfiction. In addition, students will have opportunities to refine their communication skills through writing and speaking. Students will write and speak in a variety of modes including expository, narrative, and persuasive. Vocabulary units will be integrated throughout the year. Assessments will be based on writing assignments, exams, presentations, projects, and homework.

Course #:	0130	Credit:	1.000
Course Title:	ENGLISH 11	Prerequisite(s):	Completion of English 10 (LIT)

This course is designed to focus on three major areas of study enhancing students' critical thinking, comprehension, speaking, and writing skills. The first major area of study is a comprehensive examination of American Literature encompassing both classical and modern authors of poetry, short stories, novels and drama and the literary devices found in these works. The second major area of study involves the development and refinement of skills in the areas of creative, persuasive, expository and narrative writing. The final major area of study in this course involves developing oral communication skills through projects, presentations, and speeches designed to give students more confidence in their abilities to effectively communicate.

Assessment will be based on a variety of factors. Writing assignments, journals, examinations, homework, group and individual projects, and oral presentations will be used to help assess student performance. Students will also be required to keep a portfolio. Opportunities for extra credit will be available at the discretion of the instructor.

Course #:	0138	Credit:	1.000
Course Title:	CIHS ENGLISH COMPOSITION I	Prerequisite(s):	90% Average in Both English 9 (COMP) and English 10 (LIT) or Teacher Recommendation

English Composition I emphasizes the techniques of writing expository essays with stress upon careful thinking, word choice, sentence structure, and methods of organization. Students practice the writing of clear, coherent, and unified paragraphs and essays. Editing skills and the use of correct grammar and mechanics are also emphasized. Students are taught research skills and are required to write an argumentative research paper. This is the standard college English composition course.

This course is highly recommended for students intending to take College English Literature and Composition.

This course is offered as part of the College in High School Program. Credit will be awarded for River Valley School District, and may also be taken for college credit through the accrediting college/university. Further course details are available in the College in High School Course Catalog (available on the district website).

Course #:	0140	Credit:	1.000
Course Title:	ENGLISH 12	Prerequisite(s):	Completion of English 11

This senior course develops skills in reading, writing, speaking, and listening. Students will survey classical British literature in a variety of genres such as drama, short stories, poetry, essays, and novels. Writing will include analytical essays, personal responses, narratives, creative pieces, and research writing.

Assessment will be based on projects, exams, quizzes, written work, and class participation. Also, portfolios will be part of the overall evaluation of students' work.

Course #:	0148	Credit:	1.000
Course Title:	CIHS TOPICS IN LITERATURE	Prerequisite(s):	Teacher Recommendation

CIHS Topics in Literature is meant to be taught at a college-level pace using literature of merit. Students will engage in in-depth analysis of both fiction and non-fiction works as they deepen their understanding of a wide breadth of materials. Essential to this course will be the ability to comprehend, explain, and critically evaluate the written word. Literary analysis and the subsequent discussion and revision of these analyses will play a major role in the course.

This course is offered as part of the College in High School Program. Credit will be awarded for River Valley School District, and may also be taken for college credit through the accrediting college/university. Further course details are available in the College in High School Course Catalog (available on the district website).

Course #:	0170	Credit:	1.000
Course Title:	YEARBOOK	Prerequisite(s):	Teacher Recommendation

In this course students will gain skills in one or more of the following areas: page design, advanced publishing techniques, copywriting, editing and photography while producing a creative, innovative yearbook which records school memories and events. There is an emphasis on journalism skills in this class! Participants gain useful, real world skills in time management, marketing, teamwork, and design principles.

*This course is an elective and does not count towards English graduation requirements.

MATHEMATICS

Course #	Course Name	Year	Semester	9	10	11	12	Potential Credit	CIHS	
0205	Pre-Algebra	X		X				2		
0210	Algebra 1	X		X	X			2		<i>*Keystone Course</i>
0220	Geometry	X			X	X	X	1		
0222	Advanced Geometry	X		X				1		
0230	Algebra 2	X			X	X	X	1		
0232	Advanced Algebra 2	X			X			1		
0248	CIHS College Algebra	X				X	X	1	X	
0258	CIHS College Pre-Calculus	X				X	X	1	X	
0268	CIHS College Calculus 1	X				X	X	1	X	
0278	CIHS Statistics	X				X	X	1	X	
0280	Calculus 2	X					X	1	X	

*CIHS - College in High School Course

*Keystone Course - Graduation Requirement

Course #:	0205	Credit:	2.000
Course Title:	PRE-ALGEBRA	Prerequisite(s):	None

Pre-Algebra is an Algebra readiness curriculum designed as a prerequisite course for Algebra I. The goal of Pre-Algebra is to improve a student's foundational skills and prepares them for Algebra I. The course is designed to provide a solid algebraic foundation. Emphasis is placed on basic concepts such as number development, equations, functions, and graphing.

Course #:	0210	Credit:	2.000
Course Title:	ALGEBRA I (KE)	Prerequisite(s):	None

This course is designed to provide an algebraic foundation for students. Emphasis is placed upon problem solving and logical thinking while basic concepts such as number development, equations, functions and graphing are stressed as well. Exploration and presentation of topics including symbol interpretation, statement problems, polynomial expressions and equations are included.

Course #:	0220	Credit:	1.000
Course Title:	GEOMETRY	Prerequisite(s):	Completion Algebra I

This course builds upon concepts taught in Algebra I. The course offers an introduction to mathematical reasoning and Euclidean geometry. Topics will include parallel and perpendicular lines, perimeter, area, surface area and volume. Other topics include properties of polygons, similarity, congruence, right triangles and trigonometry, coordinate geometry, and circles.

Course #:	0222	Credit:	1.000
Course Title:	ADVANCED GEOMETRY	Prerequisite(s):	Algebra I

This course is designed for students who have completed Algebra I in middle school. The course offers a rigorous approach to mathematical reasoning through Euclidean and non-Euclidean geometries. Deductive reasoning, theorem proofs, and applications in parallelism, congruence, similarity, inequalities in geometry, transformations, and coordinate geometry are emphasized.

Course #:	0230	Credit:	1.000
Course Title:	ALGEBRA II	Prerequisite(s):	Completion of Algebra I

This course reviews and builds upon the concepts of Algebra I, covering such topics as linear equations and inequalities, linear systems, quadratic functions, polynomial functions, exponential and logarithmic functions, rational expressions and equations, sequences and series, and data analysis and probability.

Course #:	0232	Credit:	1.000
Course Title:	ADVANCED ALGEBRA II	Prerequisite(s):	Completion of Advanced Geometry

This course is designed for the accelerated student. It reviews and builds upon the concepts of Algebra I, covering such topics as linear equations and inequalities, linear systems, quadratic functions, polynomial functions, exponential and logarithmic functions, rational expressions and equations, and data analysis and probability.

Course #:	0248	Credit:	1.000
Course Title:	CIHS COLLEGE ALGEBRA	Prerequisite(s):	Completion of Algebra II and Teacher Recommendation

Students enrolled in this course should have a strong background in basic and intermediate algebra. Topics include an in-depth study of expressions, solving equations, solving inequalities, circles, and a detailed study of functions including polynomial, logarithmic, and exponential functions.

This course is offered as part of the College in High School Program. Credit will be awarded for River Valley School District, and may also be taken for college credit through the accrediting college/university. Further course details are available in the College in High School Course Catalog (available on the district website).

Course #:	0258	Credit:	1.000
Course Title:	CIHS COLLEGE PRE-CALCULUS	Prerequisite(s):	Final average of at least 80% in Advanced Algebra II and/or Teacher Recommendation

This course reviews and builds upon the concepts of Advanced Algebra II, covering such topics as linear equations and inequalities, quadratic functions, polynomial functions, exponential and logarithmic functions, and trigonometric functions.

This course is offered as part of the College in High School Program. Credit will be awarded for River Valley School District, and may also be taken for college credit through the accrediting college/university. Further course details are available in the College in High School Course Catalog (available on the district website).

Course #:	0268	Credit:	1.000
Course Title:	CIHS COLLEGE CALCULUS I	Prerequisite(s):	Completion of CIHS College Pre-Calculus and Teacher Recommendation

This course is designed as the first calculus course for students pursuing degrees in mathematics, engineering, or the natural sciences. Students will develop an understanding of the concepts of calculus and provide experience with its methods and applications. The course offers a multi-representational approach to calculus with concepts, results, and problems expressed geometrically, numerically, analytically, and verbally. Broad concepts and widely applicable methods are emphasized. Through the use of unifying themes of limits, derivatives, integrals, approximations, applications, and modeling, the course becomes a cohesive whole. These themes are developed using concepts from pre-calculus. Technology is used regularly to reinforce the relationships among multiple functions, to implement experimentation, and to assist in interpreting results.

This course is offered as part of the College in High School Program. Credit will be awarded for River Valley School District, and may also be taken for college credit through the accrediting college/university. Further course details are available in the College in High School Course Catalog (available on the district website).

Course #:	0278	Credit:	1.000
Course Title:	CIHS STATISTICS	Prerequisite(s):	Teacher Recommendation

This college-level course is a senior mathematics elective. Any student enrolled in this class may also choose to receive four credits from the University of Pittsburgh by enrolling in and fulfilling the requirements of the College in High School Program. The purpose of this course is to give students a conceptual understanding of research-based statistics. This course is divided into four segments: data analysis, data production, probability and statistical inference. The TI-84 Plus Edition graphing calculator is utilized extensively and is required.

This course is offered as part of the College in High School Program. Credit will be awarded for River Valley School District, and may also be taken for college credit through the accrediting college/university. Further course details are available in the College in High School Course Catalog (available on the district website).

Course #:	0280	Credit:	1.000
Course Title:	CALCULUS II	Prerequisite(s):	CIHS CALCULUS I

Calculus II is equivalent to a second semester college calculus course. It extends the content learned in Calculus I to different types of equations (polar, parametric, vector-valued) and new topics (such as integration by parts, partial fraction decomposition, and improper integrals), and introduces the topics of sequences, series, and polar coordinates. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

SCIENCE

Course #	Course Name	Year	Semester	9	10	11	12	Potential Credit	CIHS	
0310	Biology	X		X				1.5		<i>*Keystone Course</i>
0320	Chemistry	X			X	X		1.5		
0325	Integrated Chemistry	X			X	X		1		
0330	Physics	X				X	X	1.5		
0335	Integrated Physical Science	X				X	X	1		
0350	Biology 2	X			X	X	X	1		
0368	CIHS College Chemistry	X				X	X	1.5	X	
0378	CIHS College Physics	X					X	1.5	X	
0380	Environment & Ecology	X			X			1		

*CIHS - College in High School Course

*Keystone Course - Graduation Requirement

Course #:	0310	Credit:	1.500
Course Title:	BIOLOGY	Prerequisite(s):	None

This is offered to students as an academic survey of the biological sciences. Students are introduced to the broad range of disciplines that are encompassed by the life sciences. Students are shown the manner in which science is approached as an effort to understand and manage daily life. Topics such as cell biology, taxonomy, genetics and science process are emphasized. Hands-on activities are incorporated and the successful student will engage in an active role in class discussions and activities.

This course consists of integrated components that expose the student to the nature of scientific inquiry and the unifying themes of science and biology. The curriculum is based on testing anchors for the Keystone Biology Exam. Students will develop critical/scientific thinking skills related to science along with knowledge about the nature of life (cells), energy and living things, genetics and the evolution of life on earth. Completion of this course is intended to yield a proficient level of ability on the Keystone Biology Exam. For more information on these, and other topics, consult the PSSA State Standards of Science for Biological Sciences.

Course #:	0320	Credit:	1.500
Course Title:	CHEMISTRY	Prerequisite(s):	Completion of Algebra I and Biology I or concurrently enrolled in Algebra I

Chemistry is the study of matter and how its properties and changes are a consequence of its structure. Chemistry also investigates the energy changes that accompany the changes in matter. It is, therefore, the goal of high school chemistry to increase the student's understanding, knowledge, and appreciation of the structure and behavior of the physical universe. A course in high school chemistry will also help the student mature intellectually. It should make the student a better problem solver, develop critical thinking skills, and help the student see the connections between chemistry and other subject areas.

This course allows for a laboratory component. Topics to be covered include scientific measurement and problem solving, matter and change, the mole concept, atomic structure, electrons in atoms, the periodic table and periodic trends, chemical bonding and chemical formulas/names, chemical reactions and equations, stoichiometry, gas laws, and solutions. Assessments will include chapter tests and quizzes, performance-based lab experiments and reports, homework assignments, teacher observation and in-class activities and reinforcements.

Course #:	0325	Credit:	1.000
Course Title:	INTEGRATED CHEMISTRY	Prerequisite(s):	Completion of Biology I

Integrated Chemistry is the study of matter and how its properties and changes are a function of its atomic structure. This course is designed as an introduction to essential and basic chemical concepts that follow Chemistry Keystone Assessment Anchors. Through the use of varied modes of instruction and assessment, the overall goal of Integrated Chemistry is to develop the student's knowledge and appreciation of the chemical patterns that are present throughout the physical universe. This course is not accompanied by laboratory periods, although inquiry investigations and activities are used when applicable.

*This course accommodates the schedules of ICTC students, but is not limited to ICTC students.

Course #:	0330	Credit:	1.500
Course Title:	PHYSICS	Prerequisite(s):	Completion of Chemistry and completion or currently enrolled in Algebra II

This course is an introductory physics course with a significant emphasis on mathematics. A major goal of this course is to develop and improve critical thinking and problem solving skills. Since mathematics is considered to be the language of physics, students will be using math extensively in this course. To ensure success, it is recommended that the student have a solid foundation in algebra.

The fundamental areas of physics will be covered with special emphasis on mechanics. Mechanics is the study of motion, force, work, energy, power, machines and momentum. Other possible topics to be covered include waves, electricity, light, sound and magnetism. Topics will be taught using a more mathematical and analytical approach.

Teaching and learning strategies include demonstrations, lectures, videos, individualized problem solving, group problem solving, and the use of technology. Assessment of course objectives will be given in the form of homework, quizzes, tests, projects and performance based laboratory experiments.

Notebooks and scientific calculators are required.

Course #:	0335	Credit:	1.000
Course Title:	INTEGRATED PHYSICAL SCIENCE	Prerequisite(s):	Completion of Chemistry or Integrated Chemistry

Integrated Physical Science is designed for the student who is seeking a fundamental understanding of physics and chemistry. This course will emphasize problem solving on a basic level. The fundamental areas of integrated physical science will be covered with special emphasis on mechanics. Mechanics is the study of motion, force, work, power, energy and momentum. Additional topics to be covered may include electricity and light. This course is designed to provide students with an understanding of basic physical concepts and how they relate to our society, the environment, and the natural world in which they live. Topics will be taught using a fundamental, conceptual approach. Teaching and learning strategies include demonstrations, lectures, videos, individualized problem solving, group problem solving, and the use of technology. Assessment of course objectives will be given in the form of homework, quizzes, tests, and various "hands-on" projects that emphasize the application of physical science in a real world setting. Notebooks and basic calculators are required. *This course accommodates the schedules of ICTC students, but is not limited to ICTC students.

Course #:	0350	Credit:	1.000
Course Title:	BIOLOGY II	Prerequisite(s):	Biology I and Proficiency on the Biology Keystone Exam

This is an elective course designed for students who plan on pursuing post-secondary science education, or life science related occupations. This course is divided into two major sections: Taxonomy and Mammalian Anatomy. The course is project oriented with an essential reading and writing component. Students who take this course will be required to participate actively in a collaborative setting. This is considered a college preparatory course.

*This course is an elective and does not count towards Science graduation requirements.

Course #:	0368	Credit:	1.500
Course Title:	CIHS COLLEGE CHEMISTRY	Prerequisite(s):	Completion of Chemistry and Algebra II and Teacher Recommendation

This course, which allows for a laboratory component, is designed to be the equivalent of the general chemistry course usually taken during the first year of college. Students should attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. This course will contribute to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. A great emphasis will be placed on chemical calculations and the mathematical formulation of principles. Students will encounter more advanced laboratory methods and experiments that must be accompanied by detailed and organized laboratory reports. College Chemistry is much more rigorous and quantitative than Chemistry; virtually every concept exposes the student to a problem-solving situation. As a result, the student completing the course should have enhanced problem-solving and critical thinking skills and begin to see how other subjects such as mathematics, physics, and communication courses are integrally related and important. Students will see a connection between chemistry and their everyday lives as part of society.

Assessments include chapter tests and quizzes, performance-based lab experiments and reports, practice problems, teacher observation, and major performance tasks/projects. Each student will also complete a cumulative final exam at the end of the year. There will be a summer assignment given for this course.

This course is offered as part of the College in High School Program. Credit will be awarded for River Valley School District, and may also be taken for college credit through the accrediting college/university. Further course details are available in the College in High School Course Catalog (available on the district website).

Course #:	0378	Credit:	1.500
Course Title:	CIHS COLLEGE PHYSICS	Prerequisite(s):	Completion of Physics 0330 and Concurrent enrollment in Calculus Recommended and Teacher Recommendation

The College Physics course is available to students who have successfully completed Physics 0330. This course is targeted toward students planning to further their education in engineering or in a science related field. It is primarily designed to prepare students for a college-level, Calculus-based Physics course. Students taking this course will also have the option to take the Mechanics section of the AP Physics C Exam.

Topics covered in this course are similar to those in Physics, but all are treated in greater depth and become more abstract under the College in High School curriculum. Calculus is considered to be an integral tool for this course; therefore, it is highly recommended, but not required, that students are enrolled in a Calculus course. This will ensure repeated practice and reinforcement of the Calculus concepts taught and needed in the course.

The continued development of problem solving strategies and critical thinking skills will be the factors that drive the curriculum. As a result, this course will take a problem-centered approach in both the abstract and concrete. Not only will students be expected to solve problems on paper, but they must also apply basic knowledge, concepts and practices as they conduct laboratory experiments and complete projects.

Throughout each unit, various methods will be employed to ensure the highest level of learning. Conceptual knowledge of the content will be achieved by way of lecture, discussion, demonstration, computer simulations and video clips. Analytical skills will be developed through the delivery of sample problems and by way of problem solving both independently and in small groups. The utilization of acquired knowledge and skills will occur in student-centered, hands-on laboratory experiments and projects.

Assessment of course objectives will be given via homework, quizzes, laboratory experiments, projects and exams. Notebooks and scientific calculators are required.

This course is offered as part of the College in High School Program. Credit will be awarded for River Valley School District, and may also be taken for college credit through the accrediting college/university. Further course details are available in the College in High School Course Catalog (available on the district website).

Course #:	0380	Credit:	1.000
Course Title:	ENVIRONMENT AND ECOLOGY	Prerequisite(s):	Biology Chemistry may be scheduled concurrently with teacher recommendation.

Environment and Ecology provides students with an overview of the relationship between humans and their environment and explores the physical, chemical, and biological conditions of the environment and their effect on organisms. The relationships between living organisms, including humans, and their physical environment will be studied. The students will be exposed to aspects of biology, earth and atmospheric sciences, fundamental principles of chemistry and physics, human population dynamics, and an appreciation for the Earth and its natural resources. Environment and Ecology is a required course for students who did not pass the Keystone Biology Exam. This course will count as a Science elective course. You may take this course concurrently with Chemistry with an approved teacher recommendation.

SOCIAL STUDIES

Course #	Course Name	Year	Semester	9	10	11	12	Potential Credit	CIHS
0410	US History 1	X		X				1	
0420	US History 2	X			X			1	
0422	AP US History	X			X			1	
0430	World Cultures	X				X		1	
0438	CIHS Western Civilization 2	X				X		1	X
0440	Government & Economics	X					X	1	
0448	CIHS American Government	X					X	1	X
0468	CIHS Psychology	X				X	X	1	X
0478	CIHS Sociology	X					X	1	X
0482	Homeland Security	X		X	X	X	X	1	

*CIHS - College in High School Course

Course #:	0410	Credit:	1.000
Course Title:	UNITED STATES HISTORY I (9th)	Prerequisite(s):	None

1789 - 1914. This is a one-year course consisting of an examination of United States political, cultural, economic and diplomatic history. With a concentration on the Constitution, the course will cover the formation of the federal union, nationalism, sectionalism, the growth of democracy, the Civil War, Reconstruction, the growth of big business and progressivism.

Course #:	0420	Credit:	1.000
Course Title:	UNITED STATES HISTORY II (10th)	Prerequisite(s):	US History I

1914 - Present. The course is divided into four segments conforming to the nine weeks. The first nine weeks will cover the emergence of the U.S. as a world power up through and including WWI. The second nine weeks will deal with the Twenties, the Great Depression and World War II. In the third nine weeks, students will study the Post-War years, the Cold War, and the Civil Rights Movement. In the fourth nine weeks students will study from the 1980's to present day. Weekly homework assignments come from the textbook. Chapter tests include multiple choice, True/False, matching, fill in the blank questions, and essays. Every nine weeks, the students will have to complete a special project on assigned subjects pertaining to that nine weeks. It will be assessed on simulation rubric.

Course #:	0422	Credit:	1.000
Course Title:	AP UNITED STATES HISTORY	Prerequisite(s):	US History I and Teacher Recommendation

Advanced Placement United States History is part of the Advanced Placement curriculum. It is intended for those students with an interest in the liberal arts or history, and culminates with the AP exam in May. It may be scheduled as a replacement course for US History II or scheduled as an elective in subsequent years. The scope of the course covers the entire range of United States history from exploration to the modern times. Testing is the primary means of evaluation and the tests are similar to the AP exam. There is also extensive weekly work. The course relies heavily on college level texts, primary resource documents, and supplemental readings.

Course #:	0430	Credit:	1.000
Course Title:	WORLD CULTURES (11th)	Prerequisite(s):	US History I & II

This class is the required History Course for all juniors during the 2022-2023 school year. It is designed as a survey of Global History, from the beginning of civilizations up to the modern era. The intent of the course is to make the students more familiar with the many civilizations that have existed before our own. The intention of this course is for students to understand the influences those cultures have had on our present day society and will have a greater appreciation for the many tremendous accomplishments of early peoples. Additionally, we hope to increase personal knowledge of major geographical concepts. The broad nature of the course requires a very fast pace, and therefore demands hard work, good attendance, good notes, regular study, and reading of the textbook.

Course #:	0438	Credit:	1.000
Course Title:	CIHS WESTERN CIVILIZATION II	Prerequisite(s):	Teacher Recommendation

Course #:	0440	Credit:	1.000
Course Title:	GOVERNMENT AND ECONOMICS	Prerequisite(s):	None

The Senior Social Studies course is the base social studies class for twelfth grade students. One semester of the course is devoted to a study of the American model of the Free-enterprise economic system. The other semester is a study of American Government. An emphasis will be placed on study of individual freedom and American Democracy. Students will be encouraged to deal logically with various political problems. The course will encourage enhancement of communication, research, and technological skills of each student in various projects throughout the year.

Course #:	0448	Credit:	1.000
Course Title:	CIHS AMERICAN GOVERNMENT	Prerequisite(s):	Teacher Recommendation

CIHS course is designed to explain the contours of a federal system and the implications of federalism in American politics. Students will identify the branches of the federal government and explain the relationship between them. Students will investigate and identify the competing political ideologies in the United States and explain their impact on the democratic policy making process. Using podcasts, research projects, and current events, students will analyze the impact of the media on the political process; identify and analyze major political shifts in American political history; identify and analyze major Supreme Court Cases and explain the role of foreign policy in American politics

Course #:	0468	Credit:	1.000
Course Title:	CIHS PSYCHOLOGY	Prerequisite(s):	Grades 11 & 12

This is an introduction to the science of human behavior and mental processes. Students examine the relation between the nervous system and behavior, learning, perception, language, personality, intelligence, and psychopathology. This is a college level course and requires the ability to read and write at that level. It includes both informal and formal written lab reports. This course is open to 11th and 12th grade students.

*This course is an elective and does not count towards Social Studies graduation requirements.

Course #:	0478	Credit:	1.00
Course Title:	CIHS SOCIOLOGY	Prerequisite(s):	Grade 12

Introduction to the theories, principles, concepts, and major research in sociology. Study includes society's impact on human behavior and consciousness as well as the ways in which individuals and groups affect cultures and their social structures. A comparison of different cultures and subcultures provides an understanding of the relativity and universality of social values, norms, and beliefs.

*This course is an elective and does not count towards Social Studies graduation requirements.

Course #:	0482	Credit:	1.00
Course Title:	HOMELAND SECURITY	Prerequisite(s):	9-12

Program integrates current practices and technologies, used by both governmental and private sector agencies. Instruction centers around how the United States protects against threats to public health and public safety, by using effective communication, prevention, response and recovery techniques. Students will also take a CPR course and receive an Industry Certification.

*This course is an elective and does not count towards Social Studies graduation requirements.

WORLD LANGUAGE

Course #	Course Name	Year	Semester	9	10	11	12	Potential Credit	CIHS
0610	CIHS Spanish 1	X		X	X	X	X	1	X
0612	CIHS Spanish 2	X			X	X	X	1	X
0614	CIHS Spanish 3	X				X	X	1	X
0622	French 1	X		X	X	X	X	1	

*CIHS - College in High School Course

Course #:	0610	Credit:	1.000
Course Title:	CIHS SPANISH I	Prerequisite(s):	None

This course is an optional CIHS class for credits from Penn Highlands Community College. The course introduces the basic structures of the Spanish language and culture. This interactive course will allow students to achieve a functional proficiency at the novice levels of speaking, listening, reading, and writing. It also stresses aural/oral proficiency, pronunciation, grammatical accuracy, and a fundamental awareness of the cultural diversity of Spanish speaking countries.

Course #:	0612	Credit:	1.000
Course Title:	CIHS SPANISH II	Prerequisite(s):	Spanish I

This course is an optional CIHS class for credits from Penn Highlands Community College. To receive college credits for this course, you must have taken Spanish 1 as CIHS.

This course continues building the foundations of the Spanish language and culture of Spanish speaking countries. There is an emphasis on more complex syntactic structures in addition toward working on a greater proficiency in speaking, listening, reading, writing, skills. Developing communicative skills and cross-cultural competence is continued.

Course #:	0614	Credit:	1.000
Course Title:	CIHS SPANISH III	Prerequisite(s):	Spanish II

This course is an optional CIHS class for credits from Penn Highlands Community College. To receive college credits for this course, you must have taken Spanish I & II as CIHS.

Spanish III is recommended for students who are planning to attend a college or university with language requirements as well as students who desire to improve their Spanish-speaking and comprehension skills with the goal of being communicably proficient in the Spanish language. Spanish III curriculum is designed around the framework of the World-Readiness Standards for Learning Languages as developed by the American Council for the Teaching of Foreign Languages (ACTFL): Communication, Cultures, Connections, Comparisons, and Communities. The course is primarily taught in the target language, affording the students a simulated "Hispanic" environment, where they are able to apply concepts and skills to communicate in real-life situations. Students are expected to use Spanish exclusively to communicate in class. Students also explore authentic cultural and historical texts in order to bring global competence to their future careers and experiences.

Course #:	0622	Credit:	1.000
Course Title:	French I (Cyber)	Prerequisite(s):	None

French 1 is an immersive language class that covers grammar, vocabulary, and other foundational concepts that are necessary for acquiring a basic understanding of the language.

HEALTH AND PHYSICAL EDUCATION

Course #	Course Name	Year	Semester/Quarter Rotation	9	10	11	12	Potential Credit	CIHS
0810	Physical Education 9		X	X				0.25	
0812	Health 9		X	X				0.25	
0820	Physical Education 10-12	X			X	X	X	0.5	
0850	Fitness & Sport	X			X	X	X	1	
0860	CIHS Intro to Anatomy & Physiology	X			X	X	X	1	X
0862	CIHS Medical Terminology 1		X		X	X	X	.5	X

*CIHS - College in High School Course

Course #:	0810 / 0820	Credit:	Varies by rotation schedule
Course Title:	PHYSICAL EDUCATION 9/ PHYSICAL EDUCATION 10-12	Prerequisite(s):	None

The secondary physical education program, grades nine through twelve, will expose all students to the concepts of physical education and physical well-being. To achieve these goals, the students will be provided opportunities to participate in a variety of physical activities, which will give them an understanding for the needs of physical fitness in their life. The physical education program will incorporate decision-making skills while promoting lifetime activities through sports, games and other activities to attain a desirable level of physical well-being.

Course #:	0812	Credit:	Varies by rotation schedule
Course Title:	HEALTH	Prerequisite(s):	None

The secondary health program will expose all students to the concepts of total wellness including physical, mental, social and intellectual health. Healthy living will be addressed by providing active experiences that allow all students to practice applying healthy choices to real life situations. Health education will also include problem-solving, critical thinking and decision making skills. These are essential to student recognition of healthy behavior that can ultimately ensure a healthy lifestyle.

In addition to decision making, topics to be covered are: alcohol, tobacco and substance avoidance, function of the human reproductive system, disease prevention and control promotion of healthy lifestyles, and continued physical activity throughout one's life. Also, dietary guidelines and nutritional needs, community health resources, injury prevention, and the ability to respond in an emergency situation. Assessments will include chapter tests, quizzes, homework assignments, chapter worksheets, journals, various small projects and teacher assessment. The final may consist of either a written competency test or a teacher directed project.

Course #:	0850	Credit:	1.000
Course Title:	FITNESS AND SPORT	Prerequisite(s):	None

Fitness and Sports Development is an elective program designed to continue the growth and development of physical skills. Great emphasis is placed on creating a daily physical conditioning program through the use of resistive exercises three days a week. The remaining two days of the week will include activities in the gymnasium that may include, but are not limited to: archery, aerobic conditioning, basketball, floor hockey, football, soccer, softball, track & field, volleyball, wrestling, as well as lifetime sports such as badminton, table tennis, and shuffleboard. Assessments are based on active class participation and teacher observation.

Course #:	0860B	Credit:	1.000
Course Title:	CIHS INTRO TO ANATOMY & PHYSIOLOGY	Prerequisite(s):	Health and Biology

Intro to Anatomy and Physiology is a course that investigates the human structure and function. Students will be introduced to a variety of topics including body organization, proper anatomical terms, biochemical composition, and the major body systems. Students will utilize many tools to succeed in this course including textbooks, study guides, worksheets, group projects/work, webquests, and other technological resources. This course is especially recommended for any future health care professionals, athletes, and those that have an interest in science.

*This course is an elective and does not count towards Physical Education graduation requirements.

Course #:	0862B	Credit:	1.000
Course Title:	CIHS MEDICAL TERMINOLOGY I	Prerequisite(s):	Health and Biology

Medical Terminology is a one-semester course that helps students understand the Greek- and Latin-based language of medicine and healthcare. Emphasis is placed upon word roots, suffixes, prefixes, abbreviations, symbols, anatomical terms, and terms associated with movements of the human body. This course also stresses the proper pronunciation, spelling, and usage of medical terminology.

*This course is an elective and does not count towards Physical Education graduation requirements.

ART

Course #	Course Name	Year	Semester	9	10	11	12	Potential Credit	CIHS
1110	Introduction to Art/Drawing	X		X	X	X	X	1	
1116	Photography	X			X	X	X	1	
1122	Illustration/Graphic Design	X			X	X	X	1	
1124	Painting 1/2	X			X	X	X	1	
1130	Advanced Painting		X			X	X	0.5	
1131	Pottery & Sculpture	X			X	X	X	1	
1125	Advanced Pottery & Sculpture		X			X	X	0.5	

Course #:	1110	Credit:	1.000
Course Title:	INTRODUCTION TO ART/DRAWING	Prerequisite(s):	None

Art is designed to give the beginning art student the opportunity to develop their artistic skills. The course allows the student to work two-dimensionally as well as three-dimensionally. Students will be expected to take artistic risks, use resources to explore several different options, and demonstrate growth. Types of assessment include art projects, quizzes, critiques, portfolios, teacher observation and a variety of other assignments.

Drawing is a class that teaches the student how to put what's in the front of them down on paper. In addition, it aids the student in learning how to plan on paper not only compositions for their art work but to brainstorm ideas on how to achieve the optimal piece. Drawing is a key foundation in any art whether it's 2-D or 3-D work. Students will be expected to work with different drawing mediums such as charcoal, graphite and monochromatic pieces.

Course #:	1116	Credit:	1.000
Course Title:	PHOTOGRAPHY	Prerequisite(s):	None

An introduction to digital photography using digital cameras and basic image editing software. This course includes print production for making black-and-white and color photographs and studio techniques that include portrait lighting and still life photography.

Course #:	1122B	Credit:	1.000
Course Title:	ILLUSTRATION/GRAPHIC DESIGN	Prerequisite(s):	None

Illustration is designed to give the art student the opportunity to develop their understanding of composition regarding modern techniques with illustration. The main focus of this course is to use hands-on mediums like watercolor, acrylic, alcohol based markers, colored pencils, and pen and ink to create illustrative designs and to explore typography, designing texts, cartooning, and anime.

Course #:	1124 & 1126	Credit:	1.000
Course Title:	PAINTING I/2	Prerequisite(s):	None

Painting I is an introduction to formal painting techniques and styles from various historical and cultural areas. The art student will explore water based paints and learn proper painting techniques to create completed compositions on the appropriate base materials like canvas or paper. Some of the projects involve landscapes, still lifes, and light/reflection studies.

Painting II involves further exploration of techniques the art student learned in Painting I. Using previously learned skills the student will begin learning oil painting and finishing techniques as well as mixed media which can include spray paint and/or air brush. The students will also learn how to stretch their own canvases but also to use different base materials like linen and masonite.

Course #:	1130	Credit:	1.000
Course Title:	POTTERY AND SCULPTURE	Prerequisite(s):	None

Pottery consists of multiple clay techniques such as hand building, slab building, coiling, throwing, extruding, and slip casting. The student will learn these techniques as well as proper glazing techniques. This class will also explore sculpture by using removal methods on materials like leather-hard clay and plaster. In addition the students will experiment with other 3-D elements like resin, air dry clay, as well as mixed media to create completed sculptures.

Course #:	1131	Credit:	.500
Course Title:	ADVANCED POTTERY AND SCULPTURE	Prerequisite(s):	Pottery and Sculpture or Teacher Recommendation

Advanced Pottery & Sculpture is a three dimensional based class that continues on from where Pottery and Sculpture left off. The class is split down the middle with the first half being clay based and the second half sculpture based. With there being more open ended prompts, there is more freedom in this class to explore their work. Due to this being an advanced class, a digital art portfolio will be created as each project is finished.

Course #:	1125	Credit:	.500
Course Title:	ADVANCED PAINTING	Prerequisite(s):	Painting I and Painting II or Teacher Recommendation

Advanced Painting combines the skills and techniques learned in Painting I and II. The student will use these skills to focus on a variety of projects to create an encompassing art portfolio. This will include previous projects that are further polished in this course as well as writing artist's statements. In order to create a live portfolio students will learn how to make a digital version portfolio.

BUSINESS AND TECHNOLOGY EDUCATION

Course #	Course Name	Year	Semester /Quarter Rotation	9	10	11	12	Potential Credit	CIHS
1200	Intro to Cybersecurity/Intro to Esports		X	X				0.25	
1202	Intro to Health Careers		X	X				0.25	
1210	Accounting 1	X		X	X	X	X	1	
1220	Digital Design & Technology	X		X	X	X	X	1	
1224	Video Production	X		X	X	X	X	1	
1230	Computer Science 1		X	X	X	X	X	0.5	
1231	Computer Science 2	X			X	X	X	1	

*CIHS - College in High School Course

Course #:	1200B	Credit:	0.250
Course Title:	INTRO TO CYBERSECURITY/INTRO TO ESPORTS 9	Prerequisite(s):	None

This is a communications course that encompasses Electricity and Electronics, Intro to Manufacturing, Intro to Agriculture, and Cybersecurity. These courses direct the student toward a firm foundation for their future. The course is activity based project learning through the use of critical thinking skills, problem solving and collaborative communication. Each of the four courses contains a varied mix of activities to prepare students to see the connections of core concepts in everyday life.

Course #:	1202B	Credit:	0.250
Course Title:	Intro to Health Career Pathways	Prerequisite(s):	None

This is a communications course that encompasses Electricity and Electronics, Intro to Manufacturing, Intro to Health Careers, and Cybersecurity. These courses direct the student toward a firm foundation for their future. The course is activity based project learning through the use of critical thinking skills, problem solving and collaborative communication. Each of the four courses contains a varied mix of activities to prepare students to see the connections of core concepts in everyday life.

Course #:	1210	Credit:	1.000
Course Title:	ACCOUNTING I	Prerequisite(s):	None

Accounting I emphasizes the skills and knowledge concerning economic entities that is necessary for making sound business decisions. This course aims to develop an understanding of basic principles of accounting and how they can be adapted to personal, social, or vocational use. The student will use automated accounting methods to develop an understanding of the internal workings of a business. The student will be able to keep a set of books, both manually and automated, for a service business formed as a sole proprietorship and also for a merchandising business formed as a partnership. Income tax preparation, federal, state and local will also be presented.

Course #:	1220	Credit:	1.000
Course Title:	DIGITAL DESIGN AND TECHNOLOGY	Prerequisite(s):	None

Digital Design and technology is a course that will teach students to understand and apply the elements of design to publish printed media documents. Through community and school based projects, students will build skills in creating, editing, and enhancing page layout and design of documents and media. Students will utilize various programs such as Adobe Photoshop, LightRoom, Dreamweaver, Adobe Illustrator, and Adobe Acrobat.

Course #:	1224	Credit:	1.000
Course Title:	VIDEO PRODUCTION	Prerequisite(s):	None

Video Production exposes students to broadcasting and video production through a theory based, hands-on approach. Topics include the fundamental technical aspects of the digital video camera, camera shots and composition, media literacy, aesthetic elements and techniques, Adobe Premiere and After Effects editing programs, public service announcements, television advertising, short films, special effects, studio roles and responsibilities and broadcast news. Students also have the opportunity to work in the TV studio to produce a variety of programming. Students with an interest in all forms of broadcasting, communications, visual arts, journalism and video production are encouraged to take this class.

Course #:	1230	Credit:	0.500 (9th Grade)
Course Title:	Computer Science 1	Prerequisite(s):	None

CMU's CS1 curriculum is a deep dive into the fundamentals of programming concepts and teaches text-based coding using Python. CS1 is predicated on the notion that learning about programming and computer science should be fun and engaging. In our introduction to programming course we expose students to graphics-based problem solving because it is visually engaging, allows for multiple correct solutions, and provides visual cues when a solution goes awry.

Course #:	1231	Credit:	1.000
Course Title:	Computer Science 2	Prerequisite(s):	CS 1

This curriculum is CMU's first offering with a prerequisite and does expect that students have taken our CS1 in its entirety. It builds on the CS1 foundation, covering some additional programming and CS topics, 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.

FAMILY AND CONSUMER SCIENCES

Course #	Course Name	Year	Semester	9	10	11	12	Potential Credit	CIHS
1308	CIHS Introductory Baking & Sanitation	X				X	X	1	X
1310	Food and Nutrition		X	X	X	X	X	0.5	
1312	International & Regional Cooking		X	X	X	X	X	0.5	
1314	Culinary Arts	X		X	X	X	X	1	
1318	Cafe Based Experience	X			X	X	X	1	
1320	Human Growth And Development	X			X	X	X	1	

*CIHS - College in High School Course

Course #:	1308	Credit:	1.000
Course Title:	CIHS INTRODUCTORY BAKING & SANITATION	Prerequisite(s):	Grades 11 & 12

This is a college level elective course. The course is designed to teach fundamental principles and procedures used to prepare a variety of bakery products and desserts. A study of ingredients and mixing methods for producing various baked goods. The course also includes an integration of the Applied Foodservice Sanitation Certification Course as approved by The Educational Foundation of the National Restaurant Association. Topics include the principles of food microbiology, applied measures for the prevention of foodborne illness, and emphasis on working through people to maintain a sanitary foodservice operation. Hazard Analysis Critical Control Point (HACCP) fundamentals and steps for implementation is a key component of the course. Course work prepares students for the ServSafe® certification test and is part of the Professional Management series of the National Restaurant Association. Upon successful completion of the course students will be awarded 4 college credits.

Course #:	1310	Credit:	0.500
Course Title:	FOOD AND NUTRITION	Prerequisite(s):	None

This is a course for the student who wants to learn how to choose and prepare food for a healthy diet. Students participate in labs that focus on the food groups. These labs cover quick breads, yeast bread, pasta, rice, fruits and vegetables, meat, poultry, eggs, dairy products and desserts. Kitchen safety, food safety and proper use of kitchen equipment are emphasized.

Course #:	1312	Credit:	0.500
Course Title:	INTERNATIONAL & REGIONAL COOKING	Prerequisite(s):	None

This course is designed for students interested in exploring a variety of foods and cooking techniques from regions of the world. Through individual projects students will also examine the diverse customs, influences, and food habits of people throughout the world. The focus of this course is for students to gain appreciation for the diverse cuisines and cultures of the world.

Course #:	1314	Credit:	1.000
Course Title:	CULINARY ARTS	Prerequisite(s):	None

This course is for the beginner to learn basic food preparation skills. Topics include food safety, proper knife skills, recipe reading, proper equipment use, microwave cooking, cooking with milk, eggs, and cheese, and an introduction to baking technique.

Course #:	1318	Credit:	1.000
Course Title:	CAFE BASED EXPERIENCE	Prerequisite(s):	Grades 10-12

This experience will introduce students to incorporating skills learned in cafes/food service settings. This experience will allow students to use skills learned while operating the cafe in a media center setting.

Course #:	1320	Credit:	1.000
Course Title:	HUMAN GROWTH AND DEVELOPMENT	Prerequisite(s):	Grades 10-12

This course is for students who have a desire to help others, but are unsure of a specific path. This could include teachers, medical careers, counseling, etc. We focus on human growth and development over a lifespan. This is important as it gives a student a background in human growth and development from birth, through childhood, into adulthood, and through death and grief. It gives the student perspective and highlights where people in the caring professions are most needed. Students who take this course will come away with a broad understanding of all the careers that help people from birth to death.

MUSIC EDUCATION

Course #	Course Name	Year	Semester	9	10	11	12	Potential Credit	CIHS
1410	Band	X	X	X	X	X	X		
1420	Chorus	X	X	X	X	X	X		
1430	Audio Production 1		X	X	X	X	X	0.5	
1432	Audio Production 2		X		X	X	X	0.5	

Course #:	1410	Credit:	Varies
Course Title:	BAND	Prerequisite(s):	None

Band is an elective course available to students in grades 9 - 12, who show proficiency on their band instrument. The concert band performs several evening concerts during the year.. The purpose of the course includes playing for enjoyment, developing technical skills, and reading and studying a widely varied band repertory including modern, popular, and classical styles. Course objectives include developing ensemble performance skills such as posture, tone, intonation, breathing, rhythm, and articulation, and using these skills in expressive musical performances. Students will provide their own instrument; some school instruments are available. The school provides all concert music. Periodic playing assessments & concert performances are part of the grading process.

Course #:	1420	Credit:	Varies
Course Title:	CHORUS	Prerequisite(s):	None

The High School Chorus is a performing ensemble that meets during the school day and performs several evening concerts during the year. The purpose of the course includes singing for enjoyment, developing vocal skills, and reading and studying a widely varied choral repertory including secular, popular, and classical styles. Course objectives include developing ensemble performance skills such as posture, tone, intonation, breathing, rhythm, and articulation, and using these skills in expressive musical performances. The school provides all concert music. Periodic singing assessments & concert performances are part of the grading process.

Course #:	1430	Credit:	0.500
Course Title:	AUDIO PRODUCTION I	Prerequisite(s):	None

This is an introduction to the world of audio production. It is meant for students with an interest in audio and its applications in modern media and art. Students will learn to employ audio as a creative tool for documentary storytelling, fiction filmmaking, video art, news media, radio production, comedy sketches, commercials and internet production.

Course #:	1432	Credit:	0.500
Course Title:	AUDIO PRODUCTION II	Prerequisite(s):	AUDIO PRODUCTION I

This course focuses on the study of advanced techniques involved in audio production that build on the concepts covered in Audio Production I. It is the second of two courses that comprise the Production Track core. Audio Production II focuses on production and mixing, which includes the study of various production and mixing techniques, both classic and contemporary.

Industrial Arts

Course #	Course Name	Year	Quarter/Semester Rotation	9	10	11	12	Potential Credit	CIHS
1500	Electricity and Electronics 9		X	X				0.25	
1502	Introduction to Manufacturing 9		X	X				0.25	
1524	Technical Design/Inventor	X		X	X	X	X	1	
1540	Principles of Manufacturing	X			X	X	X	1	
1544	Applied Robotics	X			X	X	X	1	
1546	Advanced Robotics	X				X	X	1	

*CIHS - College in High School Course

Course #:	1500	Credit:	0.250
Course Title:	Electricity and Electronics 9	Prerequisite(s):	Grade 9

This is a communications course that encompasses Electricity and Electronics, Intro to Manufacturing, Intro to Agriculture, and Cybersecurity. These courses direct the student toward a firm foundation for their future. The course is activity based project learning through the use of critical thinking skills, problem solving and collaborative communication. Each of the four courses contains a varied mix of activities to prepare students to see the connections of core concepts in everyday life.

Course #:	1502	Credit:	0.250
Course Title:	Introduction to Manufacturing 9	Prerequisite(s):	Grade 9

This is a communications course that encompasses Electricity and Electronics, Intro to Manufacturing, Intro to Agriculture, and Cybersecurity. These courses direct the student toward a firm foundation for their future. The course is activity based project learning through the use of critical thinking skills, problem solving and collaborative communication. Each of the four courses contains a varied mix of activities to prepare students to see the connections of core concepts in everyday life.

Course #:	1524	Credit:	1.00 Grades
Course Title:	TECHNICAL DESIGN / INVENTOR	Prerequisite(s):	Grades 9-11

Study and application of solid and surface modeling using Autodesk Inventor® parametric modeling software. Topics include the generation and editing of mechanical parts and assemblies, analysis of mass properties, rendering and animation, and the development of physical models using rapid prototyping (3D Printing) equipment. Also included are basic 3D-to-2D documentation techniques.

Course #:	1540	Credit:	1.000
Course Title:	PRINCIPLES OF MANUFACTURING	Prerequisite(s):	Grades 10-12

Principles of Manufacturing is designed to provide you with exposure to various occupations and pathways in the Advanced Manufacturing career cluster, such as Machining Technology, Electromechanical Technology, and Mechatronics. In order to gain a holistic view of the advanced manufacturing industry, you will complete all core standards, as well as standards in the focus areas. Throughout the course, you will develop and understanding of the general steps involved in the manufacturing process and master the essential skills to be an effective team member in manufacturing production setting OSHA 10 Certification

Course #:	1544	Credit:	1.000
Course Title:	APPLIED ROBOTICS	Prerequisite(s):	Grades 10-12

The student will be introduced to basic concepts in robotics through a hands-on-approach. Students will work in teams to build and test increasingly more complete robotics projects which will use motors, pulses, servos, switches, sensors, LEDs, mounting boards and much more. The course also competes in the Heritage Conference Robotics Championship.

Course #:	1546	Credit:	1.000
Course Title:	ADVANCED ROBOTICS	Prerequisite(s):	App Robotics, Grades 11-12

Students will build their knowledge base to develop skills to compete in a regional robotics competition. Students will work together in a real-world professional manufacturing model and gain in-demand technical skills like mechanical engineering and design, electrical engineering, machining, 3D printing and more. Students will have the opportunity to meet and work with local manufacturing companies to complete projects and develop relationships for future career exploration opportunities

OTHER

Course #	Course Name	Year	Semester	Quarter	9	10	11	12	Potential Credit	CIHS
1600	Entrepreneurship	X				X	X	X	1	
9905	Internship		X			X	X	X	0.5	
9990	Transition 11		X			X	X	X	0.5	
9997	Information Technology and Ethics			X				X	1	

Course #:	1600B	Credit:	1.000
Course Title:	Entrepreneurship	Prerequisite(s):	10-12

Young Entrepreneurs Academy (YEA) prepares students in the process by which one establishes a business enterprise or social movement. Students develop and hone business ideas and objectives, consider the underlying opportunities and the value proposition, write a business plan, make a pitch to potential investors, obtain funding, open bank accounts, register with the governmental agencies, develop and manage media campaigns, establish e-commerce and a web presence, run sales events, and file tax returns.

Course #:	9905	Credit:	0.500
Course Title:	INTERNSHIP	Prerequisite(s):	10-12

This program provides students with the opportunity to participate in on-site and off-site observations of business and professional organizations. The program will provide students with the opportunity to interact with, observe, and assist individuals who are employed in a career of their interest. The intent of the internship is to provide activities that will enable the student to make informed-career decisions based on significant knowledge and insights developed during participation. Internships are unpaid/paid credit-earning experiences. Students must be in good academic and behavioral standing. Students must also be in good-standing with the district graduation requirements.

Course #:	9992	Credit:	0.500
Course Title:	TRANSITION 11	Prerequisite(s):	None

Transition 11 class is designed to foster self-awareness, self-advocacy and general skills that students will need as student's transition from high school to real world settings.

Course #:	9997	Credit:	1.000
Course Title:	Information Technology and Ethics	Prerequisite(s):	12th grade only

Students in 12th grade will learn the safe and ethical use of computer technology, internet, and social media. Students will study the safety and uses of technology in today's society. Students will learn about cyber security and also the importance of AI and how this will impact our futures.

***RVCA will provide Credit Recovery Options for students on an as needed basis.**

RIVER VALLEY STEAM ACADEMY (Saltsburg Campus)

Course #	Course Name	Year	Semester	9	10	11	12	Potential Credit
SA001	Cybersecurity/eSports	X			X	X	X	3
SA002	Teacher Education Development	X			X	X	X	3
SA003	Electrical Occupations/Powerline	X			X	X	X	3
SA004	Sports Medicine and Rehabilitative Therapy	X			X	X	X	3
SA005	Service Occupation	X			X	X	X	3
SA006	Welding Technology	X			X	X	X	3
SA007	Biomedical Engineering	X			X	X	X	3
SA008	Pathways to Health Professions	X			X	X	X	3
SA009	Sports and Entertainment Communications and Design	X			X	X	X	3

Course #:	SA001/SA005	Credit:	3.000
Course Title:	Cybersecurity/eSPORTS	Prerequisite(s):	None

The STEAM Academy's Cybersecurity course is an introduction to this vital national security sector. It provides the foundational beginnings for students; thereby, enabling them to gain the necessary educational foundation to reach their career goals within the profession. This course will lead students to their post-secondary, next-steps after graduation. According to data collected by the Bureau of Labor Statics (BLS), the demand for cybersecurity jobs like information security analysts will grow by as much as 31 percent over the next ten years. Supporting that assertion; today there are cyber-attacks occurring every 39 seconds in the United States! Generally, this course introduces the concepts, understandings, and application of the field related to computer security and how it relates to other areas of information technology. Specifically, topics include security threats and management, hardening systems, wireless networking, securing networks, cryptography and organizational security policies. The skills gained in this course may be applied across the cybersecurity industry under numerous job titles. For example, Information Security Analyst, Penetration Tester, Data Recovery professionals, Network Security Engineer, Cryptographer, Security Awareness Training Specialist, and Chief Information Security Officer (CISO) and many, many more. The median salary range in Pennsylvania, for numerous job titles is from \$85,000 - \$175,000. Qualified students may be able to gain industry certifications such as: CompTIA Network+ and/or Security+; Cisco CCNA and/or CompTIA CySA+; and/or CompTIA Linux+ and/or CompTIA PenTest+.

The STEAM Academy's eSports, or organized and competitive gaming, is a fast-growing industry! This course will immerse students in the eSports industry by 1) playing, strategizing, and analyzing video games, 2) researching how competitions are organized and run at the professional level, 3) learning about the sport and the history of gaming, and 4) creating content to contribute to the video game community. Whatever type of "gamer" you are, our eSports class can help build a sense of belonging, promote collaboration and communication skills, and foster good sportsmanship, while also creating a pipeline for future STEM careers and furthering students' strategic thinking and problem solving abilities.

Course #:	SA002	Credit:	3.000
Course Title:	Teacher Education Development	Prerequisite(s):	None

This specially designed program at the STEAM Academy will provide you with a solid foundation in the right techniques and strategies that will strengthen children's cognitive, social, emotional, and physical development in both Elementary and High School. You'll get to put what you learn into practice through extensive field experiences in a wide variety of placements, including classrooms for students with diverse learning needs and classrooms for students from pre-K to grade 12.

Along the way, you'll have a dedicated career counselor to help and support you on your path to becoming a great teacher in the area you choose to make a difference.

Course #:	SA003B	Credit:	3.000
Course Title:	Electrical Occupations/Powerline	Prerequisite(s):	None

The STEAM Academy's Electrical Occupations Program of Study is a solid introduction to the field of electricity. Students will receive instruction related to a broad range of workforce applications including Residential, Commercial and Industrial applications as well as the National Electric Code (NEC). Additional coursework from the syllabi will include information from the National Center for Construction Education and Research (NCEER) curriculum. Students enrolled in this program will be simultaneously enrolled in the International Brotherhood of Electrical Workers (IBEW) as Pre-Apprentices in IBEW. This cooperative agreement is a result of a grant from the Pennsylvania Department of Labor and Industry. Upon successful completion of the EO course, students will be granted membership into the IBEW Apprenticeship. Additionally, ABC of Western Pennsylvania is also a supporting part of this program. According to data collected by the Bureau of Labor Statics (BLS), the demand for all portions of the electrical industry is likely to grow by as much as nine (9) percent over the next ten years. Across this industry numerous job titles exist and the median salaries in Pennsylvania range from \$58,000 - over \$128,000. Generally, this course introduces the concepts, understandings, and application of the field of electricity, and its unique applications in the various sectors. Specifically, topics include but are not limited to: Safety; Hand and Power tools, Blueprint Reading, Anchors and Supports; Residential Cabling; Switches, Receptacles and Circuits; Fixtures; Raceways; Wired Devices; Testing Equipment; Service Installation; Green Technology and NEC. The skills gained in this course may be applied across the electrical industry under numerous job titles: Electrical Engineer; Electrical Technician; Residential Electricians; Commercial Electricians; Industrial Electricians; Maintenance Electricians; Installation Electricians; Construction Electricians; Automotive Electricians; Marine Electricians; and many more.

Qualified students may be able to gain industry certifications either before or after graduation in areas including: OSHA Safety Certificate (10/30); Electrical Technician Certification; EPA Amusement Operators Safety Certification; Electrical Maintenance Technician Certificate; Electrical and Instrumentation Pipeline Technician; Certified Electrical Inspector - Residential; HVAC Master Specialist; Air Conditioning Service Certification; CompTIA A+ Certification; and/or Computer Service Technician. Students enrolled in the Electrical Occupations course will also gain technical knowledge and skills related to becoming a lineman.

Those additional skills will include a wide-array of installation, troubleshooting and repair of telecommunication equipment. Throughout the course, students will add to their fundamental understanding of electricity by adding concepts of electronics, fiber optics and copper-based systems. Additionally, STEAM Academy students will have the opportunity to study and preform specific skills involving safety and applicable codes, pole climbing techniques, trenching and underground conductor installation as well as repair, installation of high voltage conductors and hardware, trouble shooting and power restoration, maintenance and inspection, networking installation and repair, as well as applicable standards for the powerline and telecommunications industry.

Course #:	SA004	Credit:	3.000
Course Title:	Sports Medicine and Rehabilitative Therapy	Prerequisite(s):	None

The STEAM Academy's Sports Medicine and Rehabilitative Therapy (SMaRT) Program of Study is a solid introduction to the Therapy profession. Students will receive instruction related to broad range of the requisite, in-field skills and applications that pertain to becoming an Athletic Trainer (AT); Physical Therapist (PT); Physical Therapy Assistant (PTA); Occupational Therapist (OT); and Occupational Therapy Assistant (OTA). According to data collected by the Bureau of Labor Statistics (BLS), the demand for all portions of Therapist is likely to grow substantially. Specifically, the need for PTA's will grow by an estimated 33 percent through 2029. This is an additional 43,000 NEW positions that will need filled. Across this industry numerous job titles exist and the median salaries in Pennsylvania range from \$58,000 - \$60,000 for PTA's/OTA's. The median salary for PT's and OT's is from \$83,000 to \$87,000/year. Generally, this course introduces the concepts, understandings, and application of the field of Therapy and its unique applications in the various sectors. Topics include but are not limited to: Organizational and Professional Health and Well-Being; Documentation, Legal and Ethical Issues; Emergency Care and Infection Control; Injury Prevention and Protection; Treatment, Rehabilitation and Clinical Skills; Nutrition and Hydration; Exercise Science; Human Development and Mental Health; Medical Terminology; Anatomy, Physiology, and Pathophysiology. Students can achieve CPR/First-Aid Certification for both children and adults. These careers require secondary graduates to earn a Pennsylvania Department of State Licensure in any of these professions. Those are earned through a post-secondary education at an accredited college or university.

Course #:	SA010	Credit:	3.000
Course Title:	Service Occupation	Prerequisite(s):	None

This program helps individuals develop the skills necessary for entry-level employment opportunities in a variety of service industries. All students will be taught the importance of work ethic and the appropriate work skills needed for such occupations. This curriculum is designed to meet the needs of diverse learners. This innovative program is built to provide students with a variety of skills sets that could be utilized in the areas of food preparation, food counter attendant, dining and cafeteria attendant, dishwasher and kitchen assistant, custodial services, general housekeeping, stock room operation and order delivery, laundry operations, and general grounds maintenance. The learning environment will be constructed in a manner where theory, team building, and hands-on experience are all utilized. This environment will foster personal accountability and pride. Students will be supported by a number of services through River Valley STEAM and OVR. Those services will include, but not be limited to, on the job coaching, job placement, resume building and interviewing. The end goal is participation in work-based learning experiences including, job shadowing, internships, and paid co-op.

Course #:	SA006	Credit:	3.000
Course Title:	Welding Technology	Prerequisite(s):	None

Nature of the Career - Welders may work alone or as part of a team of welders in a factory, building a bridge, on a pipeline, in a powerplant or performing work on large objects. In these various career pathways, welders may be working either inside or outside depending upon the job. Additionally, they may be required to work on scaffolds, lifts, or platforms. They normally work 40+ hours a week and can depending upon the employer be working on any one of three shifts.

The Welding Technology program provides students with a wide-array of technical and tactile (hands-on) welding and cutting education with a major emphasis is placed on safety. Training will be provided in oxy-acetylene cutting and brazing, Shielded Metal Arc Welding (STICK), Air Carbon Arc Cutting, Gas Metal Arc Welding (MIG), Flux-Cored Arc Welding, Gas Tungsten Arc Welding (TIG), Plasma Arc Cutting, Robotics, and Augmented/Reality. These welding process will have students performing specific skills in all welding positions (Flat, Horizontal, Vertical and Overhead) on plate utilizing fillets and groove welds, as well as advanced skills on pipe in the 5G and 6G positions. The metals that will be utilized are carbon (mild) steel, aluminum, and stainless steel. Additional competencies will involve welding blueprint reading and symbol interpretation as well as application, Metallurgy (Study of Metals) including, but not limited to, metal properties, identification, types, numerical interpretation and uses of specific electrodes, and electrical principles.

The use of manuals and code books, specification charts, and understanding of the welding standards established by the American Welding Society (AWS) as well as the American Society of Mechanical Engineers (ASME) are stressed. Additional fabrication training is provided in planning, layout, forming, joining, and joining various shapes in light and heavy gauge metal and pipe is provided. Students are exposed to the use of specialized hand tools, shears, forming and shaping machines, drill presses, and metal cutting saws. Inspection and testing processes as well as procedures are also demonstrated and explained. The students will work on various projects throughout the time they are enrolled in the Welding program. We work on projects for the school, other teachers, students, outside customers, etc.

Course #:	SA007	Credit:	3.000
Course Title:	Biomedical Technology	Prerequisite(s):	None

The program focuses on the application of the biological sciences, biochemistry and genetics in preparation for new and enhanced environmental, clinical and industrial products, including the commercial exploitation of microbes. The course includes, but is not limited to, academic and tactile instruction in bioinformatics, gene identification, phylogenetics and comparative genomics, bioinorganic chemistry, immunoassays, DNA sequencing, xenotransplantation, genetic engineering, industrial microbiology, drug and biologic development, enzyme-based production process, patent law and biotechnology management and marketing, applicable regulations and biotechnology ethics.

Course #:	SA008	Credit:	3.000
Course Title:	Pathways to Health Professions	Prerequisite(s):	None

This program prepares individuals to apply academic knowledge and tactile skills in the various health care professions. Instruction occurs in basic and advanced cognitive skills over the variety of associated healthcare careers such as health and medical services, pharmaceutical and medical instruments, clinicians, technicians, and supplies. Instruction includes but is not limited to foundations of health (medical terminology); anatomy and physiology; legal, ethical and economic aspects of health care; clinical laboratory procedures; health career skills; aseptic techniques; OSHA regulations; and infection control. Clinical education is an integral part of the program. Science and math taught by certificated science and math teachers will be coordinated and deemed essential for students to successfully reach their career objectives

Course #:	SA009	Credit:	3.000
Course Title:	Sports and Entertainment Communications and Design	Prerequisite(s):	None

Sports and Entertainment Communications and Design is an interdisciplinary mix of courses meant to provide students with a foundation in communication and design supported by specialty courses in media production, publication layout, and web design. Students will work directly with the Arts, Entertainment, and Athletic Programs that the River Valley School District currently offers. The program's aim is to provide the background necessary for a career in the fields of Sports and Entertainment Communications.

INDIANA COUNTY TECHNOLOGY CENTER

Course #:	T100	Credit:	3.000
Course Title:	AUTOMOTIVE TECHNOLOGIES	Prerequisite(s):	None

To appreciate the complexities of the automotive industries today, students need to take a look back at the gas-guzzling vehicles of yesteryear and compare them to today's computer-monitored, fuel-efficient, environmentally-friendly automobiles. When one realizes how far technology has advanced, then it is easy to understand that specialized training in automotive technology is the key to an exciting, high-paying career.

Students enrolled in the automotive technology program enjoy the benefits of a fully comprehensive ASE certified and Automotive Youth Educational Systems (AYES) program. The course of study, facilities and program equipment have been evaluated by the National Automotive Technicians Education Foundation (NATEF) and meet the National Institute for Automotive Service Excellence (ASE) standards of quality for the training of automobile technicians.

Qualified Auto Tech students earn the additional benefit of state inspection certification training as they finish their final year in the program.

Automotive Technology is a field of change. There is unlimited growth opportunity for students willing to pursue the most up-to- date training available in future automotive technologies.

Course #:	T300	Credit:	3.000
Course Title:	COLLISION REPAIR TECHNOLOGY	Prerequisite(s):	None

Collision Repair Technology--It's a trade...a profession...a career. Students who are creative, meticulous, proud of their work and fascinated with automobiles will enjoy seeing their reflection in the finish of a Collision Repair Technology project.

Collision Repair Technology students will have the opportunity to learn the skills to return a damaged vehicle to its original showroom quality finish. Collision Repair Technology students learn to apply automotive finishes in a state-of-the-art paint booth. They also learn the art of airbrushing and customizing. Students are taught cost estimating, frame straightening, MIG welding, reshaping metal parts and replacing body component parts.

Qualified second year students have the opportunity to participate in specialized training available through the PPG Research Center. Participating students in the PPG training course receive a Certificate of Completion in refinishing systems. *The ICTC Collision Repair Technology program is the first in the nation to offer seniors the opportunity to earn the PPG—Blue Level Certification.*

Course #:	T200	Credit:	3.000
Course Title:	CARPENTRY	Prerequisite(s):	None

Opportunity for success in the carpentry field is driven by knowledge and ability, enhanced by focused education and training. Students possessing creativity, independence, motivation, pride and enthusiasm for learning may want to explore carpentry as their career.

Carpentry-related theory and skills are taught using a competency-based instructional framework requiring students to demonstrate their ability to safely perform specific job-related tasks in order to prepare for the carpentry job market. Students receive instruction in all phases of residential carpentry beginning with design and layout and working through the final stages of interior and exterior finishing and trim installations. Students gain the entry-level foundation skills for them to enter either immediate employment or post-secondary training which allows them to choose from a variety of other carpentry-related fields.

Course #:	T110	Credit:	3.000
Course Title:	MASONRY	Prerequisite(s):	None

Creativity is a key ingredient leading to success in the Masonry program. A bricklayer takes units of brick, block, or stone and with a trowel, mortar, skilled hands, and an eye for perfection molds them into buildings, buildings that will be around for generations to enjoy. Just look around--every home, school, mall, church, and sidewalk are part of a mason's creative genius.

Masonry may lead students to careers in bricklaying or stone- and cement-masonry. The Masonry program also provides an excellent foundation for a future in architecture and architectural engineering or a position as an estimator, a job foreman, and even a self- employed mason.

Course #:	T140	Credit:	3.000
Course Title:	MACHINING TECHNOLOGY	Prerequisite(s):	None

Machining Technology is designed to provide each student with the latest technological skills needed for entry in the metalworking occupations. Students have the opportunity to operate state-of-the-art equipment, such as the Computer Numeric Controlled (CNC) machine. They also gain experience with the hands-on operation of standard machine tools used in the industry such as: drill presses, metal saws, lathes, milling machines and surface grinders. Related theory acquaints students with metal cutting applications, material properties, layout work, and construction and assembly of machinery. The application of mathematics and blueprint reading is also emphasized throughout the course as an integral part of all completed projects and competencies.

The ICTC's Machining Technology program is completing its final review to become a National Institute for Metalworking Skills (NIMS) Training Facility. Qualified students will have the opportunity to become certified in the NIMS Level I Machining Skills.

If students have patience and are willing to tolerate nothing less than perfection, a career in machining technology may be worth a look.

Course #:	T150	Credit:	3.000
Course Title:	HEATING/VENTILATION/AIR CONDITIONING	Prerequisite(s):	None

The Heating, Ventilation and Air Conditioning program at the ICTC prepares students to apply technical knowledge and skill to install, repair and maintain domestic heating, cooling and electrical systems. Instruction includes theory of application of principles in electricity, heating, cooling, sheet metal fabrication, customer service, indoor air quality, residential house wiring, how motors work in refrigerators, air conditioners, etc. The students will master competencies in the areas of basic plumbing and air (duct) sizing. In addition, construction work is included as a requirement for this field. Students must have a desire to work with their hands and be able to troubleshoot and repair equipment.

Course #:	T700	Credit:	3.000
Course Title:	DIGITAL COMMUNICATIONS	Prerequisite(s):	None

The Digital Media Technology Program provides intense training for students who want to learn new skills, improve existing skills or prepare for post-secondary education in the stimulating world of electronic media. Electronic communications is an essential part of the business, education and entertainment industries. The program is designed to provide the educational starting point for students in web design, multimedia and video production. Students begin with a desire to grow through education and prepare for entry-level positions in web design, multimedia and video production.

The curriculum provides students with a comprehensive overview of web design, the World Wide Web, HTML, web and design graphics, and website planning and development to create exciting web pages. Students will plan and design web sites in this program. They will also apply their web skills by designing and maintaining websites for local non-profit organizations.

The Digital Media Technology program also provides students with intense and comprehensive learning experiences in digital video production techniques, processes and skills expected of those technicians involved in video production. The curriculum focuses on non-linear editing. Using various computer editing systems, students explore the basics of editing video and audio in a digital environment from digitizing video to outputting to various playback formats. By gaining competencies in camera operation, lighting, scripting, production techniques and editing, students create videos from initial ideas to final edited composition.

Software applications taught include: Dreamweaver MX, Flash MX, Director MX, Adobe Photoshop, and Adobe Premiere

Course #:	T400	Credit:	3.000
Course Title:	GRAPHICS AND ELECTRONIC MEDIA	Prerequisite(s):	None

Graphics and Electronic Media should be viewed as an introduction to a complex and constantly changing career field. The software packages and computer technology devices available today are able to assist in the production of a variety of media formats which had been previously outsourced to printers or design agencies.

Students who are motivated by change, technology and creativity will find GEM to be the perfect educational setting. They will be introduced to the areas of desktop publishing, graphic design, photo editing and illustration. Students also will learn to use the digital color printer and scanning equipment. They will be encouraged to enhance their own creativity utilizing the most modern technology available.

The program is designed to allow interested students to bring together many areas of creative graphic design and production technologies. Skilled graphic artists have a creative flair required to produce eye-catching publications as well as talent and confidence to use up-to-date technology to output their creations.

The ICTC's Graphics and Electronic Media Technology program has made application to the Graphic Arts Education and Research Foundation PrintED® National Accreditation Program. The accreditation process will be completed in the future providing qualified students the opportunity to become certified in the Introduction to Graphic Communications and the Digital File Preparation areas.

Course #:	T130	Credit:	3.000
Course Title:	INFORMATIONAL TECHNOLOGY SERVICES	Prerequisite(s):	None

Computers are used in all facets of everyday life and there is a constant demand for qualified technicians to work on them. Students will be trained in the installation and configuration of: motherboards, processors, memory, video cards, sound cards, network interface cards, modems, hard drives, floppy drives, CD-ROM drives, as well as CD burners, printers, external storage devices and much, much more. Software training will include all major operating systems including: DOS, Windows 9x, Windows 2000 Professional and Windows XP Professional. Students will also be trained in security and virus protection techniques. Students successfully completing the A+ program will be trained to install, maintain, upgrade and troubleshoot Personal Computers and their Operating Systems and may qualify for the CompTia A+ certification.

The Network Communications program is a Cisco Local Academy. Through the Cisco Academy, enrolled NC students will be trained to install Local Area Networks and Wide Area Networks utilizing the latest Cisco networking hardware and technologies including: networking basics, network layout and design, cabling, installation and configuration of network hardware including NICs, cable, patch panels, hubs, switches and routers. Students successfully completing the 2-year CCNA program will be trained to install, maintain, upgrade and troubleshoot networking hardware and software and may qualify for the CCNA certification from Cisco.

Course #:	T900	Credit:	3.000
Course Title:	HEALTH OCCUPATIONS TECHNOLOGY	Prerequisite(s):	None

Students who are caring, compassionate and possess critical thinking skills should check out Health Occupations Technology (HOT). Statistics from the PA Department of Labor & Industry indicate that occupations in healthcare will continue to experience the highest growth rate.

Students enrolled in the HOT program will learn medical terminology, basic anatomy and physiology, common disease conditions and related patient care, communications skills and infection control techniques. Second and third year students have the opportunity to learn more about anatomy and physiology and to be introduced to medical office procedures. There are opportunities for students to investigate and explore many career options in the healthcare field both through shadow experiences and research projects.

Through scheduled clinical experience at local long-term care facilities, students apply learned health care theory to actual "hands-on" clinical practice. Students who satisfactorily achieve 108 theory hours and 42 clinical hours may be eligible to take the PA Nurse Aide (NA) competency exam. Passing the NA exam provides immediate entry into the job market.

Course #:	T500	Credit:	3.000
Course Title:	COSMETOLOGY	Prerequisite(s):	None

The cosmetology field combines talent, art, science and business, leading to a choice of rewarding careers. The ICTC cosmetology program offers a state-of-the-art facility meeting all licensing requirements of the Pennsylvania State Board of Cosmetology.

Cosmetology students learn anatomy, cosmetic chemistry, bacteriology and sanitation. Students are taught the professional hair, skin, and nail procedures.

In the student-operated patron clinic, cosmetology students gain practical work experience and essential communication skills as they cut, style and color the customer's hair; apply skin care treatments and makeup; perform manicures and pedicures; manage the salon including scheduling appointments, ordering supplies; inventorying stock; and selling products.

All areas of this licensed profession are taught for a successful transition to the cosmetology field. The cosmetology program prepares students for the PA State board exams and provides a foundation for further training in business management, education, electrolysis, advanced aesthetics and nail technology. Enrolled students will have the opportunity to earn the required 1,250 hours necessary to attain a cosmetology license.

Course #:	T600	Credit:	3.000
Course Title:	CULINARY ARTS	Prerequisite(s):	None

Culinary Arts offers a wide range of career opportunities for those who enjoy preparing exciting cuisines and have an eye toward business ventures. This comprehensive program prepares students for entry level positions in the rapidly-growing food service industry.

The students' education is enhanced by participating in various catering projects and the operation of our full-service restaurant - these hands-on learning experiences help students refine table service and dining room management techniques.

Career opportunities in restaurants, resorts, country clubs, hotels and motels as well as on cruise ships and airlines are abundant. According to the National Restaurant Association, the food service industry is expecting job growth due to lifestyle trends.

The ICTC Culinary Arts program offers the prestigious American Culinary Federation (ACF) certification which meets the professional standards for culinary education. The ACF operates the only comprehensive certification program for chefs in the United States. The ACF certification is a valuable credential awarded to qualifying seniors after a rigorous evaluation of professional education experiences and after thorough testing.

Sanitation is one of the most important areas of concern in the restaurant industry today. The ServSafe course provides students information on the sanitary aspects of handling food including receiving, storing, preparation and serving. Upon successful completion of the ServSafe test, students will receive a ServSafe certification and will automatically become a member of the International Food Safety Council.