## (D) Pine-Richland High School <br> Program of Studies



2024-2025

## Introduction \& Welcome

## Dear Students \& Families:

We are very excited to share the 2024-2025 Program of Studies! This interactive document has been prepared to assist you in planning your comprehensive educational high school plan. It is our primary goal that upon graduation all Pine-Richland students are college, career and community ready! Our Program of Studies will help guide you to important information detailing curricular offerings, course selection and scheduling.

The format of the Program of Studies places emphasis on careful planning and
 decision-making in relationship to your interests, goals and aspirations. In order to facilitate planning your high school schedule, the Program of Studies includes a Graduation Plan on page 8 and a Time Management Planner on page 9. High School Course Pathways for core departments are included to help support student and family understanding of courses that may be taken over your high school career. We believe high school course selections have a significant impact on student success. All Pine-Richland High School students will have the opportunity to meet one-on-one with their school counselor to plan and discuss course selections. We have also included Career Cluster information to help students understand the connection between high school courses and future careers.

Pine-Richland High School cultivates student growth and achievement by providing both support and challenges for all students. Academic and personal resiliency is a longitudinal process which is built upon a range of social, environmental and cultural factors that inform the student experience within multiple frames and contexts. We cannot always control the challenges that students face, however we can provide the opportunity to improve necessary skills to thrive amidst those challenges. It can also help you develop a growth mindset, which allows you to view challenges as opportunities for learning
 and personal growth. It is our hope that through purposeful learning experiences students will begin to identify their personal values, develop leadership skills, improve mental wellness and develop the ability to navigate higher education and increase their capacity to become lifelong learners.

We encourage families to carefully review the course descriptions and prerequisites, as well as our scheduling timeline (on pg. 28). Our high school staff will work cooperatively with each student and family through the scheduling process. As students make their scheduling decisions, it is important to recognize the requirements for college admission and/or career placement. A close working relationship among students, families, teachers, counselors and administrators will help to result in appropriate course selections.

Our teachers work collaboratively with students and our counselors to make course recommendations prior to scheduling. Students also complete elective course requests based on individual interests and goals. The Program of Studies is a vital resource and will provide detailed information concerning specific courses and programs. Students are encouraged to discuss any concerns with their teachers, counselors and families. Careful planning and creation of a Graduation Plan are crucial to developing a schedule each year to support the student and be focused on learning. The interactive format provides an opportunity to view video segments highlighting various course offerings. The Pine-Richland High School staff looks forward to working collaboratively throughout the scheduling process to support each student.

| Dr. Frank A. Hernandez | Mr. Michael Barlak | Mr. Jacob Cawley | Mrs. Tracy Kuchnicki |
| :--- | :--- | :--- | :--- |
| Principal | Assistant Principal | Assistant Principal | Assistant Principal |

## Pine-Richland School District Mission \& Vision

## District Mission

The district's mission is to "Focus on learning for every student every day."

## District Vision

The vision of the Pine-Richland School District is a picture developed by a graduate that captures the mission and provides a vivid reminder of the challenge and opportunity of our schools. The image conveys the following:

Learning is our primary purpose.
Learning occurs inside and outside the classroom.
Learning is measured as BOTH achievement and growth.

Learning happens differently for different people so flexibility and variation is needed in the approach.

Learning requires effort and persistence.
Learning is for all of us and requires the support of everyone (e.g., student, staff and parents).


## District Shared Values

Shared values represent an important component to the strategic direction of the district by providing guidance and a compass for decision-making.

The district's shared values spell out the acronym PRIDE.


# Pine-Richland High School 

700 Warrendale Road, Gibsonia PA 15044
www.pinerichland.org
Phone: 724-625-4444 | Fax: 724-625-4640

## Building Administration

| Frank Hernandez | Principal | x 1603 |
| :--- | :--- | :--- |
| Tracy Kuchnicki | Assistant Principal (Students P-Z) | $\times 1610$ |
| Jacob Cawley | Assistant Principal (Students G-O) | $\times 1604$ |
| Michael Barlak | Assistant Principal (Students A-F) | $\times 1601$ |
| Loni Gillis | Administrative Assistant Principal's Office | $\times 1600$ |
| Kathy Duff | Administrative Assistant School Office | x 1000 |
| Kerri Miller | Administrative Assistant Attendance Office | x 1602 |
| Andrew Petyak <br> Parker Freshwater <br> Brad Nowosielski | School Safety Coordinator (school day) <br> School Safety Coordinator (evening) <br> School Resource Officer | $\times 1607$ |
| Joe Gironda | Director of Athletics | $\times 1607$ |

## School Counseling Department

| Mary Kate Zacharias | School Counselor for student last names A-D | $\times 1657$ |
| :--- | :--- | :--- |
| Jennifer Bowers | School Counselor for student last names E-K | x 1652 |
| Toni Filipowski | School Counselor for student last names L-R | $\times 1653$ |
| Leslie Straub | School Counselor for student last names S-Z | $\times 1655$ |
| Jocelyn Secen | School Counselor for IEP Transition Services | $\times 1674$ |
| Carolyn Welshonce | School Social Worker | x 1673 |
| Jean Whalen | Director of College and Career Counseling | $\times 1654$ |
| Susan Duffy | School Counseling Office Administrative Assistant A-K | $\times 1650$ |
| Dorothy Erlain | School Counseling Office Administrative Assistant L-Z | x 1651 |

## Concerns and Who to Call

| Below are some frequent concerns families have throughout the year and the appropriate person/office to contact. |  |  |  |
| :---: | :---: | :---: | :---: |
| Concern | Person to Call | Concern | Person to Call |
| Class Grade | Teacher Issuing Grade | Bus Discipline | Asst. <br> Principal/Principal |
| Homework | Teacher | Teacher Concern | Teacher - ${ }^{\text {st }}$ <br> Principal - $2^{\text {nd }}$ |
| Homework Requests (illness) | Attendance Secretary 724-625-4444, x1602 <br> Teacher | Medical | $\frac{\text { School Nurse }}{724-625-4444, \times 1625}$ |
| Course Placement | School Counseling Office | Tutoring \& Homebound Instruction | $\begin{aligned} & \text { School Counseling } \\ & \text { Office } \end{aligned}$ |
| New Student <br> Class Schedule | Enrollment - Central <br> Administration Office <br> Class Schedule - HS School <br> Counseling Office | Vacation/Educational Trip Requests | Attendance Secretary |
| Withdrawing Student | School Counseling Office Administrative Assistant | Extracurricular Activities | Athletic Office, <br> Coach, Sponsor, <br> Principal \& Asst. <br> Principal |
| Transcripts <br> (Post grad \& Current) | School Counseling Office <br> Administrative Assistant | College/Career | Director of <br> College and Career Counseling |
| Scholarships | School Counseling Office Administrative Assistant <br> Director of College \& Career Counseling | Detention | Teacher Issuing Detention <br> (Asst. Principal if Concern Remains) |
| Lunch Account Information | Food Services | At-Risk Student | School Counseling Office, Principal |

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## Graduation Credit Requirements

| English \& Language Arts | 4 |
| :--- | :---: |
| Social Studies | 3 |
| Mathematics | 3 |
| Science (includes Biology) | 3 |
| Flexible Core Academic Credit <br> (Mathematics, Science or Social Studies) | 1 |
| Health \& Physical Education |  |$\quad 1$| Electives |
| :---: |

## Portrait of a Graduate

. Through the strategic planning process and regular discussions with staff and parents, we know that there are many desired elements for a PR Graduate that go well beyond knowledge in certain content areas. What are these elements? How can we define them?

Although "graduate" is mentioned in this initiative, it is understood that students develop the knowledge, skills, habits and characteristics throughout each and every year. We have identified a few examples of where the Program of Studies aligns to the Graduate Portrait:

- Skills (Study and Communication Skills integrated in all courses)
- Health and Wellness (Career Awareness)
- Knowledge (Time Management Planner on page 10)
- Personal Qualities \& Characteristics (Leadership and Involvement page)



## Graduation Plan

It is encouraged that families use this form to assist in planning a comprehensive educational high school plan.

## PINE-RICHLAND HIGH SCHOOL STUDENT GRADUATION PLAN

Choice \#1
Choice \#2
Choice \#3
Career Cluster Interests

| Subject | Credits Required | Grade | Courses | Year | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 9 |  |  |  |
| English |  | 10 |  |  |  |
| Eng | 4 | 11 |  |  |  |
|  |  | 12 |  |  |  |
|  |  |  |  |  |  |
|  |  | 9 |  |  |  |
|  |  | 10 |  |  |  |
| Math | 3 | 11 |  |  |  |
|  |  | 12 |  |  |  |
|  |  |  |  |  |  |
|  |  | 9 |  |  |  |
| Science |  | 10 |  |  |  |
| Science | 3 | 11 |  |  |  |
|  |  | 12 |  |  |  |
|  |  |  |  |  |  |
|  |  | 9 |  |  |  |
|  |  | 10 |  |  |  |
| Social Studies | 3 | 11 |  |  |  |
|  |  | 12 |  |  |  |
|  |  |  |  |  |  |
| Flex (Math, Science, or Social Studies) | 1 | 12 |  |  |  |
|  |  |  |  |  |  |
| Health/Physical Education | 1 | 9 |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Electives | 9 |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  | Literature |  |  |
| Keystone Exam Verification | NA |  | Algebra 1 |  |  |
|  |  |  | Biology |  |  |
|  |  |  |  |  |  |
| Anticipated Graduation Year: |  |  |  |  |  |

## Time Management Planner

It is encouraged that students use this form to assist in planning a balanced academic schedule to promote personal wellness.

## The RAMS Way: Time Management Planner

Use this tool to plan a manageable schedule for the time required to meet your academic and personal goals.
Students should review course descriptions, speak to school counselors, teachers and peers, and then note the anticipated amount of work outside of the school day required for each class; these estimates will vary by student and course. Students who narrowly meet the prerequisite for a course, or waive into a course, may need to budget more time above the estimates. Students are most successful when they plan for a realistic schedule that allows for a sufficient challenge while maintaining balance. Do it The RAMS Way: students who do make informed choices about scheduling are better able to achieve academically and enjoy personal wellness.
Academic Time: List the daily homework and study time needed for proposed courses.
Ram Tip: Talk to the teachers of the classes you want to take prior to scheduling.


## PRHS Graduation Requirements Grid

| PR Credits | 24 credits <br> 4 credits required in English; 3 credits in Math, Science and Social Studies <br> 1 additional core credit in Math, Science or Social Studies <br> 1 credit Health \& Physical Education <br> 9 elective credits |
| :---: | :---: |
| Keystone Content Areas | Keystone Exams in Algebra 1, Biology \& Literature Click here for a Link to Keystone Assessment Schedule for 2023-2024. |
| Proficiency on Keystone Exam | Yes, proficiency for PRSD. |
| Required Retake <br> Keystone Exam | Yes. Students should retake twice (prior to exploring alternative pathways) in the following year during the winter window and, if necessary, spring window. |
| Supplemental Instruction for Keystone Exam | Recommended for non-proficient students through Progress Learning platform and classroom support. |
| Demonstration of Proficiency on Keystone Exam | Desired outcome of Proficient or higher score on Biology, Literature and Algebra I Keystone Exam, if a student does not achieve a Proficient or higher score after three exam attempts, successful completion of an Act 158 pathway. |
| Special Education and Keystone Exam | Must test at least once for ESSA compliance. <br> A student should retest if close to (but not) Proficient. An IEP team decision will be made for special education students that do not score at least Proficient after the second exam attempt to determine if the student will follow Act 158 pathways. A waiver is available in rare cases if a student does not meet any Act 158 pathway. PVAAS projections may be used to help inform the decision-making process. |
| Transcript Reporting of Keystone Exam | Keystone Exam scores are not recorded on a student's transcript; however, they may be added to a student's transcript at parent request. |

## Keystone Requirements

Federal regulations require schools to participate in state assessments. In addition, Pine-Richland graduation policy requirements stipulate that students must demonstrate mastery of the PA Core Standards on the Keystone Exams or local assessments. Keystone Exams are end-of-course assessments designed to assess proficiency in three subjects: Algebra I, Literature and Biology. Keystone Exams are one component of Pennsylvania's system of high school graduation requirements and help school districts guide students toward meeting state standards.

Keystone Exams are typically taken during the spring testing window of the year in which a student is enrolled in the given course. Students must demonstrate proficiency on each of the three Keystone Exams. If a student does not receive a score of "Advanced" or "Proficient" on a Keystone Exam, the student will be offered supplemental support through Progress Learning and classroom support and the student will be scheduled to retest during the next designated testing window as established by the Pennsylvania Department of Education. If a Proficient or Advanced score is still not obtained during a student's second attempt, they will be scheduled for one final retake during the Spring testing window. If following three Keystone Exam attempts a student still has not earned a Proficient or higher score, additional pathways will be explored at that time. It is our goal that all Pine-Richland students demonstrate a Proficient or higher score on each Keystone Exam.

Through Act 158 of 2018 and Act 6 of 2017, students graduating from Pennsylvania public high schools in 2023 or later will have greater flexibility in reaching Keystone Exam proficiency through a five pathway option. These pathways provide greater flexibility to students; however, they are not considered until a student has made three attempts to reach Proficiency on each of the Keystone exams. These five pathways may be found on the next page of this Program of Studies.

Act 158 Pathway to Proficiency Resources

# Pennsylvania Pathways to Graduation 



## Waiver

A student in 12th grade, or experiencing extenuating circumstances, who meets locally established grade-based requirements for Keystone content area(s) in which the student is less than proficient, and is unable to satisfy the requirements of a graduation pathway may be granted a waiver by the chief school administrator.

Individualized Education Plan

A student with a disability who is unable to satisfy pathway requirements but who satisfactorily completes a special education program is granted a diploma under Title $\mathbf{2 2}$ §4.24.

NOTE: Although this infographic displays a sequential progression, students may fulfill criteria under the CTE Concentrator, Alternative Assessment, or Evidence-Based Pathways prior to demonstrating proficiency in Keystone academic content through Keystone Exam scores or locally established grade-based requirements.

## Promotion Requirements

- To receive credit for a course, a student must earn a D $(60 \%)$ or better.
- Promotion from 9th to 10th grade requires a student to earn at least 6 credits.
- Promotion from 10th to 11 th grade requires a student to earn a combined total of at least 12 credits.
- Promotion from 11th grade to 12th grade requires a student to earn a combined total of at least 18 credits.
- Special Considerations
o Regardless of the number of promotion credits, students must pass all required subjects to graduate.
- Promotion requirements are reviewed at the end of each year. Students and parents are informed if a student is not promoted.


## Incomplete Grades

Students who have not completed the work for a class assigned during a quarter can receive an incomplete grade on their report card. Students have two weeks after the report card is distributed to complete the missing work. If the work is not completed within two weeks of distribution of the report card, the missing work will be marked as a zero and a new quarter grade will be calculated.

## Failed Courses

Students must work with their School Counselor or a building administrator to plan how the course credit will be recovered. Options to recover credits necessary for graduation are:

1. Repeat the course at PRHS in the following academic year. Both grades will appear on the transcript. The new grade may replace the old grade in the student's grade point average calculation.
2. Attend a regularly accredited summer school. The failed course will be calculated into a student's grade point average. The recovered course will not be calculated into a student's grade point average.
3. Pass a licensed correspondence course that has prior approval. See your Counselor for additional information*. Per Policy 124, all fees for non-PRHS courses are the student's responsibility. The failed course will be calculated into a student's grade point average. The recovered course will not be calculated into a student's grade point average.
4. Take a pre-approved course online over the summer*. Per Policy 124, all fees for non-PRHS courses are the student's responsibility. The failed course will be calculated into a student's grade point average. The recovered course will not be calculated into a student's grade point average.
*These options will impact NCAA eligibility. Individuals who desire to participate in collegiate athletics should advise their school counselor prior to finalizing an option for credit recovery.

## Grading System

Grades are on a four-point quality point scale unless enrolled in a weighted course. See list below for details of weighted course categories and the corresponding quality points:

| Percent | Grade | Regular <br> Courses | Honors Courses | Advanced Courses <br> Advanced Placement <br> College in High School |
| :---: | :---: | :---: | :---: | :---: |
|  |  | A | 4.0 | 4.5 |
| $90-100$ |  | 3.0 | 3.5 | 5.0 |
| $80-89$ | C | 2.0 | 2.5 | 4.0 |
| $70-79$ | D | 1.0 | 1.5 | 3.0 |
| $60-69$ | F | 0.0 | 0.0 | 2.0 |
| $0-59$ |  |  | 0.0 |  |

## Student Transcripts

The transcript officially records the student's academic work done while enrolled at Pine-Richland High School. The transcript lists courses attempted and the final grade earned for each course. Non-PRHS courses are included but not calculated into the students final GPA.

In computing the final grade for a yearlong course, each quarter grade is worth $20 \%$ of the course-end grade. The midterm and the final exams each count as $10 \%$ of the year-end grade. If there is doubt about how a final course-grade was calculated, please contact the teacher of the course directly. For semester long courses, each quarter grade is worth $40 \%$ of the final course grade and the exam counts as $20 \%$.

Requests for PRHS to send out a transcript must be made by filling out a Transcript Request Form in addition to a Parent Release of Record form and then submitting it to the School Counseling office at least ten (10) business days prior to the due date. No transcripts are sent until after the request for course change period at the start of the school year. Transcript Request Forms and parent signature forms are available in the school counseling office as well as on the website at www.pinerichland.org/prhs under scheduling resources. Click here for a tutorial on requesting a transcript.

Per Act 55 of 2023, industry-earned credentials will be noted on a student's transcript. These credentials are typically earned through a student's coursework and National Occupational Competency Testing Institute qualifying scores at A.W. Beattie Career Technical Center.

## Class Rank

Class rank is determined by ordering students based upon a cumulative GPA calculated using final grades earned for PRSD courses. Class rank is not reported on the student's transcript unless requested by parents. Parents can make this request by completing the Inclusion of Class Rank Transcript Request Form that is available in the school counseling office.

## Credit Recovery

Definition - Credit recovery is an opportunity for a student who has failed to earn credit in an academic course (Math, Science, English, Social Studies, Health, Physical Education and World Language) to recover that course credit by enrolling in a "Credit Recovery" program. Current Pine-Richland School District approved credit recovery programs include Keystone Credit Recovery, AIU Waterfront Learning Other credit recovery programs must be approved by Pine-Richland School District. A credit recovery application is available from the school counseling office and must be approved by a school counselor and principal.

## Policy 124 - Alternative Instruction Methods and Application

The Alternative Instruction Methods policy was designed to provide Pine-Richland students with a variety of opportunities to improve their skills and understandings of content or to explore areas of strength and interest.

## Students must work closely with their school counselors to ensure the alternative method of instruction is approved before scheduling a course.

- The deadline for approval for requests per Policy 124 is the last day of Quarter 3. Click here for application.


## Acceleration

Definition - Acceleration occurs when courses are taken outside of Pine-Richland School District to move ahead in mathematics, science, or world language pathways. An application must be completed and approved prior to scheduling any course.

## Retake

Definition - Retake is an opportunity for students who earned a credit in a course, but would like to improve their skills and understanding of content.

## Foreign Exchange Program

Definition - District students shall receive high school credit for foreign exchange courses that meet the criteria established in the curriculum and are approved by the building principal.

## Enrichment

Definition - Enrichment is additional learning opportunities outside of the Pine-Richland Program of Studies. Enrichment programs help students discover their strengths and interests and should support each student's individual goals. An application must be completed and approved prior to scheduling any course.

|  | Alternative Instruction Methods |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Independent <br> Study | Credit Recovery | Acceleration | Retake | Enrichment | Foreign <br> Exchange |
| Graduation Plan <br> discussed with family and <br> counselor | Yes | Yes | Yes | Yes | Yes | Yes |
| Application for Approval | Yes | Yes | Yes | No <br> Requested <br> through the <br> yearly <br> scheduling <br> process) | Only if desired <br> to be recorded <br> on student's <br> transcript | Yes |
| Recorded on Transcript? | Yes | Yes |  | Option to be <br> recorded in <br> notes section | Yes | Option to be <br> recorded in <br> notes section |
|  |  | Yes, as <br> Pass/Fail |  |  |  |  |
| Calculated into GPA | Optional | No | No | Yes | No | No |
| Credit Awarded | Yes option <br> for 0.5 or 1.0 <br> credit | Yes option for 0.5 or <br> 1.0 credit (Up to six <br> credits) | No | No | No | Yes |
| Option for Honors Weight | No | No | No | For honors | No | No |

## Preparing for College

## College Admission

To help students prepare for and complete the college admissions process, students and parents are provided access to a software program called Naviance Student. Naviance Student makes it easier for students to answer questions that will shape their future: Who am I? What do I want to be? How will I get there? The new design delivers the power of Naviance to students' fingertips with familiar and intuitive tools that personalize and simplify the college and career planning process. In addition, Naviance Student is used by the School Counseling Office and high school teachers to electronically send most transcripts and teacher letters of recommendation. This software program allows students to:

- Get involved in the planning and advising process - Build a resume, complete online surveys and manage timelines and deadlines for making decisions about colleges and careers;
- Research colleges - Compare GPA, standardized test scores and other statistics to actual historical data from students who have already applied;
- Sign up for college and career visits - Find out which colleges are visiting our school and sign up to attend those sessions (sophomore, junior and senior students);
- Research scholarship and enrichment opportunities;
- Add parents as Parent Partners


Naviance Student also lets the School Counseling Office share information with parents and students about upcoming meetings and events, local scholarship opportunities and other Web resources for college and career information. Students receive information and instruction about Naviance Student at school. The Director of College and Career Counseling is available to answer any questions about Naviance Student or to register interested parents.

## Click here to view the Naviance Student tutorial.

Colleges and universities generally consider students for admission by evaluating the following data:
College Application: Every college has its own application process. Students must follow the instructions carefully for the colleges of their choice. Students can find college applications under the admissions tab for each college.

Scholastic Record: A transcript of the student's academic record, senior class schedule and Pine-Richland High School profile are sent by the school to the student's selected college(s) for evaluation.

Admission Tests: ACT, SAT test scores are carefully noted by admission officers. Students must have their scores sent directly to
 their schools by the testing agency (ie. College Board; ACT).

Recommendations: Students gather recommendations from counselors, teachers, coaches, administrators and community members. Most teacher letters of recommendation are sent electronically through $\underline{\text { Naviance Student. }}$ Seniors can access information here. Video resources are available here.

Students create a resume of their extracurricular experiences and summer enrichment activities to be sent to their selected colleges. Students can use Naviance Student to create and store their resumes.

## College Admission Testing-Pine-Richland High School CEEB Code: 391512

Throughout the year, college admission tests are administered to college bound students. It is important for students to become familiar with these tests. Computer-assisted instruction is available through Naviance and on the web by visiting the SAT website, www.collegeboard.com, and/or the ACT website at www.actstudent.org.

## PSAT/NMSQT - The Preliminary SAT/National Merit Scholarships Qualifying Test

\(\left.$$
\begin{array}{ll}\text { Duration: } & \begin{array}{l}\text { Approximately } 3 \text { hours; Digital exam given in mid-October during the school day } \\
\text { Taken by: } \\
\text { High school juniors (required) and sophomores (optional) only } \\
\text { Given by: }\end{array}
$$ <br>
College Entrance Examination Board and National Merit Scholarship Corporation <br>

(https://collegereadiness.collegeboard.org/psat-nmsqt-psat-10?navId=gh-pn)\end{array}\right]\)| Frequency: | One time per year (October) <br> The PSAT/NMSQT will measure the skills and knowledge that have been determined as essential for <br> college readiness and success. The test establishes eligibility for certain scholarships. |
| :--- | :--- |
| Note: | The fee for juniors taking the exam during school day is paid for by the district. Sophomores <br> wishing to sit for the test are responsible for the test fee. It is recommended that sophomores be <br> currently enrolled in or have already completed Algebra 2. |

Duration: 4 hours
Taken by: High school juniors and seniors

| Given by: <br> Frequency: | ACT (www.actstudent.org) <br> Six times per year (Saturdays - usually offered in Sept, Oct, Dec, Feb, April, June) <br> Some colleges will require students to take the ACT with Writing, if using scores to replace the SAT. <br> Used by most colleges for admissions purposes and merit scholarship awards. |
| :--- | :--- |
| Purpose: | SAT TEST* |
| Duration: | Approximately 2.5 hours. Students are encouraged to check with post-secondary institutions to <br> determine whether it is required for admission. |
| Taken by: | High school juniors and seniors <br> College Board (www.collegeboard.com $)$ |
| Given by: | Seven times per year (Saturdays - usually offered in Oct, Nov, Dec, Jan, Mar, May, June) |
| Frequency: |  |
| Purpose: | Used by most colleges for admissions purposes and merit scholarship awards. |

*Students are charged a fee by the test publishers to take these exams. Students who qualify for the free $\mathcal{E}$ reduced lunch program may be eligible for discounted rates. See your counselor for more information.

## Financial Aid

Financial aid may be awarded in several ways. It may be a scholarship, grant, parent or student loan from a bank or other agency, or an on-campus work-study program. Some of these methods may provide money that has to be paid back by a prearranged method. Students interested in financial aid should research the colleges of their choice, discover what is available and determine how to apply. Financial Aid Night is held once a year at the high school to help students and parents understand the financial aid process. Pine-Richland High School partners with PHEAA, the Pennsylvania Higher Education Assistance Agency. It is the student's responsibility to meet deadlines regarding financial aid. Additional information about financial aid can be found by visiting the college and career web page. Additional scholarship searches are available in the college career center, in Naviance or through internet search engines, such as http://www.fastweb.com.

## Gaining College Experience

## College in High School Program for Courses Taken at Pine-Richland High School:

Pine-Richland High School collaborates with local colleges that allow students to earn college credit upon successful completion of certain specific, upper level, college courses offered at the high school and taught by high school teachers. For example, students may receive credit from the University of Pittsburgh for successful completion of Business Calculus, AP Calculus AB, AP Statistics and AP Physics C - Mechanics. Our College in High School courses are reviewed every year and may change from year to year. Students are informed at the start of class in the fall if their course is part of the College in High School Program. Interested students must receive approval from their school counselor. All students enrolled in an AP course must take the AP exam for the course, regardless of CHS enrollment.

| College in High School |  |  |
| :---: | :---: | :---: |
| English | Math | Science |
| College in High <br> School Argument | $\frac{\text { College in High School }}{\text { Business Calculus }}$ | $\frac{\text { College in High }}{\text { School Physics }}$ |

The University of Pittsburgh will be using an online web-based placement system named ALEKS for College in High School student placement for CHS Business Calculus only. Course placement is based on a single numeric score. The College in High School Business Calculus students will have to meet the same placement criteria as an on-campus student. This test is $\$ 25$ and paid for by the student. Students may retest up to 5 times, but must complete the targeted ALEKS learning modules before repeating the assessment. The assessment scores are only good for 6 months. Students must provide a printout to the College in High School Business Calculus teacher. Please note there are additional special fees attached to enrolling in the College in High School Program. Per Policy 124, college fees are the responsibility of students.

## Dual Enrollment

Dual Enrollment programs allow students to be enrolled in two separate academic institutions. Typically, this refers to high school students who take courses at local colleges or universities. Dual Enrollment gives high school students the opportunity to begin their post-secondary transcripts and earn post-secondary credits. There is an application process for dual enrollment programs through the post-secondary institution and most programs require the approval of the student's high school. Students who participate in dual enrollment programs do not earn PRHS credit and the courses taken do not appear on their PRHS transcript.

## Extracurricular Activities

All students are encouraged to participate in extracurricular activities, whether they are related to school, community, or church. Often, the experience gained in participating in sports, volunteer work and clubs represent some of the most important learning in high school. Employers and colleges are interested in the school activities in which students have participated. However, it is not the number of activities that is considered important, but those in which the student has continuously participated over the years and demonstrated dedication and leadership. Click here for a list of activities and clubs at the high school.

## Making Career Connections

## Career Planning

Successful career planning involves incorporating each student's unique qualities, abilities and goals. A college, trade school, or career "fit" is one that embraces all aspects of an individual's educational strengths and personality. The school counseling office helps students explore post-secondary opportunities by providing meetings with colleges, as well as, career and technical institutions. Additional material can be obtained through internet research, reference books and meetings with the school counselor or the college and career counselor.

The Career Education and Work Standards (CEW) are part of Pennsylvania Department of Education's regulations of required education for all students in Pennsylvania. Beginning in the fall of 2017, Pine-Richland School District, along with all other school districts across the state of Pennsylvania, began refining and archiving student college and career learning experiences. The activities provide students with personalized information related to college and career
options, getting a job, keeping a job and entrepreneurship. Through Naviance, Google Applications and each student's cumulative folder, a portfolio of college and career experiences is available to help each student make post-secondary decisions that align with his/her talents, interests and aspirations.

## Naviance Student

The Career Planning component of Naviance Student allows students to realize their goals, skills, knowledge, values, constraints and interests to help them make better academic decisions. During this process, students gain a clear understanding of the academic preparation required to pursue careers that are likely to be fulfilling for them. The following assessment tools are available to all students throughout high school.

- Career Cluster (completed in middle school)
- Achieveworks Learning and Productivity (completed freshman year)
- Achievworks Personality
(completed sophomore year)
- Career Interest Profiler
(completed junior year)
- Post-secondary Career and Education Search
(completed junior year)
- Roadtrip Nation Interview Archive (may be completed independently)
- StrengthsExplorer ${ }^{\circledR}$ (may be completed independently)
- Achieveworks Intelligence (may be completed independently)
- Achieveworks Skills (may be completed independently)


## 16 Career Clusters

Exploring the 16 Career Clusters allows students to find a group of careers that they may enjoy based on their interests, skills and personality traits. Each individual career cluster shares common features and skills. Careers in the same cluster typically require similar education and training paths. Exploring career groups can help students find a good career match, especially if they have several areas of interest but are not sure what specific careers best fit with those interests. Career clusters also help students better understand how their courses can prepare them for certain types of future careers.

PRHS students use Naviance Student to complete a comprehensive series of career exploration assessments to help them align their chosen interests with high school courses. Exploring interests in high school can set you up for success and help you discover potential careers. Students and families can find potential courses throughout the PRHS Program of Study that align interests, strengths, personality traits and careers with specific career clusters. Click here for additional resources and information about career exploration. Visit the National Association of State Directors of Career Technical Education Consortium for more detail about the Career Clusters framework. Additionally, you may visit PA Career Zone as another resource for information about the Career Clusters. Career clusters are now integrated into each high school student's graduation plan. Starting at the end of $8^{\text {th }}$ grade, students will use their career education and work standards, learning experiences, previous courses of study and outside interests to begin identifying possible career clusters to help guide them through the program of studies. School counselors and teachers will then continue this conversation with students and families throughout their high school careers to refine the cluster choices as students experience our program of studies and other co- and extra-curricular interests.

|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Designed by: Andi Harper


## Agriculture, Food and Natural Resources

Careers in the agriculture, food and natural resources cluster involve working with plants, animals and the environment. Nearly all of the farming, fishing and forestry occupations and many of the life, physical and social science occupations are assigned to this cluster.


## Architecture and Construction

Careers in the architecture and construction cluster involve designing and building homes, roads and other structures. Nearly all of the construction and extraction occupations and many of the architecture and engineering occupations are assigned to this cluster. A strong economy is important in creating new jobs within this field.


## Arts, Audio/Video Technology and Communications

Careers in this cluster often involve creative tasks, such as performing or writing. Most of the arts and design, entertainment and sports and media and communication occupations are assigned to this cluster. This cluster offers two different avenues of concentration. Careers in the Performing Arts, Visual Arts or certain aspects of Journalism, Broadcasting and Film require courses and activities that challenge students' creative talents.

Business Management and Administration
Careers in this cluster involve planning, oversight and organizational tasks needed to run a business. Many of the business and financial, management and office and administrative support occupations are assigned to this cluster. Career opportunities are available in every sector of the economy and require specific skills in organization, time management, customer service and communication.


## Education and Training

Careers in the education and training cluster involve teaching and other tasks associated with schools, libraries and museums. All of the education, training and library occupations are assigned to this cluster.


## Finance

Careers in the finance cluster involve managing and working with money. A number of the business and financial and office and administrative support occupations are assigned to this cluster. The Finance Cluster prepares learners for careers in financial and investment planning, banking, insurance and business financial management. Career opportunities are available in every sector of the economy and require specific skills in organization, time management, customer service and communication.

## Government and Public Administration

Careers in the government and public administration cluster involve making laws, ensuring safety and providing other public services. All of the military careers are assigned to this cluster. There are many challenging educational and training opportunities within the high-skilled world of Government and Public Administration.

## Health Science

Careers in the health sciences cluster involve helping people and animals with the medical care they need to get or stay healthy. Nearly all of the healthcare occupations are assigned to this cluster. Some of the careers involve working directly with people, while others involve research into diseases or collecting and formatting data and information. Work locations are varied and may be in hospitals, medical or dental offices or laboratories, cruise ships, medevac units, sports arenas, space centers or within the community.

Hospitality and Tourism
Careers in this cluster involve providing people with food, lodging and related services. All of the food preparation and serving occupations and a number of the personal care and service occupations are assigned to this cluster. Hospitality operations are located in communities throughout the world.

## Human Services

Careers in the human services cluster involve helping people with a variety of needs, such as counseling and fitness training. Nearly all of the community and social service occupations and many of the personal care and service occupations are assigned to this cluster. This diverse Career Cluster prepares individuals for employment in career pathways related to families and human needs.

## Information Technology

Careers in the information technology cluster involve working with computer hardware, software or network systems. The IT industry is a dynamic and entrepreneurial working environment that has a revolutionary impact on the economy and society. Nearly all of the computer and information technology occupations are assigned to this cluster.

Law, Public Safety, Corrections and Security
Careers in this cluster involve protecting people and enforcing rules. All of the legal occupations and nearly all of the protective service occupations are assigned to this cluster. The Law, Public Safety, Corrections and Security Cluster helps prepare students for careers in planning, managing and providing legal, public safety, protective services and homeland security, including professional and technical support services.


## Manufacturing

Careers in the manufacturing cluster involve making products, such as food, cars and household goods. Nearly all of the production occupations, many of the installation, maintenance and repair occupations and some of the architecture and engineering occupations are assigned to this cluster. This diverse Career Cluster prepares learners for careers in planning, managing and performing the processing of materials into intermediate or final products. Careers also include related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

## Marketing

Careers in the marketing cluster involve promoting and selling products and services to reach organizational objectives. Most of the sales occupations and some management occupations are assigned to this cluster.

## Science, Technology, Engineering and Mathematics

Careers in the STEM cluster involve solving problems through research and design. Many of the life, physical and social science; architecture and engineering; and math occupations are assigned to this cluster. A career in science, technology, engineering or mathematics is exciting, challenging and ever-changing. Learners who pursue one of these fields will be involved in planning, managing and providing scientific research and professional and technical services including laboratory and testing services and research and development services.

## Transportation, Distribution and Logistics

Careers in this cluster involve moving people and products from one place to another by road, air, rail and water. It also includes related professional and technical support services such as infrastructure planning and management, logistic services and the maintenance of mobile equipment and facilities. Most of the transportation and material moving occupations and some of the installation, maintenance and repair occupations are assigned to this cluster.

## Advanced Placement Courses

Pine-Richland High School offers Advanced Placement courses for students across many subject areas. All students enrolled in AP courses are required to take the end of year AP exam during the College Board mandated testing window each May. There is a fee of approximately $\$ 97$ for each exam and each family is responsible for payment of the fee prior to the testing window. A letter and invoice will be sent home early in the second semester, detailing all exams ordered for the current school year along with the total testing fee.

AP exams are scored on a 1-5 scale. Many colleges and universities award recognition for scores of 3, 4 or 5 . For some colleges, the recognition permits students to skip entry-level courses and enroll in more advanced level courses as a freshman. For others, college credits are awarded. Students may check for details on how AP test scores are managed for each college/university using $\underline{\mathrm{https}: / / a p s t u d e n t . c o l l e g e b o a r d . o r g / c r e d i t a n d p l a c e m e n t . ~}$

Please keep in mind that it is the responsibility of the student to send AP scores to their chosen school directly from the College Board. AP scores are made available to families in July each year through the College Board. A student may request to be partially reimbursed by Pine-Richland upon receiving a score of 3 or higher. Please note that the reimbursement process has specific requirements and deadlines. Information regarding the process will be available on the district website's high school homepage in July. Current AP courses taught at Pine-Richland are:

| Art | Humanities | Math \& Sciences | World Languages |
| :---: | :---: | :---: | :---: |
| AP Art History | AP English Language \& Composition | AP Calculus AB | AP French |
| $\frac{\text { AP Studio Art: }}{\text { Drawing }}$ | AP English Literature \& Composition | AP Calculus BC | AP German |
| $\frac{\text { AP Studio Art: 2-D }}{\text { Design }}$ | $\frac{\text { AP US Government \& }}{\underline{\text { Politics }}}$ | AP Statistics | AP Spanish |
| $\frac{\text { AP Studio Art: 3-D }}{\underline{\text { Design }}}$ | AP European History | AP Biology |  |
|  | AP Microeconomics | AP Chemistry |  |
|  | AP Psychology | AP Physics C-Mechanics |  |
|  | AP United States History | AP Computer Science |  |
|  |  | $\frac{\text { AP Environmental }}{\text { Science }}$ |  |

## Additional Scheduling Opportunities

## AIU Career Connection Opportunities

PRHS students may apply for career-building opportunities through the Allegheny Intermediate Unit (AIU) Career Connection Program. These programs are open to all students who wish to apply and Pine-Richland is permitted to recommend three students for each program. A Career Connection program is considered an enrichment activity which is defined as an "additional learning opportunity outside of the Pine-Richland Program of Studies." According to Policy $\underline{124}$, students will not receive credit for an enrichment activity but they do have the option to request the Career Connection program be documented on the note section of their transcript. They are generally open to students in grades 10-12 although a few are restricted to juniors and seniors. Career Connections programs typically occur once a month for a total of 30 hours a year. Applications are due at the end of first semester for the following year. Please see your school counselor for more information. Examples of Career Connections programs previously available include:

| Acting | Advertising/Public Relations | Animation |  |
| :--- | :--- | :--- | :---: |
| Anthropology | Architecture | Associated Artist Art Centers |  |
| Astronomy | Biotechnology | Broadcast Journalism |  |
| Business | Civil and Environmental Engineering | Conducting |  |
| Dance Academy/Pittsburgh CLO | Dance/Dance Alloy | Education |  |
| Engineering | Filmmaking | International Affairs |  |
| Journalism | Journalistic Layout | Marine Biology |  |
| Memoir (non-fiction) | Musical Theater | Nursing |  |
| Opera and Voice Coaching | Photography | Play Writing |  |
| Poetry | Screenwriting | Short Fiction |  |
| Videography | Visual Arts | Web Design |  |
| Zoo Animal Care |  |  |  |

## A.W. Beattie Career Center

Students interested in becoming licensed in technical fields by the time they graduate from high school may take courses at A.W. Beattie Career Center. Some programs offer certification opportunities.

- Students can prepare for careers in the technology fields of advertising design, intelligent systems, business and information, computer systems, network engineering, robotics engineering and cyber security.
- Students can prepare for careers in the consumer services of cosmetology, culinary arts, pastry arts and early childhood education.
- Students can prepare for health careers in dentistry, emergency response technology, health and nursing and pharmacy, rehab therapy, sports medicine, surgical sciences and veterinary sciences.
- Students can prepare for the mechanical careers of automotive collision and automotive technology, carpentry, building construction and HVAC (heating, ventilation and air-conditioning).
Please note many programs have fees required for their courses of study.


## Senior Flex

Seniors are eligible to participate in a senior flex schedule, which permits students in the 12th grade to carry a reduced load of classes and then be excused for the purpose of reporting to work or attending a college course. To qualify, graduation requirements must be met. Students must work through the application process directly with their Counselor to develop a senior flex schedule. To enroll in the senior flex program, students must:

- Make an appointment with the student's Counselor during scheduling.
- Present student's Counselor with a letter from employer, on letterhead, stating workdays \& starting time or evidence of course enrollment. Supervisor and parents must sign this letter.
- Agree to quarterly monitoring by their Counselor, which includes providing a current pay stub every quarter.
- Provide your own transportation from school to place of employment or college.
- Discontinue Senior Flex if failing courses required for graduation or can no longer provide proof of employment or enrollment in a course.


## Additional Learning Opportunities

Students take courses online for many different reasons. Sometimes students are unable to fit a class into their schedule but have the time to take the course during the day online. Sometimes students work online during the summer to recover credit needed for graduation or to take additional courses not offered by PR. Online courses can be quite different from each other. Some take place asynchronously which means students work on the course on their own time. Some online courses are synchronous and have set times students must be available to take the class. Before deciding to take an online course, students should consider whether they have a computer at home that is compatible with system requirements of the course; whether or not they enjoy learning electronically with little or no physical interaction from the teacher; and whether or not they are self-disciplined, highly organized and strongly motivated for independent learning.

Students must work closely with their School Counselor so that the details of the online course, including the fees involved, the location of the computer to be used and the time devoted to completing the course are thoroughly understood. Students will receive their grade assigned by the third party online organization. Per Policy 124, online course fees are the responsibility of the student.

## Air Force Junior Reserve Officer Training Corps (AFJROTC)

Embark on a transformative journey with the Air Force Junior Reserve Officer Training Corps (AFJROTC), where our mission is to cultivate citizens of character dedicated to serving their nation and community. Our program, open to 8th-12th graders, is not a military recruitment initiative but a citizenship program designed to shape leaders and responsible individuals.

Join a community of over 90,000 cadets across the United States, Guam, Europe, and the Pacific, guided by a dedicated team of 59 headquarters personnel and more than 1,600 retired Air Force officers and enlisted military instructors. The AFJROTC curriculum seamlessly blends Aerospace Science, Leadership Education, and Health and Wellness studies, offering academic credits and providing insights into air and space fundamentals.

The AFJROTC curriculum integrates Aerospace Science, Leadership Education, and Health and Wellness studies. Successful completion of these courses earns students graduation credits. Aerospace Science delves into the history of flight, aircraft flight principles, navigation, human flight requirements, aerospace power development, rocketry, space and technology programs, aerospace industry dynamics, cultural studies of major world regions, and cyber technology. The inclusion of a STEM curriculum enhances students' comprehension of science and math, fostering critical thinking skills and preparing cadets for competitiveness in the 21st century. Leadership Education acquaints students with military customs, character education, U.S. citizenship, first aid, wellness, health and fitness, basic drill and ceremonies, effective communication, management, human relations, and college and career readiness. AFJROTC units enrich the curriculum through collaboration with organizations like the National Aeronautics and Space Administration and the Civil Air Patrol, providing students with a comprehensive educational experience that extends beyond the typical curriculum.

Beyond the classroom, engage in Leadership Development Requirements, where you can participate in diverse activities like Drill and Color Guard teams, Raiders Competitions, CyberPatriot, and more. Our instructors, maintaining Air Force standards, are not just retired Air Force personnel but now also include qualified National Guard and Reserve members, fostering a dynamic learning environment.

At AFJROTC, community service is ingrained in our mission and values, with cadets contributing over 1.6 million hours annually to national campaigns and local initiatives. Discover the thrill of personal development, citizenship, and service, all while exploring the realms of aerospace technology, leadership, and character. Join the AFJROTC, where you'll not only shape your future but also make a meaningful impact on your community and beyond.


## National Collegiate Athletic Association (NCAA) Requirements

The National Collegiate Athletic Association (NCAA) is an organization dedicated to providing a pathway to opportunity for college athletes. With over 1,000 colleges and universities registered as members, the NCAA provides more than 500,000 athletes the opportunity to compete in college level sports. The Association is structured in three divisions (DI, DII, DIII) where each has specific academic requirements for student athletes to qualify for NCAA Eligibility. To learn more about the pathway that's right for you, visit ncaa.org/divisions. This can be a great opportunity for a student athlete who wants to continue playing at the collegiate level.

If you are interested in continuing your sport at an NCAA registered school, please:

1) Visit ncaa.org/student-athletes to learn more about the process
2) Research what pathway is the best fit (DI, DII, or DIII) ncaa.org/divisions
3) Register at www.eligibilitycenter.org as soon as the summer before your 9th grade year
4) Meet with your school counselor to review the course/credit requirements

COURSE REQUIREMENTS: Not all classes offered at Pine-Richland are approved to meet the NCAA course requirements. It's important for you as a student athlete to review the Pine-Richland list of NCAA Courses on the NCAA Eligibility Center's website. Only courses that appear on your school's List of NCAA Courses will be used in the calculation of the core GPA for NCAA eligibility purposes. Use the list as a guide. Your GPA at Pine-Richland includes additional electives and core courses and is not the same as the GPA used to determine your eligibility for the NCAA. This NCAA DI and DII worksheet is a great resource that will help you with this.

TEST SCORE REQUIREMENTS: When you register for the SAT and/or ACT, it is your responsibility to report your scores directly through the testing agency by using the NCAA Eligibility Center code of 9999. Pine-Richland is not responsible for reporting test scores.

TRANSCRIPT REQUIREMENTS: Once you register for NCAA eligibility, it is your responsibility to request a transcript to be sent using the Pine-Richland transcript request form. This must be completed each year in order to update your transcript in the NCAA student athlete portal.

If you have any questions, please reach out to your school counselor or administrator.

## Initial-Eligibility Standards

If you want to compete in NCAA sports, you need to register with the NCAA Eligibility Center at eligibilitycenter.org. Plan to register before your freshman year of high school. For more information on registration, visit on.ncaa.com/RegChecklist.

## Academic Requirements

Division I and II schools require you to meet academic standards. To be eligible to practice, compete and receive an athletics scholarship in your first year of full-time enrollment, you must meet the following requirements:

## Division I

1. Earn 16 NCAA-approved core-course credits in the following areas:


4 years


3 years


2 years


1 year


2 years


4 years
2. Complete your 16 NCAA-approved core-course credits in eight academic semesters or four consecutive academic years from the start of ninth grade. If you graduate from high school early, you still must meet core-course requirements.
3. Complete 10 of your 16 NCAA-approved core-course credits, including seven in English, math or science, before the start of your seventh semester. Once you begin your seventh semester, any course needed to meet the 10/7 requirement cannot be replaced or repeated.
4. Earn a minimum 2.3 core-course GPA.
5. Ask your high school counselor to upload your final official transcript with proof of graduation to your Eligibility Center account.

## Division II

1. Earn 16 NCAA-approved core-course credits in the following areas:

2. Earn a minimum 2.2 core-course GPA.
3. Ask your high school counselor to upload your final official transcript with proof of graduation to your Eligibility Center account.

## Division III

While Division III schools set their own admissions and academic requirements, international student-athletes (first-year enrollees and transfers) who are enrolling at a Division III school after Aug. 1, 2023, must be certified as an amateur by the Eligibility Center. Contact the Division III school you plan to attend for more information about its academic requirements.


## PRHS Scheduling Process

## Scheduling Process

At Pine-Richland High School, we take great pride in helping students and families Choose Wisely by selecting the Right classes for the Right students. In making course recommendations, our staff consider factors such as a student's career goals and interests, current course grades and in-class performance, student attendance, standardized achievement data, student course projected readiness and success using the Pennsylvania Value Added Assessment System, student input, and teacher knowledge of the skills required for the recommended course. Great care and collaboration is used to make course recommendations. It is the responsibility of the student and parent to choose a course that is more rigorous than a teacher-recommended course (if desired). Elective courses and additional opportunities are selected by students based on their interests and post-secondary aspirations.

In the second semester of the current school year, course requests are gathered from incoming freshmen, sophomores, juniors and seniors. It is encouraged that parents and students begin discussions early in this process. During this time, students and families should work closely with their teachers and counselors to ensure the courses requested are closely aligned with the student's interests, abilities and future goals. Selecting the "right" courses will ensure a smooth transition into the following school year. The scheduling timeline on the following page provides an overview of important dates pertaining to student scheduling.

## Timeline for Adding a Course

The best time for adding a course is in accordance with the scheduling timeline below during the course request phase of scheduling. The building of the high school master schedule begins in February. The master schedule assigns teachers and rooms for classes and maximizes the use of district resources. It is quite difficult to add new courses and extra sections of courses after the master schedule has been built. The ability for a student to add a course once the school year has begun is dependent upon the number of students already scheduled in the class, additional changes to the student's schedule needed to add the course, the amount of time elapsed since the onset of the class and meeting the prerequisites for the course to be added. Students are never guaranteed that they will be able to make changes to their schedules once the school year has begun. When a student is considering adding a class outside of the scheduling timeline below, their first contact should be to their school counselor.

## Special Requests

Students and families may not request specific teachers or lunch periods. If you believe that you or your child may have a special need connected to academic, social, or emotional needs, please contact your child's school counselor and Assistant Principal. To the best of our ability, we will work with you and your family to create a schedule that best supports you. For students that receive special education services, we work to hand schedule the large majority of classes and supports. As a parent or guardian, you know your child best. We want to be a partner and teammate to best help your child meet their full potential. If you believe that your child needs a special scheduling request, please contact your child's Assistant Principal and school counselor directly. Requests that are made by March 29 have the best ability to be met.

## Pine-Richland High School Scheduling Timeline

$\left.\begin{array}{|l|l|}\hline \text { January 23 } & \begin{array}{l}\text { PRHS Program of Studies is available to all students and parents. Principal's letter sent to students } \\ \text { and parents to review scheduling process. }\end{array} \\ \hline \text { January 24 } & \begin{array}{l}\text { 8th Grade Class Scheduling Meeting during school day @ PRHS Auditorium. }\end{array} \\ \hline \text { January 25 } & \text { Grades 9-11 Scheduling Meeting with PRHS Administration and School Counselors. } \\ \hline \begin{array}{l}\text { January 29 - } \\ \text { February 2 }\end{array} & \begin{array}{l}\text { Pine-Richland Middle School (for 8th Grade students) and Pine-Richland High School teachers } \\ \text { share core course recommendations with current students and upload them to Sapphire. }\end{array} \\ \hline \text { February 1 } & \text { Grades 8-11 Parent Scheduling Night Presentation: Choosing Wisely: Right student \& right courses. } \\ \hline \text { February 5-9 } & \begin{array}{l}\text { Counselors review/lock core course recommendations in Sapphire. } \\ \text { PRHS Principal's Advisory Committee and Peer2Peer students visit 8th Grade \& 9th Grade classes } \\ \text { to discuss elective courses. }\end{array} \\ \hline \text { February 12 } & \begin{array}{l}\text { Core academic course recommendations and informational letters distributed to students and } \\ \text { parents to review course recommendations and to choose elective courses. }\end{array} \\ \hline \text { February 16 } & \begin{array}{l}\text { Deadline for all students to return completed and signed core academic course requests and } \\ \text { elective choices within the Community Web Portal. }\end{array} \\ \hline \text { February 21- } & \begin{array}{l}\text { Counselors meet with students on an individual basis to review course requests and input } \\ \text { electives. Discussions about graduation plan and career options occur at this time as well. }\end{array} \\ \hline \text { March 15 } & \begin{array}{l}\text { Verification forms will be distributed via the Community Web Portal. Students and parents are } \\ \text { asked to verify only that the courses showing match their original course request form. No changes } \\ \text { will occur unless a mechanical error has been made. }\end{array} \\ \hline \text { March 21 } & \begin{array}{l}\text { Deadline for all students to return signed verification forms within the Community Web Portal. } \\ \text { Course waiver process opens. Students and parents may complete a course waiver for } \\ \text { non-recommended classes. }\end{array} \\ \hline \text { April- } & \begin{array}{l}\text { All waiver forms must be submitted through the parent portal in Sapphire. }\end{array} \\ \hline \text { Course requests may be modified for the following reasons only: } \\ \text {-- mechanical error (example: requested course was left off the list) } \\ \text {-- schedule a course to meet graduation requirements (example: failed courses and needs to drop } \\ \text { elective/study hall to schedule make-up course) } \\ \text {-- fill study hall (example: replace study hall with elective course without adjusting any other part } \\ \text { of schedule, if seats are available in class) } \\ \text { Student schedules for 2024-2025 will be available through the Community Web Portal in } \\ \text { August, 2024. }\end{array}\right\}$

## Course Withdrawal/ Level Change Timeline for schedule changes.

Situations will occur in which a student needs to drop/add/change a course. Schedule changes are made using a Request for Schedule Change Form Days 2-20 that is emailed out to all students once schedules are released. The ability to make a schedule change depends on course availability, the number of students currently enrolled in the desired class as well as best practice recommendations for student to teacher ratio (which may differ depending on the requested course), and the total number of study halls in a student's schedule. A student may not have more than eight study hall periods per week. A course may not be dropped on the first day of school.

| Day | Course Drop/ Withdrawal | Level Change |
| :---: | :---: | :---: |
| 2-10 | Course dropped is not recorded on the transcript. Students may enroll in a new course, based upon availability. | Changing the level of a course can be made without a withdrawal notation appearing on the students transcript. |
| 11-20 | Course dropped is not recorded on the transcript. Students may not enroll in a new course until the Second Semester. | All students must wait until the end of the current quarter to make a level change request. Requests will not be accepted after the conclusion of the 1st |
| 21+ | A "W" along with the withdrawn passing or withdrawn failing notation (WP or WF) will appear on the transcript but not included in the GPA calculation. No credit is awarded for a dropped course. <br> Students may not enroll in a new course until the Second Semester. | or withdrawn failing notation (WP or WF) will appear on the transcript but not included in the GPA calculation. <br> Requests may not be able to be granted based on the current enrollment of courses into which the student is attempting to transfer. This includes not only actual seat number availability but also best practice recommendations for student numbers in a course. <br> The final quarter and/or semester grade from the original course in which the student has dropped will transfer to the new class. <br> *Students may not level up, this is only completed through the Waiver Process.* |

Before a course withdrawal will be considered after school day \#20, the student must demonstrate attempts to improve his/her grade in a course. Withdrawal from a course will only be considered after day 20 if the following have already occurred:

- Teacher and student conference to discuss areas and opportunities for improvement - AND - student is still not demonstrating improvement following a reasonable amount of time following the conference.
- Student is making attempts to complete all homework, in-class assignments, and attend additional support opportunities.
- School counselor, course teacher, and student's assistant principal discuss the request and approve.
- Parent/guardian approves of the course change request.

For senior students that do not need the requested withdrawal course for graduation credit, a discussion must occur with the student and the student's school counselor prior to withdrawing. Students may not withdraw from a semester class after a nine week marking period nor may they withdraw from a year long course after a semester.

## Placement and Level Changes

Students are recommended for Academic, Honors, College in High School (CHS), and Advanced Placement (AP) courses based on the established criteria that is explained in the Scheduling Process overview section of this Program of Studies. Before any course placement change after school day \#20, such as a Level Change (Ie. Moving from Honors Physics to Academic Physics), a student must demonstrate attempts to improve his/her grade. Level changes down from AP, CHS, and Honors, after school day 20 will only be considered if a student has shown evidence of the bulleted criteria described above. A student may NOT request to level change up to a CHS or AP class once the school year begins. A level change up from an Academic to an Honors course will only be considered within the first 10 days of school and the student will need to complete the waiver form in Sapphire and the approval of their school counselor, Assistant Principal, parent, and the course's department chair and/or the teacher of the course the student is requesting.

## Course Waiver Procedure

A course waiver is a signed document by the student and his/her parent or guardian that indicates the student would like to consider taking a non-recommended course. If the waiver is granted, it will provide a student with a course placement that supersedes their teacher's recommended course for the following school year. An example situation would be that a student is recommended for Academic Chemistry by their teacher but would like to take Honors Chemistry. In this situation and others like it, a student must discuss the desired course with the recommending teacher and complete the Course Waiver form found on the parent portal in Sapphire within the course waiver timeline on the Pine-Richland High School Scheduling Timeline. Students and families that pursue a waiver should understand that a waiver request has significant responsibility and accountability. If a student's waiver request is granted, neither course content nor student performance expectations will be reduced to accommodate students that waive into the course. It is the responsibility of the student to seek additional support, if needed, for any course they take - including courses they waive into. Students who are granted a course waiver must adhere to these guidelines:

- A student cannot waive prerequisite courses to take a course that is more advanced in an academic department's course sequence.
- A student may not waive more than one course level.

Students and parents must understand that if they select a more rigorous course than recommended, scheduling and staffing limitations may prohibit a later level change to another course.

The student's course waiver will be reviewed by a committee that includes the student's Assistant Principal, school counselor, department chair and/or academic teacher of the same content area as the requested course. The committee will review the student's waiver and consider the factors described in the Scheduling Process overview for the student. A final decision will be communicated to the student and family within 45 days of the end of the course waiver window (which is March 29, 2023).

Course waiver requests that are received outside of the course waiver window (March 21-March 29) do not have as likely of a chance of being approved as those that are received during the waiver window. This is due to the complexities of developing the high school's master schedule and the need to have valuable time to review and consider a student's waiver request through a committee approach. If a student has missed the waiver window and would still like to request a course waiver, they must contact their Assistant Principal to obtain the course waiver form.

## Appeal Process

If a student follows the course waiver process and does not gain waiver approval for a desired course, they may appeal the committee's decision. To appeal the committee's decision, a student must contact the Building Principal, Dr. Hernandez, to set up a meeting that includes a parent or guardian and the student's Assistant Principal. At the meeting, the team of administration, student, and parent or guardian, will review the course waiver, committee's thinking and determination, and make a final decision. All decisions that are made by the Building Principal during this meeting will be final.

## Individuals with Disabilities Education Act Notice

All children with disabilities have available to them a free appropriate public education (FAPE) that emphasizes special education and related services designed to meet their unique needs and prepare them for further education, employment and independent living.

This is achieved through the creation of a student's Individual Educational Program (IEP) by the IEP team. The special education staff provides support services for children who have an intellectual disability, vision or hearing impairment, emotional disturbance, autism, specific learning disability, speech and/or language impairment, or other health impairment.

Our goal is to enable each student to participate as fully as possible in the regular education environment and to facilitate the transition from school to the world of work or post-secondary education.

## Program of Studies Interactive Features

## Tips on Reviewing Course Descriptions

- Underlined course titles indicate an opportunity to click on the item for more information about that course or to go back to the main outline of course offerings and course sequence.
- Underlined major subject sections (English \& Language Arts, Math, Science, Social Studies, World Languages, Computer Science, Engineering \& Technology, Project Lead the Way, Physical Education, Food \& Consumer Sciences, Experiential Learning Activities, Vocational Education Opportunities \& Air Force ROTC) indicates an opportunity to click to go back to the table of contents.
- The thumbnail photographs located within a course block may be clicked to view a video about the course.


## Reviewing Courses



## English \& Language Arts

| Credit | Core Course Title | Course \# | Open to Grades |
| :---: | :---: | :---: | :---: |
| 1.0 | English 9-Genre Analysis | 101111 | 9 |
| 1.0 | Honors English 9-Advanced Genre Analysis \& Intro to Literary Criticism | 101211 | 9 |
| 1.0 | English 10-Language/Literary Analysis/Communication | 101121 | 10 |
| 1.0 | Honors English 10 - Advanced Language/Advanced Literary Analysis/Communication | 101221 | 10 |
| 1.0 | English 11 - American Literature Survey/Analysis | 101131 | 11 |
| 1.0 | Honors English 11 - Advanced American Literature Survey/Analysis | 101231 | 11 |
| 1.0 | AP English 11-Language E Composition | 101310 | 11 |
| 1.0 | English 12 - British Literature Survey/Analysis | 101141 | 12 |
| 1.0 | Honors English 12 - Advanced British Literature Survey/Analysis | 101241 | 12 |
| 1.0 | AP English 12 - Literature \& Composition | 101320 | 12 |
|  | Language Arts |  |  |


| 2.0 | Grade 9 | 101102 | 9 |
| :---: | :---: | :---: | :---: |
| 2.0 | Grade 10 | 101104 | 10 |
| 1.0 | Grade 11 | 101106 | 11 |
| 1.0 | Grade 12 | 101108 | 12 |
| 1.0 | Applied English | $\begin{aligned} & 601115 \\ & 601125 \\ & 601135 \\ & 601145 \end{aligned}$ | $\begin{gathered} 9 \\ 10 \\ 11 \\ 12 \end{gathered}$ |
| Credit | Elective Course Title | Course \# | Open to Grades |
| 1.0 | College in High School Argument | 101330 | 11, 12 |
|  | Theater Arts |  |  |
| 1.0 | Principles of Acting | 101410 | $9,10,11,12$ |
| 1.0 | Principles of Directing | 101420 | 10, 11, 12 |
| 1.0 | Advanced Acting \& Production | 101430 | 11, 12 |
| 1.0 | Creative Writing | 101525 | 11, 12 |
|  | Journalism |  |  |
| 1.0 | 【ournalism 1 | 101530 | 9, 10, 11, 12 |
| 1.0 | Lournalism 2 | 101540 | 10, 11, 12 |
| 0.5 | Critical Reading Strategies | 101631 | 9, 10, 11, 12 |
|  | Yearbook |  |  |
| 1.0 | Level 1 | 107231 | 9, 10, 11 |
| 1.0 | Level 2 | 107241 | 10, 11, 12 |
| 1.0 | Level 3 | 107251 | 11, 12 |
| 1.0 | Level 4 | 107261 | 12 |

## Typical Sequencing of Core Academic Courses

Below are typical sequences that students progress through during their high school careers. However, students have the ability to move between these pathways by meeting the prerequisites for future courses.

English Pathways


## English Department Summer Reading Assignment Rationale and Requirements

Based on the course/grade level, students may be required to complete a summer reading assignment prior to the school year at the discretion of the grade-level/course team. It is important to foster essential reading and writing skills over the summer to help students avoid summer reading loss. Research supports the use of summer reading programs to help students hone their reading skills.

## Summer Reading Program Goals:

- To help students maintain reading and writing skills over the summer and avoid summer reading loss
- To prepare students for the next level of English curriculum and for the college experience
- To encourage students to become lifelong learners

Depending on the course/grade level, students could have up to three books to read and may also need to complete an objective assessment (multiple choice test) and/or a written assessment based on the reading(s) at the start of the school year (date determined by individual teacher). The assessment scores may be entered as a quarter one assignment in the grade book.


| Course Title: | English 9 - Genre Analysis | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101111 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of English 8 | Open To Grades: | 9 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services |  |
|  | Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing |  |  |
| Marketing |  |  |  |
| Science, Technology, Engineering and |  |  |  |
| Mathematics |  |  |  |
| Transportation, Distribution and Logistics |  |  |  |

Description: In this course, emphasis is placed on various genres of literature including the short story, Shakespearean drama, poetry and the novel. The writing emphasis will include literary analysis, timed writings and a research project. These units will be accompanied by appropriate SAT vocabulary including literary terms. The student will review grammar and basic usage. Grammar will include parts of speech, punctuation, sentence structure and style. All students completing a ninth grade English course are required to take the end of course Keystone Literature Exam as mandated by the Pennsylvania Department of Education. The Keystone Exam score is not calculated in the student's final course grade.

| Course Title: | Honors English 9-Advanced Genre Analysis <br> and Intro to Literary Criticism | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101211 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of English 8 with a 90\% or higher <br> and teacher recommendation or completion of <br> English 8 Compacted/Extended with 80\% or <br> higher and teacher recommendation | Open To Grades: | 9 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: Critical arguments regarding various genres of literature including poetry, Shakespearean drama, the novel and the short story are emphasized. The writing emphasis will include literary analysis, timed writings, reflection/response, descriptive paragraphs, syntactically parallel paragraphs and essays and a research project. Literary analysis involves the investigation of a piece of literature through the author's use of literary elements such as plot, character, setting and theme. These units will be accompanied by SAT vocabulary including literary terms. The student will be expected to correctly use and evaluate grammar, punctuation, sentence structure and style. All students completing a ninth grade English course are required to take the end of course Keystone Literature Exam as mandated by the Pennsylvania Department of Education. The Keystone Exam score is not calculated in the student's final course grade.

| Course Title: | English 10-Language/Literary <br> Analysis/Communication | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101121 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of an English 9 course | Open To Grades: | 10 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: In this course emphasis is placed on an analysis of spoken and written language as well as literary analysis and criticism of a variety of literature. Elements of literature evaluated include the novel, short story, poetry and Shakespearean drama. Evidence-based research and inquiry skills will be evaluated. Writing emphasis will include informative, persuasive, descriptive, narrative and resume writing as well as literary analysis/criticism, timed writings, research essays and speeches. Appropriate SAT vocabulary, including literary terms, will accompany units. Grammar and its basic usage will be reviewed.

| Course Title: | Honors English 10-Advanced <br> Language/Literary Analysis/Communication | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101221 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of English 9 with a 90\% or higher <br> and teacher recommendation or completion of <br> Honors 9 with an 80\% or higher and teacher <br> recommendation | Open To Grades: | 10 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: In this course emphasis is placed on an analysis of spoken and written language with special emphasis on rhetorical devices. Special focus on literary analysis and literary criticism will be included. Genres of literature to be evaluated include the novel, short story, poetry and Shakespearean drama. Evidence-based research and inquiry skills will be evaluated. Writing emphasis will include informative, persuasive, descriptive and resume writing as well as literary analysis, syntactically parallel paragraphs, timed writings and research essays. Appropriate SAT vocabulary, including literary terms, will accompany units. Grammar and its basic usage will be analyzed.

| Course Title: | English 11-American Literature <br> Survey/Analysis | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101131 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of an English 10 course | Open To Grades: | 11 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: This course is a study of American Literature by literary ages and genres. The focus is on textual understanding, progression of thought through the ages, understanding central ideas and determining what is explicitly stated, what is implied and what is left uncertain. Course work requires students to think critically and support their ideas with specific evidence using a variety of modalities including projects and Socratic discussions.

| Course Title: | Honors English 11-Advanced American <br> Literature Survey/Analysis | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101231 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of English 10 with a 90\% or <br> higher and teacher recommendation or <br> completion of Honors English 10 course with <br> an 80\% or higher and teacher recommendation | Open To Grades: | 11 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: This course of American literature is organized by literary periods and is designed for the student who has mastered basic comprehension, analysis and writing skills. Critical thinking and analysis are emphasized through a study of historical and societal influence on both the author and the texts produced across multiple genres. Analytical, evidence-based writing skills are more fully developed through multiple short essay responses and a required research paper.

| Course Title: |  <br> Composition | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101310 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Honors English 10 with an $80 \%$ <br> or higher and teacher recommendation | Open To Grades: | 11 |
| Requirement(s): | Summer work is assigned for this course. Students are required to complete the designated <br> Advanced Placement exam at their own expense (2020-2021 cost \$95). |  |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: The course is designed as a study of language and composition. The focus is on rhetorical strategies used within literature and the author's purpose. There is a heavy emphasis on grammar and syntactic structure. Essays follow genre type and are critical in nature, with emphasis placed on depth, development and analytical techniques. American literature study accompanies the emphasis of language and composition.

| Course Title: | English 12-British Literature Survey and <br> Analysis | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101141 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of English 11 course | Open To Grades: | 12 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: This is a comprehensive course that revolves around the study of literary ages and the evolution of the English language, as well as social and cultural impacts on the literature. Reading, writing, speaking and listening are reinforced through close study of the literature. Evaluation of student work may include, but is not limited to, essays, projects, home work and participation. Course work will require students to analyze and evaluate information through course relevant research and related writing assignments.

| Course Title: | Honors English 12 - Advanced British Literature <br> Survey and Analysis | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101241 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of English 11 with a 90\% or higher <br> or completion of Honors English 11 with an <br> $80 \%$ or higher and teacher recommendation | Open To Grades: | 12 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: This course is designed to trace the development of British Literature from the Anglo-Saxon Age to the 20th century and to stress the interplay of history and social conditions upon that literature. Readings include selected prose, poetry and dramas with in-depth readings from Beowulf, Canterbury Tales and selected Shakespearean plays. Writings based upon the literature are of a critical or analytic nature. Research papers and/or research projects are required. Class discussions stress genre recognition, summarization, analysis and critical thinking. Oral presentations, formal and informal, are also required. Course work will require students to analyze and evaluate information through course relevant research and related writing assignments.

| Course Title: |  <br> Composition | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101320 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of AP English 11 with an $80 \%$ or <br> higher and teacher recommendation or <br> completion of $\underline{\text { Honors English 11 with a 90\% or }}$ <br> higher and teacher recommendation | Open To Grades: | 12 |
| Requirement(s): | Summer work is assigned for this course. Students are required to complete the designated <br> Advanced Placement exam at their own expense (2020-2021 cost \$95). |  |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: This course is reserved for the exceptionally able student of literature and composition. The structure of the course is designed to duplicate that of a freshman college level literature course. British literature is studied by literary periods and genres. Critical thinking and analysis are emphasized as well as historical, political and societal influences on the authors and their writings. Essays and papers are critical in nature, with emphasis placed on depth, development and analytical techniques. In addition to British authors, select authors from world literature are used to reinforce thematic and ideological perspectives. Course work will require students to analyze and evaluate information through course relevant research and related writing assignments.

| Course Title: | Language Arts | Credit Value: | 2.0 Grades 9, 10 <br> 1.0 Grades 11, 12 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101102 Grade 9 <br> 101104 Grade 10 <br> 101106 Grade 11 <br> 101108 Grade 12 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Teacher recommendation | Open To Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: Language Arts is a full-year, one or two period course that emphasizes the development of reading and writing skills through the use of a combined reading and English curriculum. Emphasis will be placed on comprehending and analyzing a variety of fiction and nonfiction genres as well as composing organized and well-developed essays. All students completing Language Arts Grade 10 may be required to take the Keystone Literature Exam as mandated by the Pennsylvania Department of Education. The Keystone Exam score is not calculated in the student's final course grade.

| Course Title: | Applied English | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | $601115(9)$ | Term(s) Offered: | Full Year |
|  | $601125(10)$ |  |  |
|  | $601135(11)$ |  |  |
| $601145(12$ and 12+) |  |  |  |
| Prerequisite(s): | Placement in Life Skills Support (LSS) or Autistic Support (AS) classroom and previously <br> qualified for Pennsylvania Alternative Standards Assessment (PASA) |  |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security |  |

Description: Applied English is a course for students whose IEP reflects the use of alternate standards. A functional curriculum that is aligned with the alternate standards is utilized in this course. The class is designed for students enrolled in the Life Skills Support (LSS) and Autistic Support (AS) programs.

| Course Title: | College in High School Argument | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101330 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of the student's most recent <br> English class with a 90\% or higher OR <br> completion of the student's most recent English <br> class with an $80 \%$ or higher and teacher <br> recommendation | Open To Grades: | 11,12 |
| Requirement(s): | Enrollment in the College in High School Program at the University of Pittsburgh (2020-2021 <br> cost $\$ 300 ; \$ 75$ per credit) |  |  |
| Career Cluster(s): | Education and Training <br> Government and Public Administration | Law, Public Safety, Corrections and Security <br> Marketing |  |

Description: This course, an English elective, examines the fundamentals of argument and promotes proficiency in the application of elementary debating techniques. It is taught as part of the University of Pittsburgh's College in High School program. Successful completion of the program will result in guaranteed college credit at the University of Pittsburgh and other universities and colleges that accept the course. CHS Argument explores the foundations of argument construction, support and refutation. It also develops argument skills through in-class activities. The course includes an analysis of arguments in the public forum. There is a written as well as oral component to this course.

| Course Title: | Principles of Acting | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 101410 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open To Grades: | $9,10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications <br> Education and Training | Human Services |  |

Description: This course, designed for both beginners or for those with training, introduces the process of acting, beginning with an investigation of the mechanicals and a study of self-awareness. The focus is on the acting process beginning with a more mechanical traditional approach and leading up to a study of Method acting. Students navigate through exercises via a variety of activities including improvisation, creative movement, skits, monologues and scene work. Students learn to work together, self-reflect and build confidence. Students are required to attend two productions, perform on stage and participate in the Shakespeare competition. These first year students are introduced to many aspects of stage production: acting, directing, writing, staging, propping, costuming and setting. This first year program focuses primarily on acting. Students learn the basic acting theories ranging from the traditional approach to Method acting and apply those theories to their own monologue presentations. They learn to analyze and synthesize the physical, vocal, emotional and intellectual aspects of a character. They acquire abilities and confidence to perform with conviction before an audience. In addition to acting skills and techniques, students are introduced to improvisational movement and theater terminology.

| Course Title: | Principles of <br> Directing | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 101420 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Finance <br> Hospitality and Tourism <br> Marketing | $10,11,12$ |
| Career Cluster(s): | Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training | Brades: |  |

Description: This course continues to develop acting skills and techniques while investigating the art of directing. Students in this course are introduced to the basic principles of directing. They learn how to analyze and interpret a script from the director's point of view. Students are introduced to the creative power of concept directing, auditioning and casting, creating prompt books and staging a one-act production.

| Course Title: | Advanced Acting \& Production | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101430 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of both Principles of Acting and <br> Principles of Directing with 80\% or higher, or <br> special permission | Open To Grades: | 11,12 |
| Career Cluster(s): | Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance | Government and Public Administration <br> Hospitality and Tourism <br> Human Services <br> Law, Public Safety, Corrections and Security <br> Marketing |  |

Description: This course is designed for students with a serious interest in advanced acting. Students consider human behavior and observation through the use of Stanislavski's Method. Daily activities such as situational, character and spontaneous improvisation are coupled with classic drama scenes to enhance their craft. After midterms, students begin the process of production in full. Students audition, prepare a character journal, actively participate in the rehearsal process and production meetings and perform for the public. Students interested in technical theater and directing may be considered for assistant positions. Student attendance at professional productions of plays is a mandatory course requirement. Students may repeat this class once for credit.

| Course Title: | Creative Writing | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101525 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open To Grades: | 11,12 |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications <br> Education and Training | Hospitality and Tourism <br> Human Services |  |

Description: Creative Writing welcomes students who wish to hone their writing artistry, regardless of current skill level, in a friendly academic setting. Students are required to write in the main forms of creative writing produced today: poetry, creative-nonfiction, short story and screenplay writing. Students also participate in writing workshops where student work is read and analyzed by peers. Final projects consist of a writing portfolio of improved work, a letter to future students and a teacher-student conference.

| Course Title: | Lournalism I | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 101530 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of 8th grade English with an $80 \%$ <br> or higher | Open To Grades: | $9,10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Government and Public Administration | Hospitality and Tourism <br> Human Services <br> Law, Public Safety, Corrections and Security <br> Marketing |  |

Description: This course considers the principles of journalistic writing through readings and writings from a wide variety of newspapers including local papers, exchange school papers and monthly publications. Units of study include the history of American journalism, rights and responsibilities of journalists, the nature of news, techniques of newspaper writing, mechanics of newspaper production, kinds of school publications and journalism in mass communication. Students define, identify, analyze and write news articles, sports stories, editorials, feature stories and interviews. Some of their writings are selected for the RAMPAGE and all others are entered in student's portfolio. The contributions of headlines, makeup and photography to a newspaper are studied. Editorial skills are developed through editing activities, copy reading and proofreading.

| Course Title: | Journalism II | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101540 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Journalism 1 | Open To Grades: | $10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Government and Public Administration | Hospitality and Tourism <br> Human Services <br> Law, Public Safety, Corrections and Security <br> Marketing |  |

Description: This course is designed for students who are considering a journalism career and wish to work on the high school newspaper. Emphasis is given to the nature of newsworthy events, newspaper structure, interviewing techniques and feature writing for newspapers. Students design the layout for the high school newspaper, the RAMPAGE.

| Course Title: | Critical Reading Strategies | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 101631 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: This course is designed for students of all grades and academic levels who would like to improve their comprehension and analysis skills with nonfiction and fiction texts. There is an emphasis on nonfiction reading skills and study strategies that students will implement into their content areas. They will also learn time management and efficiency strategies, organization strategies, note-taking strategies and test-taking skills. Students will also learn a variety of comprehension and analysis strategies for nonfiction and fiction text, including context clues, main idea and details, text organizational patterns, inference, author's purpose, tone and point of view. This course is perfect for students who wish to improve upon their critical reading skills and study strategies.

| Course Title: | $\underline{\text { Yearbook }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | Level 1 107231 <br> $\underline{\text { Level 2 107241 }}$ <br> $\underline{\text { Level 3 107251 }}$ <br> Level 4 107261 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Level 1 by Application <br> Level 2 Completion of Yearbook 1 <br> Level 3 Completion of Yearbook 2 <br> Level 4 Completion of Yearbook 3 | Open to Grades: | $9,10,11$ |
| Career Cluster(s): | Ars, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Government and Public Administration <br> Hospitality and Tourism | Human Services <br> Law, Public Safety, Corrections and Security <br> Marketing <br> Transportation, Distribution and Logistics |  |

Level 1 Description: Students in Yearbook I create the Pine-Richland High School Rambler Yearbook. The book operates on a strict publishing deadline schedule to ensure the Yearbook is distributed each May. Areas of focus include interview and reporting skills, developing desktop publishing skills, layout and design techniques, digital photography and journalistic writing. Yearbook is also an activity, which requires students to dedicate after school time to meet our six publisher set deadlines. Students completing this course may include their work in a high school portfolio and college applications.

Level 2 Description: Yearbook 2 continues the Yearbook I experience by developing advanced layout and design concepts'. Students further develop caption and copy writing skills and digitally edit photos in Photoshop. Students create and design more advanced layouts for yearbook pages and mentor incoming Yearbook I students. Editorial positions are available for students in this course.

Level 3 Description: Yearbook 3 further extends all concepts developed in Yearbook 1 and 2. Students in this-course serve as leaders to develop the book's theme and key design elements. They also edit pages, design templates and assist fellow staff in all production matters. In addition, Yearbook 3 students have greater command over the entire book creation process including marketing, ad sales, public relations, financial management and proof corrections. Editorial positions are available for students in this course.

Level 4 Description: Yearbook 4 further extends all concepts developed in Yearbook 1, 2 and 3. Students in this course serve as leaders to develop the book's theme and key design elements. They also edit pages, design templates and assist fellow staff in all production matters. In addition, Yearbook 4 students have greater command over the entire book creation process including marketing, sales, public relations, financial management and proof corrections. Editorial positions are available for students in this course.

Mathematics

| Credit | Course Title | Course \# | Open to Grades |
| :---: | :---: | :---: | :---: |
| 1.0 | Concepts of Mathematics | 102113 | 9, 10, 11, 12 |
| 1.0 | Algebra 1 | 102130 | 9 |
| 1.0 | Algebra 1 with Lab | 102131 | 9 |
| 1.0 | Geometry | 102210 | 9,10 |
| 1.0 | Geometry with Lab | 102211 | 9,10 |
| 1.0 | Honors Geometry | 102220 | 9, 10 |
| 1.0 | Algebra 2 | 102310 | 9, 10, 11, 12 |
| 1.0 | Algebra 2 with Lab | 102311 | 10, 11, 12 |
| 1.0 | Honors Algebra 2 | 102320 | 9, 10, 11 |
| 1.0 | Pre-Calculus | 102413 | 10, 11, 12 |
| 1.0 | Honors Pre-Calculus | 102422 | 10, 11, 12 |
| 1.0 | Business Calculus | 102505 | 11, 12 |
| 1.0 | Trigonometry \& Analytical Geometry | 102412 | 11, 12 |
| 1.0 | College in High School Business Calculus | 102510 | 11, 12 |
| 1.0 | AP Calculus AB | 102520 | 11, 12 |
| 1.0 | AP Calculus BC | 102530 | 11, 12 |
| 1.0 | Statistics | 102600 | 11, 12 |
| 1.0 | AP Statistics | 102610 | 11, 12 |
| 1.0 | Applied Mathematics | $\begin{aligned} & 602115 \\ & 602125 \\ & 602135 \\ & 602145 \end{aligned}$ | $\begin{gathered} 9 \\ 10 \\ 11 \\ 12 \text { and } 12+ \end{gathered}$ |



Mathematics has infinite beauty that allows students to grow and pursue their individual goals through the integration of fundamental skills, abstract concepts, reasoning, and real-world applications.

## Typical Sequencing of Core Academic Courses

Below are typical sequences that students progress through during their high school careers. However, students have the ability to move between these pathways by meeting the prerequisites for future courses.

Math Pathways

| Freshman | Sophomore | Junior | Senior |
| :---: | :---: | :---: | :---: |
| Course | Course | Course | Course |
| $\frac{\text { Honors Algebra }}{\underline{2}}$ | Honors Pre-Calculus | $\frac{\text { AP Calculus AB }}{\text { or }}$AP Calculus BC <br> or <br> AP Statistics | $\frac{\text { AP Calculus AB }}{\text { or }}$AP Calculus BC <br> or <br> AP Statistics |
| Honors <br> Geometry | Honors Algebra 2 | Honors Pre-Calculus | College in High School <br> Business Calculus <br> or <br> AP Calculus AB <br> or <br> AP Calculus BC <br> or <br> AP Statistics |
| Geometry | Algebra 2 | $\frac{\text { Pre-Calculus }}{\text { or }}$ Trigonometry \& Analytical $\frac{\text { Geometry }}{\text { or }}$ Statistics | College in High School <br> Business Calculus <br> or <br> Business Calculus <br> or <br> Statistics |
| Algebra 1 | Geometry | Algebra 2 | $\frac{\text { Pre-Calculus }}{\text { or }}$ <br> Trigonometry \& Analytical |
| $\frac{\text { Algebra } 1 \text { with }}{\underline{\text { Lab }}}$ | Geometry with Lab | Algebra 2 with Lab | $\frac{\text { Geometry }}{\text { or }}$ $\underline{\text { Statistics }}$ |


| Course Title: | Concepts of Mathematics | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 102113 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | $9,10,11$, |
| $\underline{\text { Career }} \mathbf{\text { Cluster(s): }}$ | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: This course is designed for students who need further development of foundational skills before enrolling in Algebra 1 and taking the Keystone Algebra 1 exam. We spend the first semester largely working with number skills and number sense, working on explaining, reasoning, estimation and making sense of word problems. Much of the time is spent working with fractions, including rates of change, proportional reasoning and percent. At the end of the semester we work on measurement skills that support the programs at Beattie Tech in which many of our students are enrolled. The concepts in the third quarter are focused on foundational algebraic skills such as function vocabulary, translating between graphing, equations, data tables and words and solving equations. In the fourth quarter we focus on statistics: summarizing and interpreting data and creating data displays. Overlaying all of our work are applications to real world problems and supporting reading skills. Students receive specific support based on their unique needs.

| Course Title: | $\underline{\text { Algebra 1 }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 102130 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Fundamentals of Algebra and <br> teacher recommendation | Open to Grades: | $9,10,11$ |
| $\underline{\text { Career }} \boldsymbol{\text { Cluster(s): }}$ | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: The study of algebra expands what students know about applying operations to numbers to thinking in terms of patterns that are valid in many situations. Specifically, we replace unknown values with variables which allows us to write equations. Algebra 1 students spend much of the year modeling real life problems that have constant rates of change (linear functions), but they also model situations involving two rates of change (quadratic functions) and changing rates (exponential growth and decay functions). In order to do this, students explore the properties of real numbers, absolute value, proportional reasoning, systems of linear equations and inequalities and a brief introduction to nonlinear functions. The emphasis on the relationship between data, equations, graphs and words provides opportunities for students to make connections and strengthen their problem-solving strategies. All students completing Algebra 1 are required to take the end of course Keystone Exam as mandated by School Board Policy. The Keystone Exam score is not used to calculate the student's final course grade.

| Course Title: | Algebra 1 with Lab | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 102131 | Term(s) Offered: | Full <br> Year |
| Prerequisite(s): | Completion of Fundamentals of Algebra or <br> completion of Concepts of Mathematics and <br> teacher recommendation | Open to Grades: | $9,10,11$ |
| Note(s): | Class meets 5 days per week and then meets on either A or B days for additional class time <br> each week. |  |  |
| Career | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: The study of algebra expands what students know about applying operations to numbers to thinking in terms of patterns that are valid in many situations. Specifically, we replace unknown values with variables which allows us to write equations. Algebra 1 students spend much of the year modeling real life problems that have constant rates of change (linear functions), but they also model situations involving two rates of change (quadratic functions) and changing rates (exponential growth and decay functions). In order to do this, students explore the properties of real numbers, absolute value, proportional reasoning, systems of linear equations and inequalities and a brief introduction to nonlinear functions. The emphasis on the relationship between data, equations, graphs and words provides opportunities for students to make connections and strengthen their problem-solving strategies. Lab students will also spend time practicing reading and making sense of word problems as well as repeatedly practicing basic number skills and developing more number sense. All students completing Algebra 1 are required to take the end of course Keystone Exam as mandated by School Board Policy. The Keystone Exam score is not used to calculate the student's final course grade.

| Course Title: | Geometry | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 102210 | Term(s) Offered: | Full <br> Year |
| Prerequisite(s): | Completion of Algebra 1 with 70\% or Higher | Open to Grades: | 9,10 |
| Career | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: Geometry topics are studied using both an inductive and a deductive approach. Students discover relationships through experimentation and then verify their discoveries by deductive proofs. Real world applications and algebraic connections are emphasized. Topics include: definitions, constructions, parallel line properties, triangle and polygon properties, circles, transformations, tessellations, symmetry, area, surface area, volume, the Pythagorean Theorem, similarity, basic trigonometry and basic logic.

| Course Title: | $\underline{\text { Geometry with Lab }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 102211 | Term(s) Offered: | Full <br> Year |
| Prerequisite(s): | Completion of Algebra 1 or teacher <br> recommendation | Open to Grades: | 9,10 |
| Note(s): | Class meets 5 days per week and then meets on either A or B days for additional class time <br> each week. |  |  |
| $\underline{\text { Clureer }}$ | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arss, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing |  |
| Science, Technology, Engineering and |  |  |  |
| Mathematics |  |  |  |
| Transportation, Distribution and Logistics |  |  |  |

Description: Geometry topics are studied using both an inductive and a deductive approach. Students discover relationships through experimentation and then verify their discoveries by deductive proofs. Real world applications and algebraic connections are emphasized. Topics include: definitions, constructions, parallel line properties, triangle and polygon properties, circles, transformations, tessellations, symmetry, area, surface area, volume, the Pythagorean Theorem, similarity, basic trigonometry and basic logic. Students enrolled in the lab section experience a lower student-to-teacher ratio and use the extra time to extend classroom concepts, move at a flexible pace, clarify directions on homework and reinforce strategies and procedures.

| Course Title: | Honors Geometry | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 102220 | Term(s) <br> Offered: | Full Year |
| Prerequisite(s): | Completion of Algebra 1 with a 90\% or higher or teacher <br> recommendation | Open to <br> Grades: | 9,10 |
| Career | Agriculture, Food and Natural Resources <br> Cluster(s): | Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |

Description: This is a fast-paced high school geometry course that integrates synthetic, coordinate and transformational geometry. This course extends the students' knowledge of algebra, develops their understanding of proofs and provides opportunities for students to apply their knowledge in real-world situations. Reading mathematics and writing logical arguments are emphasized. Topics include: definitions, constructions, parallel line properties, triangle and polygon properties, circles, transformations, tessellations, symmetry, area, surface area, volume, the Pythagorean Theorem, similarity, basic trigonometry and basic logic.

| Course Title: | $\underline{\text { Algebra 2 }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 102310 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Algebra 1 and Geometry with a <br> $70 \%$ or higher or concurrent enrollment in <br> Geometry | Open to Grades: | $9,10,11,12$ |
| $\underline{\text { Career }} \boldsymbol{\text { Cluster(s): }}$ | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: Students enrolling in this course are expected to apply prior algebra knowledge in order to enhance current algebra practices. Algebra 2 is the study of functions: polynomial (linear, quadratic, cubic, quartic), piece-wise, exponential, logarithmic, rational, radical and absolute value. Functions are explored through multiple representations and practical application problems show connections between course content and real world application. Function operations and transformations provide a common thread to link the units of study.

| Course Title: | Algebra 2 with Lab | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 102311 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Algebra 1 and Geometry or <br> teacher recommendation | Open to Grades: | $10,11,12$ |
| Note(s): | Class meets 5 days per week and then meets on either A or B days for additional class time <br> each week. | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Human Services <br> Information Technology <br> Cluster(s): |
| Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |  |  |

Description: Students enrolling in this course are expected to apply prior algebra knowledge in order to enhance current algebra practices. Algebra 2 is the study of functions: polynomial (linear, quadratic, cubic, quartic), piece-wise, exponential, logarithmic, radical, rational and absolute value. Functions are explored through multiple representations and practical application problems show connections between course content and real world application. Function operations and transformations provide a common thread to link the units of study. Students enrolled in the lab section experience a lower student-to-teacher ratio and use the extra time to extend classroom concepts, move at a flexible pace, clarify directions on homework and reinforce strategies and procedures.

| Course Title: | Honors Algebra 2 | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 102320 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Algebra 1 with a 90\% or higher or <br> teacher recommendation and one of the <br> following: <br> Completion of Honors Geometry with an 80\% or <br> higher <br> -or - <br> Completion of Geometry with a 90\% or higher <br> and teacher recommendation | Open to Grades: | $9,10,11$ |
| Career |  |  |  |
| Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: This course is a rigorous continuation of Algebra 1 and is designed for students who have demonstrated an advanced level of achievement in mathematics. Students enrolling in this course are expected to apply prior algebra knowledge in order to enhance current algebra practices. Algebra 2 is the study of functions: polynomial (linear, quadratic, cubic, etc.), piece-wise, exponential, logarithmic, radical, rational and absolute value. Additional units include matrices and series/sequences. Functions are explored through multiple representations and challenging applications. Function operations and transformations provide a common thread to link the units of study. The curriculum is distinguished by a difference in pace, rigor and the quality of work, not merely the quantity. Conceptual understanding of topics is emphasized.

| Course Title: | Pre-Calculus | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 102413 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of $\underline{\text { Algebra 2 with an } 80 \% \text { or higher }}$ <br> or completion of Honors Algebra 2 with a 70\% or <br> higher or teacher recommendation. Completion <br> of Geometry presumed. | Open to Grades: | $10,11,12$ |
| Career <br> Cluster(s): | Architecture and Construction <br> Business Management and Administration <br> Finance | Information Technology <br> Science, Technology, Engineering and <br> Mathematics |  |

Description: Pre-Calculus is a course with college-level algebra and trigonometry that is designed to prepare students for the study of calculus. Students enrolled in this course generally intend on taking a calculus course in high school (Business Calculus, College in High School Business Calculus). The year begins with a study of trigonometry, including right triangles, graphing periodic functions, modeling periodic phenomena, proving identities and solving trigonometric equations. The analysis of conic sections from a coordinate point of view is also studied. The year concludes with a study of functions and their applications designed to increase students' knowledge of algebra.

| Course Title: | $\underline{\text { Honors Pre-Calculus }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 102422 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Algebra 2 with a 90\% or higher or <br> completion of Honors Algebra 2 with an 80\% or <br> higher or teacher recommendation. Completion <br> of Geometry presumed. | Open to Grades: | $10,11,12$ |
| Career <br> Cluster(s): | Architecture and Construction <br> Business Management and Administration <br> Finance | Information Technology <br> Science, Technology, Engineering and <br> Mathematics |  |

Description: Honors Pre-Calculus includes the study of Trigonometry including right triangle trigonometry, graphing periodic functions, modeling periodic phenomena, proving identities and solving trigonometric equations. The course continues with regression, analytical geometry, modeling with various functions and proof. This rigorous course is designed for the advanced mathematics student intent on enrolling in an AP level mathematics course the following year (either AP Calculus AB, AP Calculus BC or AP Statistics), The curriculum for this honors course is distinguished by a difference in rigor and quality of work, compacting and extending concepts studied in the Pre-Calculus course.

| Course Title: | Trigonometry \& Analytical Geometry | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 102412 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Geometry and Algebra 2 | Open to Grades: | 11,12 |
| Career | Architecture and Construction <br> Business Management and Administration <br> Fluster(s): | Information Technology <br> Science, Technology, Engineering and <br> Mathematics |  |

Description: Trigonometry is a branch of mathematics that studies relationships between the sides and angles of triangles. This level of trigonometry is for students who are not intending to take a calculus course in high school. The year begins with a study of trigonometry, including both right and non-right triangles, applying the trigonometric ratios, graphing the trigonometric functions and describing the effects transformations have on these functions. Students will also solve trigonometric equations, algebraically and graphically, using inverse functions. Describing the properties of simple harmonic motion and modeling periodic phenomena are also studied. Students prove trigonometric identities. The year concludes with analyzing conic sections and other geometric curves from a coordinate point of view. Algebra concepts will be reviewed as needed.

| Course Title: | Business Calculus | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 102505 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of <br> (honors Pre-Calculus with a 70\% <br> or higher or completion of Pre-Calculus with an <br>  <br> Analytical Geometry with 90\% or higher or <br> teacher recommendation. | Open to Grades: | 11,12 |
| Career | Finance <br> Information Technology | Science, Technology, Engineering and <br> Mathematics |  |
| Cluster(s): |  |  |  |

Description: Calculus is the study of how things change. This calculus course is designed for the student who plans to pursue a non-science related field in college. Business Calculus begins with a brief review of precalculus concepts then moves to the study of limits, derivatives and integrals. These concepts will be applied to polynomial, power, rational, exponential and logarithmic functions. This course also includes an introduction to calculus of several variables. This course and the CHS course cover the same content. This course differs from AP Calculus classes by placing less emphasis on trigonometric functions and proof of theorems; more emphasis is placed on the use and application of calculus concepts.

| Course Title: | College in High School Business Calculus | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 102510 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Honors Pre-Calculus with a <br> $70 \%$ or higher or completion of Pre-Calculus <br> with an 80\% or higher or teacher <br> recommendation AND a passing score on the <br> ALEKS placement test (\$25 fee in 2020-2021) | Open to Grades: | 11,12 |
| Requirement(s): | Enrollment in the College in High School Program at the University of Pittsburgh (2020-2021 <br> cost \$300; \$75 per credit) | Science, Technology, Engineering and <br> Career Cluster(s): | Finance <br> Information Technology |

Description: Calculus is the study of how things change. This calculus course is designed for the student who plans to pursue a non-science related field in college. Through successful completion of the coursework and CHS exams, a student may earn four college credits.Placement into this course is contingent upon earning a passing score (as determined by the University of Pittsburgh's College in High School Program) on the ALEKS placement test. Business Calculus begins with a brief review of precalculus concepts then moves to the study of limits, derivatives and integrals. These concepts will be applied to polynomial, power, exponential and logarithmic functions. In addition, this course includes an introduction to calculus of several variables. This course differs from the AP Calculus classes by placing less emphasis on trigonometric functions and the proof of theorems; more emphasis is placed on the use and application of calculus concepts.

| Course Title: | $\underline{\text { Advanced Placement Calculus AB }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 102520 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Honors Pre-Calculus with $80 \%$ <br> or higher or Pre-Calculus with $90 \%$ or higher <br> or teacher recommendation. | Open to Grades: | 11,12 |
| Requirement(s): | Students are required to take the designated Advanced Placement exam at their own expense <br> $(2020-2021$ cost \$95). | Science, Technology, Engineering and <br> Mathematics |  |
| Career Cluster(s): | Finance <br> Information Technology |  |  |

Description: Calculus is the study of how things change. This course looks at ways to measure tiny (infinitesimal) changes and use that information to describe large changes in relationships between variables. Calculus is structured around three big ideas: limits, derivatives and integrals. AP Calculus students apply their knowledge of calculus to polynomial, power, trigonometric, exponential and logarithmic functions. This course emphasizes a multi-representational approach with concepts, results and problems being expressed and connected graphically, numerically, analytically and verbally. AP Calculus is equivalent to 1.5 semesters of college calculus. It is expected that students who enroll have a strong mastery of material in algebra, geometry, trigonometry, analytical geometry and elementary functions (equivalent to four years of high school mathematics) and can handle the rigor of a college-level mathematics course with the intention of placing out of a comparable college calculus course.

| Course Title: | Advanced Placement Calculus BC | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 102530 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Honors Pre-Calculus with an <br> 90\% or higher or teacher recommendation | Open to Grades: | 11,12 |
| Requirement(s): | Students are required to take the designated Advanced Placement exam at their own <br> expense (2020-2021 cost \$95). |  |  |
| Notes: | Students who have completed AP Calculus AB are only eligible for 0.5 credit in AP Calculus <br> BC due to the two-thirds overlap of the course material |  |  |
| Career Cluster(s): | Finance <br> Information Technology | Science, Technology, Engineering and <br> Mathematics |  |

Description: Calculus is the mathematical study of change. We look at ways to measure tiny - infinitesimal-changes and use that information to describe large changes in relationships between variables. Calculus is structured around three big ideas: limits, derivatives and integrals; AP Calculus BC students also study series. AP Calculus students apply their knowledge of calculus to polynomial, power, trigonometric, exponential and logarithmic functions; BC students also apply calculus to vector, polar and parametric functions. Both AP Calculus AB and BC students emphasize a multi-representational approach, with concepts, results and problems being expressed and connected graphically, numerically, analytically and verbally. While AP Calculus AB replaces 1.5 semesters of college calculus, BC replaces two full semesters. Because the pace is brisk, AP Calculus BC students are expected to have a strong mastery of material in algebra, geometry, trigonometry, analytical geometry and elementary functions (equivalent to four years in high school mathematics) and can handle the rigor of a college-level mathematics course with the intention of placing out of comparable college calculus courses.

| Course Title: | Statistics | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 102600 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Algebra 2 | Open To Grades: | 11,12 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: In this course, students will learn about methods of descriptive and inferential statistics. Topics include data collection and description, data production, correlation and regression (descriptive statistics), probability and inference (inferential statistics). The course focuses on data and statistical reasoning over theory and recipes to allow students to develop the skills for working with data. The Texas Instruments $83 / 84$-Plus graphing calculator is used extensively for computation, graphing and simulation. Students are expected to read through examples and case studies while completing their daily classroom assignments. Students will design experiments, collect and analyze data and generate statistically supported solutions.

| Course Title: | Advanced Placement Statistics | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 102610 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Pre-Calculus with a 90\% or <br> higher or completion of Honors Pre-Calculus <br> with an 80\% or higher <br> or teacher recommendation | Open to Grades: | 11,12 |
| Requirement(s): | Students are required to take the designated Advanced Placement exam at their own expense <br> (2020-2021 cost \$95). | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: This course teaches the methods of descriptive and inferential statistics. Topics include data collection and description, data production, correlation and regression, analysis of variance, probability to build a foundation for inference and inference. The course focuses on data and statistical reasoning over theory and recipes. It aims to give students the main ideas of statistics with useful skills for working with data. The TI 83/84/89 graphing calculator is used extensively for computation, graphing and simulation. The course curriculum is designed to meet the requirements for AP Statistics established by the College Board. Students are expected to read through examples and case studies while completing their daily classroom assignments. Several "special problems" and projects are assigned throughout the year that require more in depth analysis and a final project is assigned that requires the generation of data as well as the analysis with statistically well-supported conclusions. The pace of the course is set to have students prepared for the AP exam in early May of each year. Students can also earn college credits for this course through the College in High School Program of the University of Pittsburgh.

| Course Title: | Applied Mathematics | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | $602115(9)$ | Term(s) Offered: | Full Year |
|  | $602125(10)$ |  |  |
|  | $602135(11)$ |  |  |
|  | $602145(12$ and 12+) |  |  |
| Prerequisite(s): | Placement in Life Skills Support (LSS) or Autistic Support (AS) classroom and previously |  |  |
|  | qualified for Pennsylvania Alternative Standards Assessment (PASA) |  |  |

Description: Applied Mathematics is a course for students whose IEP reflects the use of alternate standards. Students are given a baseline pre-test before each unit of study. The concepts are based on grade- level standards and incorporate daily functional math skills based on real-world applications. Students use the Brigance Transition Assessment and Getting Real Assessments to see where their math strengths and weaknesses are.

## Science

| Credit | Core Course Title | Course \# | Open to Grades |
| :---: | :---: | :---: | :---: |
| 1.0 | Earth \& the Environment | 103110 | 9, 10 |
| 1.0 | Environmental Science | 103140 | 10, 11, 12 |
| 1.0 | AP Environmental Science | 103142 | 11, 12 |
| 1.0 | Astronomy | 103150 | 11, 12 |
| 1.0 | Biology | 103201 | 9, 10, 11, 12 |
| 1.0 | Academic Biology | 103210 | 9, 10 |
| 1.0 | Honors Biology | 103220 | 9 |
| 1.0 | AP Biology with Lab | 103230 | 11, 12 |
| 1.0 | Comparative Anatomy \& Physiology | 103250 | 10, 11, 12 |
| 1.0 | Honors Human Anatomy \& Physiology | 103252 | 10, 11, 12 |
| 1.0 | Chemistry with Lab | 103301 | 10, 11, 12 |
| 1.0 | Academic Chemistry with Lab | 103310 | 10, 11, 12 |
| 1.0 | Honors Chemistry with Lab | 103320 | 10, 11, 12 |
| 1.0 | AP Chemistry with Lab | 103330 | 11, 12 |
| 1.0 | Organic Chemistry | 103350 | 11, 12 |
| 1.0 | Physical Science | 103400 | 11, 12 |
| 1.0 | Academic Physics with Lab | 103413 | 10, 11, 12 |
| 1.0 | Honors Physics with Lab | 103420 | 10, 11, 12 |
| 1.0 | AP Physics C-Mechanics | 103450 | 11, 12 |



Engage students in the world of science by developing a foundation of skills strengthened through a wide range of experiences.

## Typical Sequencing of Core Academic Courses

Below are typical sequences that students progress through during their high school careers. However, students have the ability to move between these pathways by meeting the prerequisites for future courses. All students are required to take a biology course.

## Science Pathways

| Freshman | Sophomore | Junior | Senior |
| :---: | :---: | :---: | :---: |
| Course | Course | Course | Course |
| Honors <br> Biology | Honors Chemistry with Lab | Honors Physics with Lab <br> or <br> AP Biology with Lab <br> or <br> AP Chemistry with Lab <br> or <br> AP Environmental Science | $\frac{\text { AP Biology with Lab }}{\text { or }}$ $\frac{\text { AP Chemistry with Lab }}{\text { or }}$ $\frac{\text { AP Physics C-Mechanics }}{\text { or }}$ AP Environmental Science |
| $\frac{\text { Academic }}{\text { Biology }}$ | $\frac{\text { Academic Chemistry with }}{\underline{\text { Lab }}}$ | $\frac{\text { Academic Physics with }}{\underline{\text { Lab }}}$ | Additional Senior Courses |
| Biology | Chemistry with Lab | $\begin{gathered} \frac{\text { Physical Science }}{\text { or }} \\ -\frac{\text { Academic Physics with }}{\underline{\text { Lab }}} \end{gathered}$ | Academic Physics with Lab or <br> Additional Senior Courses |
| Earth \& the Environment | Biology | Chemistry with Lab | Physical Science or Additional Senior Courses |
| Additional Science Courses | Sophomore | Junior | Senior |
|  | Comparative Anatomy \& Physiology <br> Honors Human Anatomy \& Physiology <br> Environmental Science | Comparative Anatomy \& Physiology <br> Honors Human Anatomy \& Physiology <br> Environmental Science <br> Organic Chemistry <br> Astronomy | Comparative Anatomy \& Physiology <br> Honors Human Anatomy \& Physiology <br> Environmental Science <br> Organic Chemistry <br> Astronomy |


| Course Title: | Earth \& The Environment | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 103110 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | 9,10 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Government and Public Administration <br> Health Science <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Human Services <br> Science, Technology, Engineering, Mathematics |  |  |
|  | ( |  |  |

Description: This course is designed to provide students with a better understanding of the Earth, its environment and place in the universe. Emphasis is placed on the physical laws of nature and the effects that they have on our environment. The areas of geology, meteorology and the environment are also viewed with their relations to the other sciences. A variety of laboratory investigations are conducted to reinforce the concepts studied and to introduce the student to basic laboratory procedures. Throughout the year, emphasis is placed on the improvement of reading and writing skills within a science framework. This will help prepare students to take the Biology Keystone Exam in their sophomore year.

| Course Title: | Environmental Science | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 103140 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of a Biology course. | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Government and Public Administration <br> Health Science <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Human Services <br> Science, Technology, Engineering, Mathematics |  |  |

Description: This course is designed to provide students with a comprehensive background in scientific principles and concepts in the area of Environmental Science. This course is focused on providing students with a working knowledge of current environmental problems, the interactions of organisms with their environments and Pennsylvania's Environmental and Ecology Academic Standards. Further concentration will be placed on understanding the physical, biological and chemical interrelationships within the environment and lab activities that promote problem solving through group activity and technology.


| Course Title: | Advanced <br> Placement <br> Environmental <br> Science | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 103142 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Honors Biology or Academic <br> Biology AND Honors Chemistry or <br> Academic Chemistry AND teacher <br> recommendation. Note: A minimum grade of <br> 90\% is required in academic level courses. | Open to Grades: | 11,12 |
| Requirement(s): | Students are required to complete the designated Advanced Placement exam at their own <br> expense. (2023 - 2024 cost \$98) |  |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Government and Public Administration <br> Health Science <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Human Services <br> Science, Technology, Engineering, Mathematics |  |  |

Description: This course is designed for students who wish to continue the study of biological or environmental sciences in college. It is based on the Advanced Placement Environmental Science curriculum. Intensified studies in Earth's systems, ecosystem balance and interactions, use and sustainability of natural resources and global change will be the focus of the course. Laboratory investigations will supplement course work. Students who elect this course have the opportunity to be adequately prepared for the AP test in Environmental Science and the opportunity to potentially earn college credit through the AP/College Board program.

| Course Title: | Astronomy | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 103150 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | 11,12 |
| Career <br> Cluster(s): | Education and Training <br> Health Science <br> Information Technology <br> Science, Technology, Engineering, Mathematics |  |  |

Description: Astronomy is divided into two major areas of study. Naked eye astronomy introduces students to the scale of the universe, movements and perceived movements of the earth and visible bodies. Through research and use of the planetarium, students learn the classical mythology of the sky and are able to identify constellations and locate and name prominent stars. No need for an APP! The second area includes the historical development of astronomy, production of light, spectroscopy, stellar evolution, galaxies, sun, moon, solar system, cosmology and celestial navigation techniques.

| Course Title: | Biology | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 103201 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | 9,10, |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Health Science <br> Human Services <br> Science, Technology, Engineering, Mathematics |  |  |
|  | 11,12 |  |  |

Description: This course is designed to give a broad overview of biology. Units of study will include Basic Biological Principles, The Chemistry of Life, Cell Structure and Function, Homeostasis and Cellular Transport, Cell Growth and Reproduction, Genetics, Natural Selection and Ecology. Topics of biology are taught at a slower pace and depth that is tailored to student needs. Activities, laboratory experiments and models are utilized to present concepts. All students completing a biology course are required to take the end of course Keystone Biology Exam as mandated by the Pennsylvania Department of Education. The Keystone Exam score is not calculated in the student's final course grade.

| Course Title: | Academic Biology | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 103210 Term(s) Offered: | Full Year |  |
| Prerequisite(s): | For 9 <br> th grade: Completion of Science 8 <br> Compacted/Extended or completion of <br> Science 8 with an 80\% or higher: <br> For 10 <br> science grade: Completion of 9th grade <br> sciense with a 90\% or higher AND/OR <br> teacher recommendation | Open to Grades: | 9,10 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Health Science <br> Human Services <br> Science, Technology, Engineering, Mathematics |  |  |

Description: This course is designed to be an introductory course for college bound students and will introduce students to the core concepts of biology. Units of study will include Basic Biological Principles, The Chemistry of Life, Cell Structure and Function, Homeostasis and Cellular Transport, Cell Growth and Reproduction, Genetics, Natural Selection and Ecology. Students are taught to think critically about concepts and relate them to the world in which they live through science and engineering practices. Lab investigations, individual and group projects will illustrate principles and reinforce key concepts. All students completing a biology course are required to take the end of course Keystone Biology Exam as mandated by the Pennsylvania Department of Education. The Keystone Exam score is not calculated in the student's final course grade.

| Course Title: | Honors Biology | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 103220 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Science 8 <br> Compacted/Extended with a 90\% or higher <br> AND teacher recommendation | Open to Grades: | 9 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Health Science <br> Human Services <br> Science, Technology, Engineering, Mathematics |  |  |

Description: This course is designed to be a fast paced and rigorous introduction to the concepts of biology and is designed for college bound students interested in a career in science or medicine. Units of study will include Basic Biological Principles, The Chemistry of Life, Cell Structure and Function, Homeostasis and Cellular Transport, Cell Growth and Reproduction, Genetics, Natural Selection and Ecology. Lab investigations, individual and group projects will illustrate principles and reinforce key concepts. Students will analyze, interpret and evaluate the validity of experimental data in order to draw conclusions about biological principles. Students taking Honors Biology should realize that there is an obligation to complete a considerable amount of both individual and group work outside of the classroom. All students completing a biology course are required to take the end of course Keystone Biology Exam as mandated by the Pennsylvania Department of Education. The Keystone Exam score is not calculated in the student's final course grade.

| Course Title: | Advanced Placement Biology with Lab | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 103230 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Honors Biology or Academic <br> Biology AND Honors Chemistry or <br> Academic Chemistry AND teacher <br> recommendation. Note: A minimum grade of <br> $90 \%$ is required in academic level courses. | Open to Grades: | 11,12 |
| Requirement(s): | Students are required to complete the designated Advanced Placement exam at their own <br> expense. (2023-2024 cost \$98) |  |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Health Science <br> Human Services <br> Science, Technology, Engineering, Mathematics |  |  |

Description: This course is designed for students who wish to continue the study of biological sciences in college. It is based on the Advanced Placement Biology Curriculum. Intensified studies in molecular and cellular biology emphasize biological chemistry, cellular energetics, protein synthesis and DNA replication. Inheritance patterns, gene expression, and population genetics are presented with a focus on evolution and ecosystems. Laboratory investigations supplement all course work. Students who elect this course have the opportunity to be adequately prepared for the AP test in Biology, and the opportunity to potentially earn college credit through the AP/College Board program. . Students are encouraged to take Honors Human Anatomy \& Physiology either prior to or concurrently with AP Biology.

| Course Title: | Comparative Anatomy \& Physiology | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 103250 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Honors Biology with a 70\% or <br> higher, or completion of Academic Biology <br> with an 80\% or higher, or completion of <br> Biology with a 90\% or higher | Open to Grades: <br> Students who have <br> taken Honors Human <br> A\&P may not take this <br> course. | $10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Health Science <br> Human Services <br> Science, Technology, Engineering, Mathematics |  |  |



Description: This course is designed for college-bound students who are interested in learning about the anatomy and physiology of various animals and of humans. The first semester is spent learning about the major phyla of the Animal Kingdom. The second semester focuses on the various organs and systems of the human body and examines how these organs and systems interact with one another. Lab investigations and dissections emphasize and reinforce key concepts.

[^0]| Course Title: | Honors Human <br>  <br> Physiology | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 103252 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of or concurrent enrollment in <br> Academic or Honors Chemistry AND | Open to Grades: | $10,11,12$ |
| completion of Honors Biology with an 80\% <br> or higher or Academic Biology with a 90\% or <br> higher or Biology with a 93\% or higher AND <br> teacher recommendation | Students who have <br> taken Comparative A\&P <br> may not take this course. |  |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Health Science <br> Human Services <br> Science, Technology, Engineering, Mathematics <br> - |  |  |

Description: Honors human Anatomy \& Physiology is designed for college-bound students who plan to enter careers that require extensive knowledge of human anatomy and physiology. The course focuses on the structure and function of the major body systems with emphasis on the interrelationships between these systems. Lab investigations will supplement class lectures and will include dissections and computer probeware-based activities. Independent research projects and scientific journal readings will enable in-depth study of course topics and allow for exploration of new medical research and technologies. This course is directed towards students with a serious interest in the medical field and requires significant study time outside of class for successful completion. Emphasis is placed on the development of critical thinking skills that will enhance the ability to correlate structure and function and better understand how the human body maintains homeostasis.

| Course Title: | Chemistry with Lab | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 103301 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of a Biology course with a 70\% or <br> higher. | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Health Science <br> Human Services <br> Science, Technology, Engineering, Mathematics |  |  |

Description: This course is designed to provide an introduction to the basic principles of inorganic chemistry. Reading, writing and mathematical skills will be learned within a science framework. Laboratory experiments will be performed to provide authentic examples of concepts. Topics of Chemistry are taught at a slower pace and depth tailored to student needs. The fundamental concepts of matter and energy, atomic theory, bonding, nomenclature, the mole, chemical reactions, stoichiometry, solutions, acids and bases and gas laws will be studied. All required math skills will be taught and reviewed in class.

| Course Title: | Academic Chemistry with Lab | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 103310 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Honors Biology or Academic <br> Biology with an $80 \%$ or higher | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Health Science <br> Human Services <br> Science, Technology, Engineering, Mathematics |  |  |
|  |  |  |  |

Description: This course is designed to provide an introduction to the basic principles of inorganic chemistry. Students are expected to apply existing reading, writing and mathematical skills within a science framework. Algebra skills are required for success in Academic Chemistry. Algebra skills will be reviewed and reinforced through content and labs. Laboratory experiments are completed and emphasize problem solving skills and authentic application of course content. Topics of Academic Chemistry are taught at an intermediate pace and depth. Topics studied include matter and energy, atomic theory, bonding, nomenclature, the mole, chemical reactions, stoichiometry, thermodynamics, solutions, acids and bases and gas laws.

| Course Title: | Honors Chemistry with Lab | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 103320 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Honors Biology with an $80 \%$ or <br> higher or Academic Biology with a 90\% or <br> higher and completion of Algebra I with a 70\% <br> or higher AND teacher recommendation | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Health Science |  |  |
|  | Human Services <br> Science, Technology, Engineering, Mathematics |  |  |

Description: This course is designed to provide an introduction to the basic principles of inorganic chemistry at an in-depth and rigorous pace. A strong mathematical foundation is required. Previous mastery of algebra skills is expected. Algebra skills will not be reviewed in class. Problem solving and critical thinking skills are stressed. Student centered, inquiry based laboratory investigations provide authentic application of course content. Students are required to present their laboratory findings using scientific writing. Topics of Honors Chemistry include matter and energy, atomic theory, bonding, nomenclature, the mole, chemical reactions, stoichiometry, thermodynamics, solutions, acids and bases, gas laws and nuclear chemistry.
\(\left.$$
\begin{array}{|l|l|l|l|}\hline \text { Course Title: } & \text { Advanced Placement Chemistry with Lab } & \text { Credit Value: } & 1.0 \\
\hline \text { Course Number: } & 103330 & \text { Term(s) Offered: } & \text { Full Year } \\
\hline \text { Prerequisite(s): } & \begin{array}{l}\text { Completion of Honors Chemistry with a 90\% } \\
\text { or higher or teacher recommendation }\end{array} & \text { Open to Grades: } & 11,12 \\
\hline \text { Requirement(s): } & \begin{array}{l}\text { Summer work for this course: Students are strongly recommended to complete a review of } \\
\text { first year chemistry concepts which include nomenclature, writing net-ionic equations and } \\
\text { stoichiometry. Materials and resources for this review are provided. }\end{array}
$$ <br>
Students are required to complete the designated Advanced Placement exam at their own <br>

expense. (2023 - 2024 cost \$98)\end{array}\right]\)| Career Cluster(s): |
| :--- |
| Agriculture, Food and Natural Resources <br> Health Science <br> Human Services <br> Science, Technology, Engineering, Mathematics |

Description: This course is designed to provide students with a learning experience equivalent to that of an introductory college course in chemistry and includes those topics covered in a typical college-level chemistry course. AP Chemistry differs significantly from Honors Chemistry with respect to the range and depth of topics covered, the emphasis on chemical calculations and the mathematical formulation of principles, the nature and variety of laboratory work done by students and the time and effort required of students. Students who elect this course have the opportunity to be adequately prepared for the AP test in Chemistry, and the opportunity to potentially earn college credit through the AP/College Board program.Every incoming student is expected to come to AP Chemistry with a thorough understanding of the concepts taught in first year chemistry. A recommended review packet is made available in the spring and should be completed before beginning the AP Chemistry course in the fall. Students that can successfully complete this packet will have the prerequisite understanding required for this course.
\(\left.$$
\begin{array}{|l|l|l|l|}\hline \text { Course Title: } & \text { Organic Chemistry } & \text { Credit Value: } & 1.0 \\
\hline \text { Course Number: } & 103350 & \text { Term(s) Offered: } & \text { Full Year } \\
\hline \text { Prerequisite(s): } & \begin{array}{l}\text { Completion of Academic Chemistry with a } \\
90 \% \text { or higher, or completion of Honors }\end{array}
$$ \& Open to Grades: \& 11,12 <br>

Chemistry with 80\% or higher\end{array}\right]\)| Career Cluster(s): |
| :--- | | Agriculture, Food and Natural Resources |
| :--- |
| Health Science |
| Human Services |
| Science, Technology, Engineering, Mathematics |

Description: This is a demanding lecture-oriented course that deals with the chemistry of carbon compounds with a strong focus on nomenclature and structural formulas. Organic Chemistry has minimal math, but requires a lot of practice, studying and long-term memorization. It has a story line - everything builds on what came before. This course is primarily for those students intending to pursue a career in chemistry, biology, medicine, pharmacy, or physical therapy. Organic Chemistry is one of the most challenging courses for pre-professional majors in college and students that have the opportunity to take an introductory course in high school will learn the fundamentals to be successful in a typical college-level organic course. Laboratory investigations will be used to supplement course topics.

| Course Title: | Physical Science | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 103400 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Architecture and Construction <br> Health Science <br> Information Technology <br> Manufacturing <br> Science, Technology, Engineering, Mathematics |  |  |
|  |  |  |  |

Description: Students are provided with a survey of the basic concepts of physics, such as heat, light, sound, motion, energy, electricity, magnetism and related chemical principles. Students are presented with current developments in technology and their applications within society. Emphasis is placed upon the improvement of reading, writing and mathematical skills. Laboratory experiments are provided to reinforce the basic skills and develop good lab techniques.

| Course Title: | $\underline{\text { Academic Physics with Lab }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 103413 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of previous academic level science <br> with an 80\% or higher or completion of <br> Chemistry with a 90\% or higher - AND - <br> completion of Algebra 2 with a 70\% or higher. | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Architecture and Construction <br> Health Science <br> Information Technology <br> Manufacturing <br> Science, Technology, Engineering, Mathematics <br> Transportation, Distribution and Logistics |  |  |
|  | ( |  |  |

Description: Academic Physics is a course designed to provide students with a conceptual understanding of how and why objects and waves move. Students gain knowledge of physical phenomena and the scientific process through extensive experimentation, problem-solving and critical thinking.

| Course Title: | Honors Physics with Lab | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 103420 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of previous honors level science <br> with an 80\% or higher or completion of <br> previous academic level science with a 90\% or <br> higher AND teacher recommendation | Open to Grades: | $10,11,12$ |
| Co-requisite(s): | Completion of or concurrent enrollment in Pre-Calculus |  |  |
| Career Cluster(s): | Architecture and Construction <br> Health Science <br> Information Technology <br> Manufacturing <br> Science, Technology, Engineering, Mathematics |  |  |

Description: After an introduction to methods of measurement and problem-solving techniques, the following physical concepts are covered: motion, vector analysis, forces, work, energy, momentum and rotational motion. The course has a heavy emphasis on problem-solving, mathematical reasoning and laboratory techniques.

| Course Title: | $\underline{\text { AP Physics C - Mechanics }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 103450 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Honors Physics AND teacher <br> recommendation | Open to Grades: | 11,12 |
| Co-requisite(s): | Students must be concurrently enrolled in, or have completed Calculus; students who want <br> to apply the for CHS credit must have completed or be concurrently enrolled in $\underline{\text { AP }}$ <br> Calculus |  |  |
| Requirement(s): | Students are required to complete the designated Advanced Placement exam at their own <br> expense. (2023-2024 cost \$98) |  |  |
| Career Cluster(s): | Architecture and Construction <br> Health Science <br> Information Technology <br> Manufacturing <br> Science, Technology, Engineering, Mathematics |  |  |

Description: This calculus based physics course is designed to prepare students for the AP Physics C - Mechanics and AP Physics - Electricity \& Magnetism exams. Content will focus on rigorous problem solving involving mathematical reasoning, as well as, a laboratory portion commensurate with the curriculum. This course also satisfies the requirements for the University of Pittsburgh's College in High School Physics course 0174, Basic Physics for Science \& Engineering 1. Students may select to register for the Pitt option at the beginning of the year. There is a separate fee associated with University registration. Students must register for at least one of the three testing options (AP Physics C - Mechanics, AP Physics Electricity \& Magnetism, CHS Physics at Pitt), but are not limited to only one option. This course is not a first-year physics course.

## Social Studies

| Credit | Core Course Title | Course $\#$ | Open to Grades |
| :---: | :--- | :--- | :---: |
| 1.0 | US History | 104111 | 9 |
| 1.0 | Honors US History | 104121 | 9 |
| 1.0 | Themes in World History | 104411 | 10 |
| 1.0 | Honors Themes in World History | 104421 | 10 |
| 1.0 | AP European History | 104435 | $10,11,12$ |
| 1.0 | US History: Twentieth Century to the Present | 104211 | 11 |
| 1.0 | Honors US History: Twentieth Century to the Present | 104221 | 11 |
| 1.0 | AP US History | 104310 | 11 |
| 1.0 | AP Microeconomics | 104515 | 11,12 |
| 1.0 | AP Psychology | 104525 | 12 |
| 1.0 | AP American Government/Politics | 104320 | 12 |
| 0.5 | Honors Philosophy through Media | 104471 | 12 |
| 0.5 | Honors Research in Global Issues | 104511 | 12 |
| 0.5 | Economics | 104530 | 12 |
| 0.5 | Principles of Law | 104532 | 12 |
| 0.5 | History through Music | 104533 | 12 |
| 0.5 | Sports and Culture |  | 12 |



Empowering young people to navigate their role as engaged \& empathetic citizens within an integrated global society.

## Typical Sequencing of Core Academic Courses

Below are typical sequences that students progress through during their high school careers. However, students have the ability to move between these pathways by meeting the prerequisites for future courses.

## Social Studies Pathways

| Freshman | Sophomore | Junior | Senior |
| :---: | :---: | :---: | :---: |
| Required Course | Required Course | Required Course | Elective Course |


| Course Title: | US History | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 104111 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | 9 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Education and Training <br> Government and Public Administration | Law, Public Safety, Corrections and Security <br> Manufacturing <br> Transportation, Distribution and Logistics |  |

Description: The aim of this course is to provide students with a better understanding of basic American freedoms, general good citizenship, and the development of America as a social, political, and economic world power . An additional purpose of the course is to stimulate an appreciation of American heritage and to foster a sense of patriotism by the study of the development and growth of the United States and the Commonwealth of Pennsylvania. This course equips students with the skills needed to succeed in college and the habits of mind necessary to foster a higher level of learning. This course integrates the study of history, government, geography, and economics.

| Course Title: | Honors US History | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 104121 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Social Studies 8 with an 90\% <br> or higher or teacher recommendation or <br> completion of Social Studies 8 <br> Compacted/Extended with a 80\% or higher | Open to Grades: | 9 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Education and Training <br> Government and Public Administration | Law, Public Safety, Corrections and Security <br> Manufacturing <br> Transportation, Distribution and Logistics |  |

Description: In this class, while studying United States History, students participate in authentic historical work. Class time is spent reading primary documents, formulating historical questions, proposing critical arguments, discussing controversial issues, researching original inquiries, and writing scholarly papers. Learning the process of historical analysis is emphasized in class. This course integrates the study of history, government, geography, and economics and is designed to be academically challenging to students.

| Course Title: | World History | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 104411 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | 10 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Education and Training <br> Government and Public Administration <br> Hospitality and Tourism | Human Services <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Transportation, Distribution and Logistics |  |
|  |  |  |  |

Description: World History takes students on a journey from the Mongols through the Age of Revolutions and into current events. Students will explore elements of civilizations from various time periods while building historical thinking skills such as: comparing and contrasting, evaluating historical arguments, and historical reading and writing. Students will be expected to combine knowledge from the textbook and in-class activities with a focus on applying historical reasoning skills to various time periods of world history, while developing an appreciation of diverse cultures of the past. This course integrates the study of history, government, geography, and economics. The World History course will also require a project-based culminating assessment.

| Course Title: | Honors Themes in World History | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 104421 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion US History: Nineteenth Century <br> with a 90\% or higher or completion of Honors | Open to Grades: | 10 |
| US History: Nineteenth Century with an 80\% | or higher or teacher recommendation | Human Services <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Transportation, Distribution and Logistics |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Education and Training <br> Government and Public Administration <br> Hospitality and Tourism | ( |  |

Description: This course is designed to introduce students to a thematic approach to the study of world history. Unlike many world history survey level courses, the depth and scope of the course is both thematic and chronological. This thematic approach is designed to help students understand and analyze the interconnectedness of historical events, people, places, and ideas. To this end, we will employ extensive use of primary and secondary source materials, implement numerous objective and written assessments, and complete some project-based and authentic/simulated learning experiences. Each of the major themes covered in the course will include regional analysis, significant contributors, and the impact on regions and the world as a whole. Major themes included in the course will be: Principles of Geography and Culture, Principles of World Religions, Political Systems and Structure, Global Conflict, Modernization and its Impact and Global Economies and Resources. This course integrates the study of history, government, geography, and economics. The World History course will also require a project-based culminating assessment.

| Course Title: | Advanced Placement European History | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 104435 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Honors US History: <br> Nineteenth Century with an 80\% or higher or <br> teacher recommendation | Open to Grades: | $10,11,12$ |
| Requirement(s): | Students are required to complete the designated Advanced Placement exam at their own <br> expense (2022-2023 cost \$98). |  |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Finance | Government and Public Administration <br> Hospitality and Tourism <br> Human Services <br> Law, Public Safety, Corrections and Security <br> Marketing |  |

Description: This is a college-level survey course in modern European History that begins with the study of the Renaissance and Reformation and traces the development of European institutions and trends in science, politics, economics, and social patterns into the present day. Students in this class must have a strong work ethic, historical curiosity, and the ability to study at an accelerated pace. There is an expectation that students will also work independently in order to cover all of the information necessary for the course. There is a large emphasis on analyzing primary source documents and synthesizing knowledge from the textbook in order to apply it to various trends and themes. Students will write frequently in the course in an effort to show analysis and application. The course is implemented with a 3-pronged approach: standardized content, historical analysis skills, and preparation for the AP examination.

| Course Title: | $\underline{\text { US History: Twentieth Century to the Present }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 104211 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | 11 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Education and Training <br> Government and Public Administration | Law, Public Safety, Corrections and Security <br> Manufacturing <br> Transportation, Distribution and Logistics |  |

Description: This course is intended to provide the student with the information and skills that are essential for better understanding of $20^{\text {th }}$ century American history. US History: Twentieth Century to the Present is a comprehensive history course that provides students with an appreciation of American cultural, economic, political, and social history. This course equips students with the skills needed to succeed in college and the habits of mind necessary to foster a higher level of learning. Strategies include reading comprehension, analysis of historical artwork, improving student writing, and using primary and secondary supplemental source materials for critical analysis. Some of the major themes and units of study include: World War I, The Arrival of Reform, The Roaring Twenties, The Great Depression and New Deal, Isolation to World War, Reshaping the Post War World, The Vietnam and Watergate Era and The Reagan \& Clinton Revolutions up through the present day. This course integrates the study of history, government, geography, and economics.

| Course Title: | Honors US History: Twentieth Century to the <br> Present | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 104221 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of $\underline{\text { World History with a } 90 \% \text { or }}$higher, completion of $\underline{\text { Honors Themes in }}$ <br> World History with an $80 \%$ or higher or <br> teacher recommendationOpen to Grades: | 11 |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Education and Training <br> Government and Public Administration | Law, Public Safety, Corrections and Security <br> Manufacturing <br> Transportation, Distribution and Logistics |  |

Description: Honors U.S. History: Twentieth Century to the Present studies American history from World War I to the present, with a focus on 20th century issues. The 11th-grade honors U.S. history curriculum is designed to provide the student with the information and skills that are essential for a better understanding of $20^{\text {th }}$ century American history. The course emphasizes social and cultural history as well as the growth of government during the 20th century. The course highlights the chronological development of political, economic, and diplomatic history. Students are expected to not only read the textbook but also interpret primary source readings. Course work includes lecture, class discussion, group work, debate, research and position papers, and unit tests. This course integrates the study of history, government, geography, and economics.

| Course Title: | Advanced Placement U.S. History | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 104310 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of $\underline{\text { Honors Themes in World History }}$ <br> with an $80 \%$ or higher or completion of $\underline{\text { AP }}$ <br> European History with an $80 \%$ or higher or | Open to Grades: | 11 |
| teacher recommendation |  |  |  |$\quad$| Requirement(s): |
| :--- |
| Students are required to complete the designated Advanced Placement exam at their own <br> expense (2022-2023 cost \$98). |
| Career Cluster(s): | | Agriculture, Food and Natural Resources |
| :--- |
| Education and Training |
| Government and Public Administration |$\quad$| Law, Public Safety, Corrections and Security |
| :--- |
| Manufacturing |
| Transportation, Distribution and Logistics |

Description: AP US History is a year-long high school course which is designed to be equivalent to a freshman college survey course in American History. Topics of study range from pre-Columbian American societies to the role of the US in the post 9/11 world. Class time is spent examining, through various methods, essential questions and frameworks in the study of American History. All seven themes of history including Identity, Work/Exchange/Technology, Peopling, Politics and Power, Americans in the World, Environment and Geography and Ideas, Beliefs, and Culture are addressed throughout the course. Students are expected to read the course textbook, interpret primary source readings, and examine the interpretations of scholars on specific events and trends. College level writing is considered a high priority in this class. Writing at this level includes detailed note-taking, position papers, and research papers. Assessing student learning is accomplished through College Board style multiple choice tests, Document Based Questions (DBQs), and Free Response Questions (FRQs). These assessments will be used along with in-class discussions and homework assignments in order to measure success in the interpretation of primary and secondary sources. The goal of the course is to foster a broad knowledge of American History, increase interest in further study of history, and prepare students for the College Board Exam.

| Course Title: | Advanced Placement Microeconomics | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 104515 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Honors US History: Twentieth <br> Century to the Present with a 80\% or higher | Open to Grades: | 11,12 |
| Requirement(s): | or completion of AP US History with an 80\% <br> or higher or teacher recommendation | Students are required to complete the designated Advanced Placement exam at their own <br> expense (2022-2023 cost \$98). | Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Marematics <br> Transportation, Distribution and Logistics |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Hospitality and Tourism |  |  |

Description: Explore the evolution of trade from ancient bartering systems to the modern era of one-click shopping and rapid doorstep deliveries by giants like Amazon. In this class, students not only study economic principles but actively participate in discussions and events that bring these concepts to life. By examining real-world scenarios, students gain a deeper appreciation for the interrelatedness of producers, consumers, and the government. The class addresses the challenges posed by monopolies, prompting students to propose strategic changes aimed at limiting market power and ensuring fair competition. This course blends elements of basic math with insights from psychology, providing an understanding of human decision-making, using the almighty dollar. Expect an engaging, diverse learning environment exploring topics like fashion economics, sports management, international business, investments, and taxes. Through simulations, group projects, and trials, students gain immersive experiences fostering understanding and critical thinking. Designed by the College Board, this course is tailored for academically-prepared students seeking to engage in college-level studies while still in high school. The academic year culminates in preparation for the AP Microeconomics College Board Exam.

| Course Title: |  <br> Politics | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 104320 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Honors US History: Twentieth <br> Century to the Present with a 80\% or higher or <br> completion of previous AP US History course <br> with an 80\% or higher or teacher recommendation | Open to Grades: | 12 |
| Requirement(s): | The required and graded summer essay assignment will give students a basis for <br> understanding the underpinnings of American government, society and culture. The <br> assignment is due 10 days following the start of the semester. Students adding the course <br> after the beginning of the semester will have until the end of the 1 |  |  |
| st quarter to complete the <br> assignment. Students are required to complete the designated Advanced Placement exam at <br> their own expense (2022-2023 cost \$98). |  |  |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration | Health Science <br> Hospitality and Tourism <br> Human Services <br> Law, Public Safety, Corrections and Security <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: AP Government is a one-year political science course that prepares students for the College Board Advanced Placement U.S. Government \& Politics exam given in May each year. This course is designed to give students a critical perspective on government and politics in the United States. This course involves the study of general concepts used to interpret American politics and the analysis of specific case studies. It requires familiarity with the interaction among institutions, groups, beliefs, and ideals that make up the American political reality. Although no single approach to this study is used, the general units of study include Constitutional Underpinnings of American Government, Political Beliefs and Behaviors, Political Parties and Interest Groups, Institutions and Policy Processes of National Government and Civil Rights and Civil Liberties. Students in this course should be highly motivated and expect weekly readings as well as frequent writing assignments, debates, and discussions.
$\left.\begin{array}{|l|l|l|l|}\hline \text { Course Title: } & \text { Advanced Placement Psychology } & \text { Credit Value: } & 1.0 \\ \hline \text { Course Number: } & 104525 & \text { Term(s) Offered: } & \text { Full Year } \\ \hline \text { Prerequisite(s): } & \begin{array}{l}\text { Completion of Honors US History: Twentieth } \\ \text { Century to the Present with a 80\% or higher } \\ \text { or completion of previous AP US History } \\ \text { course with an 80\% or higher or teacher } \\ \text { recommendation }\end{array} & \text { Open to Grades: } & 12 \\ \hline \text { Requirement(s): } & \begin{array}{l}\text { Students are required to complete a summer assignment. Students should expect to devote } \\ \text { approximately five hours to completing the summer assignment. Students can expect } \\ \text { approximately 30 minutes of homework per night on average throughout the school year. } \\ \text { Students are required to complete the designated Advanced Placement exam at their own } \\ \text { expense (2022-2023 cost \$98). }\end{array} & \begin{array}{l}\text { Hospitality and Tourism } \\ \text { Career Cluster(s): }\end{array} & \begin{array}{l}\text { Agriculture, Food and Natural Resources } \\ \text { Arts, Audio/Video Technology and Communications } \\ \text { Business Management and Administration } \\ \text { Education and Training } \\ \text { Government and Public Administration } \\ \text { Health Science }\end{array} \\ \hline & \begin{array}{l}\text { Law, Public Safety, Corrections and Security } \\ \text { Marketing }\end{array} \\ \hline \text { Science, Technology, Engineering and } \\ \text { Mathematics }\end{array}\right\}$

Description: The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological theories, principles, and phenomena associated with each of the major subfields within psychology. They also learn about research methods and ethics psychologists use in their science and practice. Course work includes lecture, class discussion, debate, research and position papers, chapter quizzes, and unit tests.

| Course Title: | Honors Philosophy through Media | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 104470 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of the Social Studies Graduation <br> requirements with a 90\% or higher in previous <br> courses, an 80\% or higher in previous honors <br> courses, or a 70\% or higher in previous AP <br> courses. | Open to Grades: | 12 |
| Career Cluster(s): | Education \& Training <br> Information Technology <br> Law, Public Safety, Corrections, \& Security | Government \& Public Administration <br> Health Science <br> Human Services |  |

## Description:

This course emerged out of the in-depth program review process that was completed during the 2018-2019 school year. Students will combine traditional schools of philosophy with popular media (movies, television, music, literature) to explore historical and contemporary arguments and come to their own conclusions about logic and reason, truth and knowledge, principles of beauty and artistic taste, good and evil, right and wrong, the nature of the universe, and the meaning of life. This course is designed to be an introduction to philosophical arguments from an academic perspective, while allowing students to explore their own interests within these perspectives. Students will learn to apply critical thinking skills to essential questions, and productive discussions will be important for this process.

| Course Title: | Honors Research in Global Issues | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 104471 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of the Social Studies Graduation <br> requirements with a 90\% or higher in previous <br> courses, an 80\% or higher in previous honors <br> courses, or a 70\% or higher in previous AP <br> courses. | Open to Grades: | 12 |
| Career Cluster(s): | Agriculture, Food, \& Natural Resources <br> Education \& Training <br> Information Technology <br> STEM <br> Architecture and Construction <br> Finance <br> Law, Public Safety, Corrections \& Security | Transportation, Distribution \& Logistics <br> Arts, A/V Technology, \& Communication <br> Government \& Public Administration <br> Manufacturing <br> Hospitality and Tourism <br> Health Science |  |

Description: The course emerged out of the in-depth program review process that was completed during the 2018-2019 school year. Students will conduct a problem based research study on a current global or regional issue based on student interest (for example, students who are interested in Asian Studies can focus on this region of the world). Research projects will utilize a combination of qualitative and quantitative analysis of primary sources and secondary sources. Students will present their findings at the end of the semester. Research projects are designed to augment students' Senior Portfolios for college application. The research focus of this class makes it perfect for any student interested in pursuing a degree in the Social Sciences (Anthropology, Sociology, Economics, Political Science and Social Psychology).

| Course Title: | Economics | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 104511 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of the Social Studies Graduation <br> requirements. | Open to Grades: | 12 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Hospitality and Tourism | Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: This course involves a study of the American economy. The course content includes an introduction to the study of economics, comparative analysis of world economies, and in-depth study of the operation of a market economy and microeconomics (business organizations, supply and demand, financial investments and monetary policy). This course equips students with the skills needed to succeed in college and the habits of mind necessary to foster a higher level of learning. An investment research project is conducted in which students hypothetically invest in stock and follow their investments for a period of eight weeks. Two formal writing assignments are required: a stock market portfolio report and a field study.

| Course Title: | Principles of Law | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 104530 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of the Social Studies Graduation <br> requirements. | Open to Grades: | 12 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration | Hospitality and Tourism <br> Human Services <br> Law, Public Safety, Corrections and Security <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: This course focuses on the study of those principles considered necessary for the responsible citizen. Course content includes the history of written law, criminal law, and TORT law. The course is geared to serve the everyday needs of students in dealing with legal responsibilities. Students gain an understanding of the "spirit" of the law as well as the "letter" of the law. A great deal of reading is necessary in the use of case studies as tools to analyze the use of law. Students are required to conduct research projects, computer lab projects, demonstrations, and simulations to help reinforce concepts covered in the text.

| Course Title: | History through Music | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 104532 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of the Social Studies Graduation <br> requirements. | Open to Grades: | 12 |
| Career Cluster(s): | Arts, A/V Technology, \& Communications <br> Education \& Training <br> Hospitality \& Tourism | Human Services <br> Marketing |  |

Description: The course emerged out of the in-depth program review process that was completed during the 2018-2019 school year. Students will examine American History from colonialism to the present through the lens of music.
Students will investigate how music reflects human geography, the environment, and historical events. Any student interested in pursuing a career in the performing arts, entertainment industry, history, or education will find this course beneficial.

| Course Title: | Sports and Culture | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 104533 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of the Social Studies Graduation <br> requirements. | Open to Grades: | 12 |
| Career Cluster(s): | Arts, A/V Technology, \& Communications <br> Education \& Training <br> Health Sciences | Hospitality \& Tourism <br> Human Services <br> Marketing |  |

Description: This course emerged out of the in-depth program review process that was completed during the 2018-2019 school year. Each unit will examine a particular sport or sports from a region/nation around the world. The students will examine the sport's influence on the cultures that popularized them and each unit culminates with practicing/playing/watching an example of the sport and its skills to develop an appreciation for cultures other than our own. Knowledge of geography and history as well as current events will be included in these units. The units are: Sports Around the World, Sports and Nationalism, Sports and Colonialism, and Sports and Money. Each student is responsible for one out-of-school activity or experience provided throughout the semester.

## Art

| Credit | Elective Course Title | Course \# | Open to Grades |
| :---: | :--- | :---: | :---: |
| 1.0 | Foundations of Studio Art | 105100 | $9,10,11,12$ |
| 0.5 | Drawing | 105200 | $10,11,12$ |
| 0.5 | Graphic Design | 105210 | $10,11,12$ |
| 0.5 | Painting | 105220 | $10,11,12$ |
| 0.5 | Photography \& Illustration | 105230 | $10,11,12$ |
| 0.5 | Sculpture | 105301 | $10,11,12$ |
| 0.5 | Ceramics | 105300 | $10,11,12$ |
| 0.5 | Jewelry Design | 105320 | $10,11,12$ |
| 0.5 | Mixed Media | 105330 | $10,11,12$ |
| 1.0 | AP Art History | 105430 | $10,11,12$ |
| 1.0 | AP Studio Art: 2-D Design | 105440 | 112 |
| 1.0 | AP Studio Art: 3-D Design | 105460 | 12 |
| 1.0 | AP Studio Art: Drawing | 105450 | 11,12 |
|  |  |  |  |



| Course Title: | Foundations of Studio Art | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 105100 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance | Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Science, Technology, Engineering and <br> Mathematics |

Description: This course is the introductory class that is offered to all students interested in beginning art exploration at Pine-Richland High School. In this course, beginning students become familiar with the Elements and Principles of Design through a variety of studio art projects such as; still life, collage, perspective drawing and printmaking. Art History is embedded in all course work, highlighting historical and contemporary artists and their processes/techniques. Students begin three-dimensional projects with sculpture or ceramic work during the fourth quarter. Foundations of Studio Art is a prerequisite for all other art courses.

| Course Title: | Drawing | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 105200 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of Foundations of Studio Art or <br> Advanced Placement: Art History; or <br> Concurrent enrollment in Foundations of <br> Studio Art and Advanced Architecture | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Architecture and Construction <br> Arts, Audio/Video Technology and Communications | Information Technology <br> Science, Technology, Engineering and <br> Mathematics |  |

Description: Drawing is at the very core of the development of any artist's repertoire. This course focuses on traditional drawing techniques while encouraging students to make the media come alive in a way that is personally meaningful to them. Themes that are expanded upon are the portrait, the human figure and perspective. This course focuses in detail on various drawing techniques. Drawing media covered in this course include, but are not limited to, pencil, charcoal and pastel. Historical art examples provide information and inspiration.

| Course Title: | Graphic Design | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 105210 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of Foundations of Studio Art or <br> Advanced Placement: Art History | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Architecture and Construction <br> Arts, Audio/Video Technology and Communications | Information Technology <br> Science, Technology, Engineering and <br> Mathematics |  |

Description: In the 21st century we are surrounded by visual culture. This course addresses the main ideas essential to Graphic Design such as logo and wordmark, branding, target audience, typeface, color and print collateral. Students submit everyday examples of 'Good Design' and 'Bad Design' and identify their reasoning behind these choices referencing the Elements and Principles of Art and Design. The final project in the course is an original screen printed t-shirt: 'wearable art.'

| Course Title: | $\underline{\text { Painting }}$ | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 105220 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of Foundations of Studio Art or <br> Advanced Placement: Art History | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications <br> Information Technology | Science, Technology, Engineering and <br> Mathematics |  |

Description: In this course, students focus on various painting techniques using paint media. Painting media includes, but is not limited to, watercolor, acrylic and digital painting. Themes of study are based on the Elements and Principles of Design. Emphasis is placed on drawing and painting from observation, color theory, abstraction and expression. Themes are developed using the human figure, landscape and still-life. Individual and class critiques are integrated in studio practices and Painting routines. Master Artists of history inform processes and subjects studied. Successful completion of this course can be preparation for Advanced Placement Studio Art: Drawing.

| Course Title: | $\underline{\text { Photography \& Illustration }}$ | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 105230 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of Foundations of Studio Art or <br> Advanced Placement: Art History | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications <br> Information Technology | Science, Technology, Engineering and <br> Mathematics |  |

Description: In this course, students focus on various visual storytelling techniques using photography and illustration media. Photography and illustration media includes, but is not limited to, digital photography, ink drawing, digital collage and digital painting. Themes of study are based on concept development in the Elements and Principles of Design. Emphasis is placed on originality and creative problem- solving. Themes are developed using the human figure, landscape and still-life. Individual and class critiques are integrated in studio practices and Photography \& Illustration routines. Master artists of history inform processes and subjects studied. Successful completion of this course can be preparation for Advanced Placement Studio Art: 2-D Design.

| Course Title: | $\underline{\text { Sculpture }}$ | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 105300 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of Foundations of Studio Art or <br> Advanced Placement: Art History | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Education and Training <br> Health Science | Hospitality and Tourism <br> Information Technology <br> Manufacturing <br> Science, Technology, Engineering and <br> Mathematics |  |

Description: In this course, students explore two main processes utilized in creating sculpture. The "additive" process, such as paper mache', where students create an armature and build or "add on" to the piece to create it. The course will also explore the "subtractive" process, where material is removed to create the form, such as plaster carving. Sketching, enlarging and planning processes will be covered to take designs from the beginning stage to the completed form. Historical and contemporary sculptors will be covered and used as inspiration for course assignments.

| Course Title: | Ceramics | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 105300 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of Foundations of Studio Art or <br> Advanced Placement: Art History | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Education and Training <br> Health Science | Hospitality and Tourism <br> Information Technology <br> Manufacturing <br> Science, Technology, Engineering and <br> Mathematics |  |

Description: In this course, students explore the medium of clay through hand-building techniques (pinch, coil, slab) and wheel-throwing processes (centering, opening, raising \& trimming) to create functional clay vessels by hand and through the aid of a pottery wheel. Students will utilize decorative processes by historical and contemporary ceramic artists such as; sgraffito, paper \& wax resists and underglaze inlay (mishima) to embellish the clay's surface. Students completing the class will have a greater understanding of the nature of clay and its function as an art medium.

| Course Title: | Jewelry Design | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 105320 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of Foundations of Studio Art or <br> Advanced Placement: Art History | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Education and Training <br> Health Science | Hospitality and Tourism <br> Information Technology <br> Manufacturing <br> Science, Technology, Engineering and <br> Mathematics |  |

Description: In this course, students will explore the medium of metal fabrication, by specifically using copper and brass. Students will create jewelry (wearable art) through traditional metalworking processes such as hand sawing, drilling, piercing and filing processes.. Students will also try processes that alter the metal's surfaces, such as roll printing and etching to create surface texture. Works by historical and contemporary metalsmiths will be covered in the course and will serve as inspiration when students create a necklace with pendant, earrings and a ring.

| Course Title: | Mixed Media | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 105330 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of Foundations of Studio Art or <br> Advanced Placement: Art History | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Education and Training <br> Health Science | Hospitality and Tourism <br> Information Technology <br> Manufacturing <br> Science, Technology, Engineering and <br> Mathematics |  |

Description: In this course, students will explore the media of paper and fiber. Beginning with contemporary paper artists and their works as inspiration, in conjunction with the visual elements of space and form, students will produce works that explore a chosen theme. The course will also explore how fiber is used by some contemporary artists as their medium of choice. Students may participate in a large installation piece using paper or fiber during the course.

| Course Title: | $\underline{\text { Advanced Placement: Art History }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 105430 | Term(s) Offered: | Full Year |
| Prerequisite(s): | $80 \%$ or higher required in Honors US History: <br> Twentieth Century to the Present or 90\% or higher | Open to Grades: | $10,11,12$ |
| in Honors US History: Nineteenth Century |  |  |  |$\quad$| Requirement(s): |
| :--- |
| Summer work is required for this course. Students are required to complete the designated <br> Advanced Placement exam at their own expense (2020-2021 cost \$95). |
| Career <br> Cluster(s): |
| Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance |
| Government and Public Administration <br> Hospitality and Tourism <br> Human Services <br> Information Technology <br> Science, Technology, Engineering and <br> Mathematics |

Description: The AP Art History course will provide students with an in-depth knowledge of art works and architectural sites across times and cultures. The new APAH course saw a significant reduction in the number of required works - this will afford students a more immersive learning experience. 'Western' as well as 'Global' art pieces will illustrate the human need to create Art throughout time and places. Slideshows, films, group discussions, research papers and presentations, hands-on studio projects, quizzes and exams will comprise the coursework. The overarching theme and design of the course will be preparation for the Advanced Placement exam.

| Course Title: | Advanced Placement <br> Studio Art: Drawing | Credit Value: | 1.0 |
| :---: | :---: | :---: | :---: |
| Course Number: | 105450 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Students must complete Pathway A or Pathway B of the PRHS Art Program Course Sequencing <br> Pathway A: Completion of Foundations of Studio Art and an additional 3 semesters of Art courses. Submit a statement of purpose, a digital portfolio of at least 4 original Art works. <br> Pathway B: Completion of Advanced Placement: Art History and at least 1 additional semester Art course. Submit a statement of purpose, a digital portfolio of at least 4 original Art works. <br> Drawing and Painting (semester courses) are strongly recommended. <br> Students may also register for this course after successful completion of AP Studio Art: 2D Design with the AP Exam score of 3 or higher | Open to Grades: | 11, 12 |
| Requirement(s): | Students are required to complete the National Advanced Placement Studio Art Exam for Drawing at their own expense. Students are required to apply and submit original work to the National Scholastic Art Competition at their own expense. |  |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources Architecture and Construction Arts, Audio/Video Technology and Communications Business Management and Administration | Education and Training Finance <br> Human Services <br> Information Technology |  |

Description: In this course, students create a portfolio demonstrating mastery in Concentration (Sustained Investigation) and Quality (Selected Works) as specified by the standards set by the National AP Board. The Drawing Portfolio is intended to address a very broad interpretation of drawing issues and media. Line quality, light and shade, rendering of form, composition, surface manipulation, the illusion of depth and mark-making are drawing issues that can be addressed through a variety of means, which could include painting, printmaking, mixed media, etc. Abstract, observational and invented works may demonstrate drawing competence. The range of marks used to make drawings, the arrangement of those marks and the materials used to make the marks are endless. Any work submitted in the Drawing Portfolio that incorporates digital or photographic processes must address drawing issues such as those listed previously. There is no preferred (or unacceptable) style or content.

| Course Title: | Advanced Placement Studio Art: 2-D Design | Credit Value: | 1.0 |
| :---: | :---: | :---: | :---: |
| Course Number: | 105440 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Students must complete Pathway A or Pathway B of the PRHS Art Program Course Sequencing <br> Pathway A: Completion of Foundations of Studio Art and an additional 3 semesters of Art courses. Submit a statement of purpose, a digital portfolio of at least 4 original Art works. <br> Pathway B: Completion of Advanced Placement: Art History and at least 1 additional semester Art course. Submit a statement of purpose, a digital portfolio of at least 4 original Art works. <br> Graphic Design and Photography \& Illustration semester courses) are strongly recommended. <br> Students may also register for this course after successful completion of AP Studio Art: Drawing with the AP Exam score of 3 or higher | Open to Grades: | 11, 12 |
| Requirement(s): | Students are required to complete the National Advanced Placement Studio Art Exam for 2-D Design at their own expense. Students are required to apply and submit original work to the National Scholastic Art Competition at their own expense. |  |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training | Finance <br> Health Science <br> Human Services <br> Information Technology <br> Science, Technology, Engineering and <br> Mathematics |  |

Description: In this course, students create a portfolio demonstrating mastery in Concentration (Sustained Investigation) and Quality (Selected Works) as specified by the standards set by National AP Board. This portfolio is intended to address two-dimensional (2-D) design issues. Design involves purposeful decision making about how to use the elements and principles of art in an integrative way. The principles of design (unity/variety, balance, emphasis, contrast, rhythm, repetition, proportion/scale, figure/ground relationships) can be articulated through the visual elements (line, shape, color, value, texture, space). They help guide artists in making decisions about how to organize an image on a picture plane in order to communicate content. Effective design is possible whether one uses representational or abstract approaches to art. For this portfolio, students must demonstrate understanding of 2-D design through any two-dimensional medium or process, including, but not limited to, graphic design, digital imaging, photography, collage, fabric design, weaving, fashion design, fashion illustration, painting and printmaking. Video clips, DVDs, CDs and three-dimensional works may not be submitted.

| Course Title: | $\underline{\text { Advanced Placement Studio Art: 3-D Design }}$ | Credit Value: | $\mathbf{1 . 0}$ |
| :--- | :--- | :--- | :--- |
| Course Number: | 105460 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Students must complete Pathway A or Pathway <br> B of the PRHS Art Program Course Sequencing <br> Pathway A: Completion of Foundations of <br> Studio Art and an additional 3 semesters of Art | Open to Grades: | 12 |
|  | courses. Submit a statement of purpose, a <br> digital portfolio of at least 4 original Art works. |  |  |
| Pathway B: Completion of Advanced <br> Placement: Art History and at least 1 <br> additional semester Art course. Submit a <br> statement of purpose, a digital portfolio of at <br> least 4 original Art works. | Ceramics and Sculpture (semester courses) are <br> strongly recommended. | Students are required to complete the National Advanced Placement Studio Art Exam for <br> 3-D Design at their own expense. Students are required to apply and submit original work <br> to the National Scholastic Art Competition at their own expense. |  |
| Requirement(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance | Health Science <br> Human Services <br> Information Technology <br> Manufacturing <br> Science, Technology, Engineering and <br> Mathematics |  |
| Career Cluster(s): |  |  |  |

Description: In this course, students create a portfolio demonstrating mastery in Concentration (Sustained Investigation) and Quality (Selected Works) as specified by the standards set by the National AP Board. This portfolio is intended to address sculptural issues. Design involves purposeful decision making about using the elements and principles of art in an integrative way. In the 3-D Design Portfolio, students are asked to demonstrate their understanding of design principles as they relate to the integration of depth and space, volume and surface. The principles of design (unity/variety, balance, emphasis, contrast, rhythm, repetition, proportion/scale and occupied/unoccupied space) can be articulated through the visual element (mass, volume, color/light, form, plane, line, texture). For this portfolio, students must demonstrate understanding of 3-D design through any three-dimensional approach, including, but not limited to, figurative or non figurative sculpture, architectural models, metal work, ceramics, glass work, installation, performance, assemblage and 3-D fabric/fiber arts. There is no preferred (or unacceptable) style or content.

## Music

| Credit | Elective Course Title | Course \# | Open to Grades |
| :---: | :---: | :---: | :---: |
|  | Music Honors Program <br> Available offerings for all primary performance based sections of Band, Choir, and Orchestra | $\begin{aligned} & 105510 \\ & 105555 \\ & 105631 \\ & 105641 \\ & 105615 \end{aligned}$ | 9, 10, 11, 12 |
| 1.0 | Marching Band \& Ensemble | 105500 | 9, 10, 11, 12 |
| 0.5 | Dance Team | 105515 | $9,10,11,12$ |
| 0.25 | Color Guard | 105516 | 9, 10, 11, 12 |
| 0.5 | Jazz Ensemble | 105530 | 9, 10, 11, 12 |
| 0.5 | Lazz Band | 105540 | 9, 10, 11, 12 |
| 1.0 | Orchestra | 105550 | 9, 10, 11, 12 |
| 1.0 | Advanced Orchestra |  | 10,11,12 |
| 1.0 | Freshman Choir | 105610 | 9 |
| 1.0 | Concert Choir | 105620 | 10, 11, 12 |
| 1.0 | Chamber Singers | 105630 | 10, 11, 12 |
| 1.0 | Women's Ensemble | 105640 | 10, 11, 12 |
| 0.5 | Harmony \& Theory | 105710 | 11, 12 |
| 0.5 | Introduction to Music Production | 105720 | 9, 10, 11, 12 |
| 0.5 | Music Production |  | 9, 10,11,12 |
| 0.5 | Beginner Piano | 105730 | 9, 10, 11, 12 |
| 0.5 | Piano 2 |  | 9, 10,11,12 |



Inspire and connect people for a lifetime through creating, performing and responding to music.

| Course Title: | Music Honors Program |  |  |
| :--- | :--- | :--- | :--- |
| Course Number: |  | Term(s) Offered: | Full Year |
| Prerequisite(s): | A student must be enrolled as a member of <br> the band, choir, or orchestra program and <br> have written permission from the <br> instructor to partake in this rigorous <br> course addendum. | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications |  |  |

Description: The honors program in music is designed to give the serious high school musician the opportunity to learn advanced musical concepts and dive deeper into the written curriculum. All students who participate in band, choir, or orchestra may choose to take the ensemble for honors credit. Students in the honors music program receive 0.5 additional quality points to the grades they earned in their full-year course. All musicians who partake in the honors music course will be required to complete assignments above and beyond the regular ensemble requirements.

| Course Title: | $\underline{\text { Marching Band \& }}$Ensemble | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 105500 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Open to any student who musically qualifies <br> Attendance at band camp | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications |  |  |

Description: In Band, continued emphasis is placed on the development and appreciation of good musical literature and technical performance skills. All students selecting Band must participate in Marching Band during the fall marching season. During the concert season, the students are divided into performance ensembles based on musical ability. The band directors will assess each student's musicianship for proper placement within the appropriate ensemble. If they qualify musically, students may also play in the Jazz Band or Jazz Ensemble. Attendance at summer band camp is mandatory.

| Course Title: | $\underline{\text { Dance Team }}$ | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 105515 | Term(s) Offered: | Semester 1 |
| Prerequisite(s): | Selection by audition | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications |  |  |

Description: In conjunction with the Marching Band and Ensemble for the first semester, movement is used for the development and appreciation of good music, literature, rhythmic accuracy and technical abilities related to musical interpretation. All students chosen for this course take part in Marching Band and perform at other related events throughout the semester. Additional rehearsal time outside of class is mandatory. Students will perform throughout the first semester.

| Course Title: | Color Guard | Credit Value: | 0.25 |
| :--- | :--- | :--- | :--- |
| Course Number: | 105516 | Term(s) Offered: | Semester 1 |
| Prerequisite(s): | Selection by audition | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications |  |  |

Description: In conjunction with the Marching Band and Ensemble for the first nine weeks, movement is used for the development and appreciation of good music, literature, rhythmic accuracy and technical abilities related to musical interpretation. All students chosen for this course take part in Marching Band and perform at other related events throughout the semester. Additional rehearsal time outside of class is mandatory. This course will transition into a study hall during the second nine-weeks.

| Course Title: | Jazz Ensemble | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 105530 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Selection by audition | Open to Grades: | $9,10,11,12$ |
| Co-requisite(s): | Concurrent enrollment in Band |  |  |
| Notes: | Class meets on cycle day A |  |  |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications |  |  |

Description: The purpose of the high school Jazz Ensemble is to provide able high school musicians with advanced music experiences in the style of big band jazz. Students receive intensive technical experience with written as well as improvised jazz. There are various opportunities to perform at community, school and jazz related festivals and clinics. Group size depends on standard big band instrumentation. Variations in ensemble composition are at the director's discretion.

| Course Title: | Lazz Band | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 105540 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Selection by audition | Open to Grades: | $9,10,11,12$ |
| Co-requisite(s): | Concurrent enrollment in Band |  |  |
| Notes: | Class meets on cycle day B |  |  |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications |  |  |

Description: The purpose of the high school Jazz Band is to provide able high school musicians with advanced music experiences in the style of big band jazz. Students receive intensive technical experience with written as well as improvised jazz. There are various opportunities to perform at community, school and jazz related festivals and clinics. Group size will be as large as possible to accommodate student interest while still keeping a balanced instrumentation. Variations in ensemble composition will be at the director's discretion.

| Course Title: | Orchestra | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 105550 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Proficiency at level 3 or higher music on a <br> stringed instrument | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications |  |  |

Description: Students in Orchestra develop a varied repertoire that includes classical and popular music. Students perform in concerts inside and outside of the district. There is collaboration with the choirs and members of the band program as well. Students participating in orchestra are given an opportunity to audition for an advanced group orchestra experience. This advanced group will perform at various community events and extra performances

| Course Title: | Advanced Orchestra | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: |  | Term(s) Offered: | Full Year |
| Prerequisite(s): | Participation in high school orchestra for at least <br> 1 year. Selection by audition only. | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications |  |  |

Description: Advanced Orchestra is offered for highly trained and motivated violin, viola, cello, and bass performers. This course provides an opportunity for advanced musicians to experience performing more complex and challenging repertoire. Students who participate in this course will be expected to attend all rehearsals and concert performances.

| Course Title: | Freshman Choir | Credit Value: | 1.0 |  |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 105610 |  | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | 9 |  |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications |  |  |  |

Description: This choir is organized as the basic element in the vocal music program and the foundation for more specialized work in the advanced choirs. The class involves sight-reading, tone production, voice placement and other fundamental singing techniques. Attendance at rehearsals and concert performances is required for those who select this course.

| Course Title: | Concert Choir | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 105620 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications |  |  |

Description: Concert Choir is an ensemble class for students who enjoy singing and working in a group. The class objectives include good ensemble singing, improving each individual's vocal technique and high-level performance of quality literature. Class activities include warm-up exercises and rehearsing challenging choral selections for mixed ensembles. Attendance at rehearsals and concert performances is required for those who select this course.

| Course Title: | Chamber Singers | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course <br> Number: | 105630 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Prior participation in a high school curricular <br> choir OR two years participation in a high <br> school music reading ensemble and selection by <br> audition | Open to Grades: | $10,11,12$ |
| Career <br> Cluster(s): | Arts, Audio/Video Technology and Communications |  |  |

Description: Chamber Singers is a highly select ensemble dedicated to choral music written for mixed voices. The course provides the opportunity for the advanced singer to learn and perform a more challenging and diverse repertoire. Emphasis will be placed on tone production, musicality, sight-reading and developing the advanced singer. Attendance at rehearsals and concert performances is required for those who select this course.

| Course Title: | Women's Ensemble | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 105640 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Prior participation in a high school curricular <br> choir OR two years participation in a high <br> school music reading ensemble and selection <br> by audition | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications |  |  |

Description: Women's Ensemble is a highly select ensemble dedicated to choral music written for treble voices in two, three and four parts. This class encompasses a large area of challenging repertoire and sight-reading is essential. Emphasis is placed on tone production, musicality and developing the advanced singer. Attendance at rehearsals and concert performances is required for those who select this course.

| Course Title: | Harmony \& Theory | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 105710 | Term(s) Offered: | Semester |
| Prerequisite(s): | Two years in a PRHS performing arts ensemble <br> OR instructor approval | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications |  |  |

Description: The purpose of Harmony and Theory is to enhance a student's existing musical skills and to provide a better understanding of the foundational mechanics of music. Throughout the semester, students will study notation, scales, key signatures, intervals, cadences, non-chord tones and harmonic analysis of a musical score. Additionally, rhythmic, harmonic and melodic dictation will be taught. This course is strongly recommended for any student considering a music major or minor in college or for any student that wishes to expand their musical base of knowledge.

| Course Title: | $\underline{\text { Introduction to Music Production }}$ | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 105720 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications | Science, Technology, Engineering and Mathematics |  |

Description: Introduction to Music Production is a course designed to introduce students to the basic programs and techniques used in the process of creating and recording music. Class activities include software introduction, music composition, recording and mixing of sounds. Computer and piano background are helpful but not necessary.

| Course Title: | $\underline{\text { Music Production }}$ | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: |  | Term(s) Offered: | Semester |
| Prerequisite(s): | Introduction to Music Production or Instructor <br> Approval | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications | Science, Technology, Engineering and Mathematics |  |

Description: Music Production is a course designed to allow students to expand on their prior knowledge received in Introduction to Music Production. This class will focus on more advanced projects and the production and mixing side of Music Technology. Students will have the opportunity to display their creations in the form of public performances. Examples include PRHS athletic warmups or in game music, music during PRTV, and music during PRHS assemblies and pep rallies.

| Course Title: | Beginner Piano | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 105730 | Term(s) Offered: | Semester |
| Prerequisite(s): | No prior piano experience | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications |  |  |

Description: Piano is a course designed to introduce the student to the proper playing of the piano and simple song performance. Music notation, hand position and rhythmic accuracy are emphasized. This course is for students who have had no prior piano experience.

| Course Title: | $\underline{\text { Piano 2 }}$ | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: |  | Term(s) Offered: | Semester |
| Prerequisite(s): | Beginner Piano or Instructor Approval | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications |  |  |

Description: Piano 2 is a course designed to allow students to expand on the prior piano knowledge gained in Beginner Piano. Songs with more challenging melodic, harmonic and rhythmic structures will be introduced and proper piano technique will be further developed. Additionally, students will gain a deeper understanding of some foundational skills which will enhance their overall knowledge of music.

## World Languages

| Credit | Elective Course Title | Course \# | Open to Grades |
| :---: | :--- | :--- | :--- |
| 1.0 | $\underline{\text { French I }}$ | 106110 | $9,10,11,12$ |
| 1.0 | $\underline{\text { French II }}$ | 106120 | $9,10,11,12$ |
| 1.0 | $\underline{\text { French III }}$ | 106130 | $9,10,11,12$ |
| 1.0 | $\underline{\text { Honors French III }}$ | 106135 | $9,10,11,12$ |
| 1.0 | $\underline{\text { French IV }}$ | 106140 | $10,11,12$ |
| 1.0 | $\underline{\text { Honors French IV }}$ | 106145 | $10,11,12$ |
| 1.0 | $\underline{\text { AP French V }}$ | 106155 | 11,12 |
| 1.0 | $\underline{\text { German I }}$ | 106210 | $9,10,11,12$ |
| 1.0 | $\underline{\text { German II }}$ | 106220 | $9,10,11,12$ |
| 1.0 | $\underline{\text { German III }}$ | 106230 | $9,10,11,12$ |
| 1.0 | $\underline{\text { Honors German III }}$ | 106235 | $9,10,11,12$ |
| 1.0 | $\underline{\text { Honors German IV }}$ | 106245 | $10,11,12$ |
| 1.0 | $\underline{\text { AP German V }}$ | 106255 | 11,12 |
| 1.0 | $\underline{\text { Spanish I }}$ | 106310 | $9,10,11,12$ |
| 1.0 | $\underline{\text { Spanish II }}$ | 106320 | $9,10,11,12$ |
| 1.0 | $\underline{\text { Spanish III }}$ | 106330 | $9,10,11,12$ |
| 1.0 | $\underline{\text { Honors Spanish III }}$ | 106335 | $9,10,11,12$ |
| 1.0 | $\underline{\text { Spanish IV }}$ | 106340 | $10,11,12$ |
| 1.0 | $\underline{\text { Honors Spanish IV }}$ | 106345 | $10,11,12$ |
| 1.0 | $\underline{\text { AP Spanish V }}$ | 106355 | 11,12 |
|  |  |  |  |

## Sequencing of World Language Courses

Students at Pine-Richland High School may choose to be in the World Language Program or the Honors/Advanced Placement World Language Program.

The World Language Program is designed for students who wish to study a language without taking the AP Exam. Three or four years of study in the World Language Program are generally adequate to satisfy entrance requirements at most colleges. This program will also meet the needs of students who wish to use a language in their personal and professional lives.

The Honors/Advanced Placement level meets the same goals as above and also prepares students for the AP Exam. The honors level courses require students to work at a faster pace, learn more vocabulary and master more sophisticated grammar. Homework at this level emphasizes analysis and there are more speaking, writing, reading and listening activities. The majority of the Honors/AP courses are conducted in the target language.

## Typical Sequencing of Core Academic Courses

Below are typical sequences that students progress through during their high school careers. However, students have the ability to move between these pathways by meeting the prerequisites for future courses.

## World Language Pathways

| Freshman | Sophomore | Junior | Senior |
| :---: | :---: | :---: | :---: |
| Course | Course | Course | Course |
| French II | Honors French III | Honors French IV | AP French V |
|  | French III | French IV |  |
| French I | French II | Honors French III | Honors French IV |
|  |  | French III | French IV |
| Spanish II | Honors Spanish III | Honors Spanish IV | AP Spanish V |
|  | Spanish III | Spanish IV |  |
| Spanish I | Spanish II | Honors Spanish III | Honors Spanish IV |
|  |  | Spanish III | Spanish IV |
| German II | Honors German III | Honors German IV | AP German V |
|  | German III |  |  |
| German I | German II | Honors German III | Honors German IV |
|  |  | German III |  |


"Inspiring students to communicate, connect and explore our world through experience and engagement."

| Course Title: | French I | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106110 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Arts, Audio/Video Technology and Communications <br> Education and Training | Health Science <br> Hospitality and Tourism <br> Transportation, Distribution and Logistics |  |

Description: This course is an introduction to French language and culture. Instruction of basic skills in the active use of reading, writing, listening and speaking are developed through thematic vocabulary. Students engage in a variety of activities to reinforce instruction. There is an emphasis on speaking and writing in the present tense. Culture is integrated throughout the course.

| Course Title: | French II | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106120 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of French I with 70\% or higher | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Arts, Audio/Video Technology and Communications <br> Education and Training | Health Science <br> Hospitality and Tourism <br> Transportation, Distribution and Logistics |  |

Description: This course develops and reinforces the basic skills previously acquired in French I with emphasis on grammar review and vocabulary building. Thematic vocabulary includes school, health, travel, family and communities. Culture is integrated throughout the course.

| Course Title: | French III | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106130 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of French II with 70\% or higher | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Arts, Audio/Video Technology and Communications <br> Education and Training | Hospitality and Tourism <br> Transportation, Distribution and Logistics |  |

Description: In order to be successful in this class, students must have mastered the following skills: conjugation of the present tense including irregular verbs, object pronouns and vocabulary production. Students must be able to create and use the passé composé with both regular and irregular verbs. This course includes a thorough review of French II grammar and vocabulary. Students learn to balance the imparfait verb tense with passé composé and learn the passé simple (a verb tense only used in writing). Thematic units of study include the expression of self, the role of family and relationships. Authentic texts include classic French tales, French poetry and the story La Belle et la Bête.

| Course Title: | Honors French III | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106135 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of French II with 90\% or higher | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Arts, Audio/Video Technology and Communications <br> Education and Training | Hospitality and Tourism <br> Transportation, Distribution and Logistics |  |

Description: Successful students must be skilled in present tense formation of regular, irregular and reflexive verbs, immediate future tense, past tense formation and use of object pronouns. Thematic vocabulary includes identity, family/community, everyday life, beauty and the world. Authentic texts and audio are used for listening and reading comprehension. The honors course places a greater emphasis on listening and reading comprehension of nonfiction material, writing and speaking in the interpersonal and presentational modes of communication (emails, dialogs and informative essays). Additionally, cultural comparisons are made throughout the course.

| Course Title: | $\underline{\text { French IV }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106140 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of French III with 80\% or higher or <br> completion of Honors French III with 70\% or <br> higher | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications <br> Education and Training <br> Health Science | Information Technology <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics |  |

Description: In order to be successful in French IV, students have mastered the following skills: conjugations and applications of the present and past tenses, understanding of the difference between passé composé and imparfait and most of the object pronouns. This course reviews French III grammar and vocabulary. Students learn the future and conditional verb tenses. Thematic units of study include health and wellness, the ideal companion, the roles of children and parents as well as tolerance. French IV places a greater emphasis on listening comprehension and there are two speaking/listening tests per quarter. Authentic texts include a variety of classic French texts such as the short stories of Petit Nicolas, Le Petit Prince and French films such as Papillon.

| Course Title: | Honors French IV | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106145 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of French III with 90\% or higher or <br> completion of Honors French III with an 80\% or <br> higher | Open to Grades: | $10,11,12$ |
| Career <br> Cluster(s): | Arts, Audio/Video Technology and Communications <br> Education and Training <br> Health Science | Information Technology <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics |  |

Description: This course is designed for students who intend to take the Advanced Placement exam. It is taught as a precursor to this exam. Students continue to explore French literature by reading and discussing several authors and their works. Special emphasis is placed on Les Adventures du Petit Nicolas and Le Petit Prince, which serve as the students' introduction to the French novel. Students use the target language to express their ideas, opinions and feelings at more advanced and mature levels.

| Course Title: | Advanced Placement French V | Credit Value: | 1.0 |
| :---: | :---: | :---: | :---: |
| Course <br> Number: | 106155 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of French IV with $90 \%$ or higher or completion of Honors French IV with an $80 \%$ or higher | Open to Grades: | 11, 12 |
| Requirement(s): | Students are required to complete the designated Advanced Placement exam at their own expense (2020-2021 cost \$95). |  |  |
| Career <br> Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: In order to be successful in this class, students must have mastered most tenses in the indicative, the subjunctive, relative pronouns and advanced conversational skills. This course will introduce the student to the plus-queparfait and conditionel passé verb tenses. Thematic units include stereotypes, bullying, family and education. Authentic texts include the novels Jean de Florette and La Symphonie Pastorale, some short stories and the French films Les Choristes, Le Diner de Cons and Le Scaphandre et le Papillon.

| Course Title: | $\underline{\text { German I }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106210 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Education and Training <br> Hospitality and Tourism | Transportation, Distribution and Logistics |  |

Description: This course provides the learner with an exciting introduction to German language and culture by focusing on the beginning stages of communication. Fundamental grammar and communication skills include: subject/verb agreement; regular present tense verb conjugation; stem changing verbs; use of haben and sein; personal pronouns; word order of questions and statements; noun gender and plurals; definite and indefinite articles; the nominative and accusative case. Thematic units of study include: free time activities; telling time; family; school and school system; weather and calendar; cities and city living; geography and maps; food and restaurants. Authentic texts and resources used for this class include short stories and poems and an ongoing review of current events and culture from the German speaking world.

| Course Title: | German II | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 106220 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of German I with $70 \%$ or higher <br> and teacher recommendation | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Arts, Audio/Video Technology and Communications <br> Education and Training | Hospitality and Tourism <br> Transportation, Distribution and Logistics |  |

Description: In order to be successful in this class, students must have mastered the following skills: subject/verb agreement; regular present tense verb conjugation; stem changing verbs; use of haben and sein; personal pronouns; word order of questions and statements; noun gender and plurals; definite and indefinite articles; nominative and accusative cases. New grammar concepts include uses of dative case, conversational past tense, commands and separable prefix verbs. Thematic units of study include clothing and colors; shopping; gift giving and special occasions; house and living; free time activities and entertainment; sports; body and health; travel and vacations and music and instruments. Authentic texts and resources used for this class include short stories and poems and news sites and newspaper for ongoing study of current events and culture from the German speaking world.

| Course Title: | German III | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106230 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of German II with 70\% or higher <br> and teacher recommendation | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Arts, Audio/Video Technology and Communications <br> Education and Training | Hospitality and Tourism <br> Transportation, Distribution and Logistics |  |

Description: Students in this course continue to improve their speaking, writing, listening and reading skills. Thematic units of study include camping, personal hygiene, telling stories, animals, tableware, foods, festivals, electronics, careers and cars. Grammar concepts include: comparison of adjectives, reflexive verbs, narrative past tense, past tense of modal verbs, genitive case, dative and accusative prepositions, past perfect tense, adjective endings and conjunctions.

| Course Title: | Honors German III | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106235 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of German II with 90\% or higher <br> and teacher recommendation | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Arts, Audio/Video Technology and Communications <br> Education and Training <br> Hospitality and Tourism | Information Technology <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

Description: Students in this course continue to improve their speaking, writing, listening and reading skills. Thematic units of study include camping, personal hygiene, telling stories, animals, tableware, foods, festivals, electronics, careers, cars, family members, bikes, games, dashboards and hiking. Grammar concepts include: comparison of adjectives, reflexive verbs, narrative past tense, past tense of modal verbs, genitive case, dative and accusative prepositions, past perfect tense, adjective endings, conjunctions, "when," imperatives, comparatives, superlatives and $d a$ - compounds. Students will read a German children's novel and complete literature activities plus a reading project.

| Course Title: | Honors German IV | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106245 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of German III 90\% or higher or <br> completion of Honors German III with an 80\% <br> or higher and teacher recommendation | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Education and Training | Government and Public Administration <br> Hospitality and Tourism <br> Transportation, Distribution and Logistics |  |

Description: In order to be successful in this class, students must have mastered the following skills: use of present, past and future tenses; stem changing and separable prefix verbs; use of haben, sein and werden; modal verbs; personal and possessive pronouns; word order of questions and statements; noun gender and plurals; definite and indefinite articles; nominative, accusative and dative cases; prepositions; conjunctions; and adjective endings. Course content includes a study of German history and culture from 1919 until the present. Time periods include: the Weimar Republic; Hitler's takeover of power; the Third Reich; World War Two and the Resistance; Postwar Germany; the German Democratic Republic; the Federal Republic of Germany; the Reunification; and Germany in the European Union of today. Authentic texts and resources used for this class include: short literature; film; artwork; songs; musical pieces; news articles and clips; and documentaries. Additionally, we will review current events from the German speaking world on an ongoing basis.

| Course Title: | Advanced Placement <br> German V | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106255 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Honors German IV with an $80 \%$ <br> or higher and teacher recommendation | Open to Grades: | 11,12 |
| Requirement(s): | Students are required to complete the designated Advanced Placement exam at their own <br> expense (2020-2021 cost \$95). | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science |
|  |  |  |  |

Description: This is a high-level, intense language course designed to prepare students for the Advanced Placement exam and college-level study. The course emphasizes vocabulary expansion, extemporaneous speaking and lengthier writing, listening at native-speaking speed and reading lengthy authentic texts. AP German V is conducted in German and students pledge to use only German in class to the best of their abilities. Themes addressed in this course include families in different societies, the influence of language and culture on identity, influences of beauty and art, science and technology in our lives, factors that impact our quality of life and global challenges.

| Course Title: | Spanish I | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106310 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources | Education and Training |  |

Description: This course provides the learner with an exciting introduction to the Spanish language and culture by focusing on the beginning stages of communication. Reading, writing, speaking and listening skills are developed through the study of relevant thematic, such as hobbies, school, food, family and culture. Grammatical units include basic verb conjugation, gender of nouns, adjective agreement and sentence structure. Culture and practice of the language are woven throughout the units of study in order to prepare students with the tools to continue succeeding in the Spanish program.

| Course Title: | Spanish II | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106320 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Spanish I with 70\% or higher <br> and teacher recommendation | Open to Grades: | 9,10,11,12 |
| Career Cluster(s): | Education and Training |  |  |

Description: In order to be successful in this class, students must have studied the following skills: conjugations of the present tense, basic sentence structure and vocabulary recognition. Thematic units of study include school, extracurricular activities, daily routines, directions, cities, childhood and celebrations. Grammar topics include: irregular present tense, past tenses, object pronouns, commands and present progressive.

| Course Title: | Spanish III | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106330 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Spanish II with 70\% or higher <br> and teacher recommendation | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources | Health Science |  |

Description: In order to be successful in this class, students must have studied the following skills: conjugation of the present tense, complex sentence structure and vocabulary production. Students must be able to apply past tense in context correctly. Thematic units of study include a thorough review of Spanish II grammar and vocabulary, news, current events, TV, movies, food, entertainment and health. New grammar topics include: conjugating the regular and irregular preterite and imperfect tenses, the imperfect progressive, the present perfect and the negative tú commands.

| Course Title: | Honors Spanish III | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106335 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Spanish II with 90\% or higher <br> and teacher recommendation | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Arts, Audio/Video Technology and Communications <br> Health Science | Hospitality and Tourism <br> Law, Public Safety, Corrections and Security <br> Transportation, Distribution and Logistics |  |

Description: In order to be successful in this class, students must have studied the following skills: conjugations of the present tense and past tense, high level of sentence structure and accurate use of vocabulary and grammar. Thematic units of study include: hotel, airport, professions and careers, the environment, the outdoors, art and health. Grammar topics include: present perfect, conditional, present of the subjunctive and future. Authentic texts and resources used for this class include online newspapers and magazines. The Honors level places a greater emphasis on writing short essays, reading, oral assessments and speaking and cultural knowledge.

| Course Title: | Spanish IV | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106340 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Spanish III with 80\% or higher <br> or completion of $\underline{\text { Honors Spanish III with 70\% }}$ <br> or higher and teacher recommendation | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications <br> Business Management and Administration | Health Science <br> Information Technology |  |

Description: In order to be successful in this class, students must have studied the following skills: conjugations and contextualized uses of the present and past tenses, complex sentence structure and accurate production of vocabulary and grammar. Thematic units of study include: outdoor activities, competitions, art, health and wellness, relationships, job searching and future goals. Students will be introduced to the perfect tense and the subjunctive mood in the present tense. Authentic texts and resources used for this class include short stories and articles.

| Course Title: | $\underline{\text { Honors Spanish IV }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 106345 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Spanish III with 90\% or higher <br> or completion of Honors Spanish III with 80\% <br> or higher and teacher recommendation | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Government and Public Administration | Hospitality and Tourism <br> Information Technology |  |

Description: In order to be successful in this class, students must have studied the following skills: conjugations of the present, past, future, conditional, present of the subjunctive and present perfect tenses. Thematic units of study include: work and community, future events, myths and realities, Spanish-speaking cultures and high level grammar units such as comparing the past tenses and the use of the subjunctive mood. Texts and resources used for this class include authentic readings from books and short stories. The Honors level places a greater emphasis on writing complex essays that analyze literature, reading authentic literature, oral assessments and cultural knowledge.

| Course Title: | $\underline{\text { Advanced Placement }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 106355 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Spanish IV with $90 \%$ or higher <br> or completion of $\underline{\text { Honors Spanish IV with } 80 \%}$ <br> or higher and teacher recommendation | Open to Grades: | 11,12 |
| Requirement(s): | Summer work is recommended for this course. Students are required to complete the <br> designated Advanced Placement exam at their own expense (2020-2021 cost \$95) |  |  |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications <br> Education and Training <br> Government and Public Administration | Health Science <br> Human Services |  |

Description: In order to be successful in this class, students must have mastered the following skills: all tenses in the indicative, all commands, present subjunctive, extensive vocabulary production and advanced conversational skills. Thematic units of study include: stereotypes, the body, habits and dependencies, global perspectives, extended family, work and leisure. Authentic texts and resources used for this class include authentic readings from novels, books, newspapers, online resources and short stories. This course prepares students for the AP exam. There is a summer writing requirement for this course. Students are expected to write to the instructor a weekly diary via email in order to maintain their language proficiency. This is a challenging, high-level language course designed to prepare students for the Advanced Placement exam and study at the college level.

## Business and Computer Applications

| Credit | Elective Course Title | Course $\#$ | Open to Grades |
| :---: | :--- | :--- | :---: |
| $\mathbf{0 . 5}$ | Microsoft Applications for Business | 107110 | $9,10,11,12$ |
| $\mathbf{0 . 5}$ | Business Communications and <br> Presentations | 107130 | $9,10,11,12$ |
| $\mathbf{0 . 5}$ | Photoshop |  |  |
| $\mathbf{0 . 5}$ | Web Page Design | 107220 | $9,10,11,12$ |
| $\mathbf{0 . 5}$ | Career \& Professional Development | 107310 | $9,10,11,12$ |
| $\mathbf{0 . 5}$ | Personal Finance | 107330 | $10,11,12$ |
| $\mathbf{0 . 5}$ | Honors Finance and Investment | 107400 | $10,11,12$ |
| $\mathbf{0 . 5}$ | Marketing | 107415 | 11,12 |
| $\mathbf{0 . 5}$ | International Business and Ethics | 107420 | $10,11,12$ |
| $\mathbf{0 . 5}$ | Entrepreneurship | 107430 | $10,11,12$ |
| $\mathbf{0 . 5}$ | Sports \& Entertainment Management | 107440 | $10,11,12$ |
| $\mathbf{1 . 0}$ | Accounting 1 | 107450 | $10,11,12$ |
| $\mathbf{1 . 0}$ | Honors Accounting 2 | 107510 | $10,11,12$ |

The Business and Computer Applications curriculum is comprehensive in that it offers training in technology, communications and real life business experiences through hands-on projects and simulations. The skills achieved through these courses can be utilized for personal use and college preparation.

## Business and Computer Science



| Course Title: | Microsoft Applications for Business | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 107110 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $9,10,11,12$ |
| $\underline{\text { Career }}$ | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics <br> Transportation, Distribution and Logistics |  |

Description: Microsoft Excel is a powerful tool that has become entrenched in virtually all professions worldwide. For students who are planning to major in any business field in college, knowledge of spreadsheets and databases is essential. Using Microsoft Excel, students learn to manipulate data, implement functions, calculate numerical data and present professional results using tables and charts. In addition, students integrate Excel with the mail merge feature of Microsoft Word to create customized bulk mailings and labels. In the latter part of the course, Microsoft Access is used as an information management tool allowing users to create databases to store various kinds of information for reference, reporting and analysis.

| Course Title: | Business Communications \& Presentations | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 107130 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $9,10,11,12$ |
| Career | Agriculture, Food and Natural Resources <br> Cluster(s): | Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics <br> Transportation, Distribution and Logistics |

Description: This course includes presentation and professional communications skills needed for academic and professional environments. Students learn effective techniques for planning, preparing and creating professional-quality presentations and business documents such as memos, letters and emails. A variety of presentation and communication tools including Microsoft PowerPoint and Google Applications are learned and applied within project-based scenarios. Students will practice teamwork and collaboration as they work together on projects. Additionally, students gain practice in oral presentations while developing a positive professional image needed for high school and college projects, college admissions interviews, job interviews and the professional workplace.

| Course Title: | Photoshop | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 107220 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $9,10,11,12$ |
| Career <br> Cluster(s): | Arts, Audio/Video Technology and Communications | Marketing |  |

Description: Photoshop is an image-editing program used by graphic designers, photographers, illustrators and Webmasters to create and modify digital images. Students use painting and editing tools to create original artwork, manipulate color images and retouch photographs as well as manipulating digital images designed for print and Internet distribution.

| Course Title: | Web Page Design | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 107310 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $9,10,11,12$ |
| Career | Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training | Information Technology <br> Marketing <br> Science, Technology, Engineering and Mathematics |  |

Description: This course provides a comprehensive introduction to the essentials of web design using a variety of development tools including Google Sites and WordPress. Students will create professional-looking, multi-page websites as they plan and design pages enhanced with graphics, images and multimedia. Students learn to critically evaluate website quality and how to create and manipulate web-ready images.

| Course Title: | Career \& Professional Development | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 107330 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $10,11,12$ |
| Career | Agriculture, Food and Natural Resources <br> Cluster(s): | Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics <br> Transportation, Distribution and Logistics |

Description: The college planning and career development process is unique to every person and evolves throughout one's life. This project-based course is designed to guide students through the process of investigation and the development of a college and career plan. Using research and decision-making skills, students will explore education and career information to explore areas of personal interest and set realistic goals. The projects of the course require students to perform extensive research, evaluate job market information, identify educational and degree requirements, research majors, evaluate colleges, navigate the college application process and learn job-seeking skills. The first $60 \%$ of the course focuses specifically on the college planning and application process making this course ideal for sophomore and junior students. The culminating project requires students to prepare a goal-setting resume and perform a mock job interview for their first professional position.

| Course Title: | Personal Finance | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 107400 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $10,11,12$ |
| Career | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics <br> Transportation, Distribution and Logistics |  |

Description: Personal Finance is designed to provide students with the knowledge and skills necessary for successful money management. Making wise decisions and establishing short and long-term financial goals are essential "life skills" that young people often fail to benefit from during their early wealth-building years. Students learn to plan for their future through in-depth lessons on money management, banking, budgeting, credit, paychecks, consumer shopping, basic saving and investing concepts and making major purchases such as education, automobiles and housing. Students participate in classroom activities, banking simulations and hands-on projects to fully integrate real-life applications. This course is recommended for all students regardless of their future career paths.

| Course Title: | Honors Finance \& Investment | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 107415 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of Personal Finance with an $80 \%$ or <br> higher or teacher recommendation | Open to Grades: | 11,12 |
| Career | Business Management and Administration <br> Finance <br> Government and Public Administration | Hospitality and Tourism <br> Marketing <br> Transportation, Distribution and Logistics |  |

Description: Honors Finance \& Investment expands upon basic financial knowledge acquired in the Personal Finance course. Finance is defined as the management of money. Topics include calculating payroll, the role of taxes, borrowing money, retirement planning, investing in the stock market, bonds, mutual funds and risk management through insurance. Students participate in simulations including a Virtual Stock Market and hands-on projects. This course provides a breadth of knowledge in finance for students interested in building their future wealth and those interested in business or finance as a career.

| Course Title: | Marketing | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 107420 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $10,11,12$ |
| Career | Business Management and Administration <br> Finance | Hospitality and Tourism <br> Marketing |  |

Description: Marketing is the process of developing, promoting and distributing goods and/or services to the satisfaction of the customer. Students explore the basic marketing mix (product, price, place and promotion) as well as market research, advertising and selling techniques in the application of classroom concepts with hands-on projects. Students understand the importance of the sales and marketing functions in today's business environment.

| Course Title: | International Business \& Ethics | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 107430 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $10,11,12$ |
| Career | Business Management and Administration <br> Finance <br> Government and Public Administration | Hospitality and Tourism <br> Marketing <br> Transportation, Distribution and Logistics |  |

Description: This project-based course provides an introduction to the national and global aspects of international business. Students will perform research to explore the cultural, economic, political and legal environments of global business including an overview of the risks, challenges and opportunities inherent to competing in the global marketplace. Throughout the course, students research and present global affairs updates to explore the impact of international issues on the domestic and global business environments.

| Course Title: | Entrepreneurship | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 107440 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Business Management and Administration <br> Finance | Hospitality and Tourism <br> Marketing |  |

Description: Learn what it takes to be a successful small business owner! Entrepreneurship takes students through the process of conceiving, creating and managing their own business. Students formulate and develop a business plan to describe the organization, marketing strategies and financial requirements of their new business based on the type of small business they would like to own. Finance, accounting, marketing and management issues are addressed from an entrepreneurial perspective. If you've ever dreamed of being your own boss and running your own company, this is the course for you!

| Course Title: | Sports \& Entertainment Management | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 107450 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $10,11,12$ |
| Career <br> Cluster(s): | Business Management and Administration <br> Hospitality and Tourism | Marketing |  |

Description: This course is designed for students who have an interest in the sports and entertainment industry. The course is interdisciplinary in nature with a focus on the management of venues, sports, musicians, artists and events. Students explore the content areas of college and professional sports, event planning, sponsorships, public image, endorsements, legal issues and the entertainment industry. Class activities include hands-on assignments, team activities, critical thinking exercises and speakers. The course is designed to provide future managers with a solid business foundation as well as knowledge of the unique facets of the Sports and Entertainment Industry. This course will focus on the "business" behind the sport with an emphasis on the four functions of management.

| Course Title: | Accounting 1 | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 107510 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Algebra 1 with a 70\% or higher | Open to Grades: | $10,11,12$ |
| Career | Business Management and Administration <br> Finance <br> Government and Public Administration | Marketing <br> Transportation, Distribution and Logistics |  |

Description: This course is a must for students who plan to major in Accounting, Marketing, Business Management or Finance in college! All college majors related to business require at least two college accounting courses. Build a solid foundation in accounting. Computer integration is incorporated using Microsoft Excel and an online learning platform.

| Course Title: | Honors Accounting 2 | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course <br> Number: | 107525 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Accounting 1 with an 80\% or <br> higher | Open to Grades: | 11,12 |
| Career <br> Cluster(s): | Business Management and Administration <br> Finance <br> Government and Public Administration | Marketing <br> Transportation, Distribution and Logistics |  |

Description: Accounting 2 expands upon basic accounting principles, partnership/corporation accounting, debt financing, payroll procedures, cost accounting and financial statement analysis. Microsoft Excel is used to reinforce computerized accounting practices as students complete projects and simulations. Together, Accounting 1 and Accounting 2 provide a strong foundation of accounting principles required for any college business program.

## Computer Science

| Credit | Elective Course Title | Course \# | Open to Grades |
| :---: | :--- | :---: | :---: |
| 0.5 | HTML \& JavaScript | 107610 | $9,10,11,12$ |
| 1.0 | Honors Computer <br> Programming | 107623 | $9,10,11,12$ |
| 0.5 | Mobile Application Design | 107631 | $10,11,12$ |
| 1.0 | Advanced Placement Computer | 107662 | $10,11,12$ |
|  | $\underline{\text { Science A }}$ |  |  |

## Computer Science Pathway

A wide variety of sequence options are available based on the interest and readiness of each student. Listed below are the most common sequence of course selections.

| Freshman | Sophomore | Junior | Senior |
| :---: | :---: | :---: | :---: |
| Course | Course | Course | Course |
| $\frac{\text { HTML \& JavaScript }}{\text { (sem) }}$ | Mobile Application Design (sem) | Honors Computer Programming | Advanced Placement Computer Science A |
| Honors Computer Programming | Advanced Placement Computer Science A | $\frac{\text { Mobile Application }}{\text { Design (sem) }}$ |  |
| $\frac{\text { HTML \& JavaScript }}{\underline{\text { (sem) }}}$ | Honors Computer Programming | AP Computer Science A | $\frac{\text { Mobile Application }}{\text { Design (sem) }}$ |
|  | HTML \& JavaScript (sem) | $\frac{\text { Honors Computer }}{\text { Programming }}$ | Advanced Placement Computer Science A |


| Course Title: | $\underline{\text { HTML \& JavaScript }}$ | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 107610 | Term(s) Offered: | Semester |
| Recommended: | Completion of Algebra 1 with an $80 \%$ or <br> higher | Open to Grades: | $9,10,11$, <br> 12 |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications <br> Education and Training <br> Information Technology | Marketing <br> Science, Technology, Engineering and Mathematics |  |

Description: This course is the first for students interested in computer programming and is designed to expand your background knowledge of web technologies. HTML5 is a markup language for structuring and presenting content for the World Wide Web and a core technology of the Internet. Students will learn to program websites complete with color, graphics links, lists, tables and forms. Cascading Style Sheets (CSS) are programmed as a primary tool for formatting pages for a consistent design. Students will also code dynamic JavaScript elements including pop-up windows, buttons, alerts, basic games and form processing.

| Course Title: | Honors Computer Programming | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 107623 | Term(s) Offered: | Full Year |
| Recommended: | It is recommended that students take HTML <br> \& JavaScript. | Open to Grades: | $9,10,11$, |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics <br> Transportation, Distribution and Logistics |  |

Description: Honors Computer Programming will give you the tools you need to think like a computer scientist. The Python programming language will be used to cover a wide range of coding concepts. Python provides a way to develop code that is easy to create and understand. Participants of this course will master essential programming techniques including decisions, loops, lists and files. Students will utilize the Pygame module to develop game applications. The course will also include concepts that are not focused solely on programming, including the global impact of computing on society and computational thinking.

| Course Title: | Mobile Application Design | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 107631 | Term(s) Offered: | Semester |
| Prerequisite(s): | $\underline{\text { HTML \& JavaScript is recommended }}$ | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics <br> Transportation, Distribution and Logistics |  |

Description: Students will develop logic and problem-solving skills as they learn how to use the Swift programming language to develop functional apps and games for an iPhone.

The different steps required to develop a mobile game and apps will be explored using the same tools as industry professionals. In the process, students will learn fundamentals coding skills as they conceptualize and design User Interfaces (UIs) that consider User Experience (UX).

| Course Title: | $\underline{\text { Advanced Placement Computer Science }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 107662 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Honors Computer <br> Programming | Open to Grades: | $10,11,12$ |
| Requirement(s): | Students are required to complete the designated Advanced Placement exam at their own <br> expense (2020-2021 cost \$95) |  |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics <br> Transportation, Distribution and Logistics |  |

Description: Advanced Placement Computer Science is a college-level equivalent course focused on Object-Oriented Programming. This course emphasizes design issues that make programs understandable, adaptable and when appropriate, reusable. At the same time, the development of useful computer programs and classes is used as a context for introducing other important concepts in computer science, including the development and analysis of algorithms, the development and use of fundamental data structures and the study of standard algorithms and typical applications. The course utilizes the Java programming language.

## Engineering and Technology



Within the Engineering and Technology Department course offerings, there are several curriculum pathways that students can explore as they progress from grades 9-12.
*Pathways are designed to help focus student course selections and connect students to a viable career and/or a post-secondary program of study.
*Pathways do not have to be followed. These pathways reflect suggested course sequences for specific post-secondary goals. The pathways are suggested but remain flexible to student choice.

| Pathways | 9th Grade | 10th Grade | 11th Grade | 12th Grade |
| :---: | :---: | :---: | :---: | :---: |
| Architecture Pathway | Introduction to <br>  <br> Engineering | Computer Aided Design | Architectural Design | Advanced <br> Architecture |
| Engineering Pathway | Introduction to <br>  <br> Engineering | Computer Aided <br> Design <br> Systems <br> Engineering | Advanced Systems <br> Engineering or Computer Aided Manufacturing | Honors Research <br> Design and <br> Manufacturing or Engineering Design |
| Materials/ Manufacturing Pathway | Introduction to <br>  <br> Engineering | Materials <br> Processing or <br> Robotics <br> Engineering | Systems Engineering | Advanced Systems Engineering |
| Video Production Pathway | Introduction to <br>  <br> Engineering | Video Production | Advanced Video Production | TV Production (PRTV) |


| Credit | Elective Course Title | Course <br> $\#$ | Open to Grades |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| 1.0 | $\underline{\text { Introduction to Technology \& Engineering }}$ | 108101 | $9,10,11,12$ |
| 1.0 | $\underline{\text { Svstems Engineering }}$ | 108219 | $10,11,12$ |
| 1.0 | $\underline{\text { Advanced Systems Engineering }}$ | 108239 | 11,12 |
| 1.0 | $\underline{\text { Materials Processing }}$ | 108319 | $10,11,12$ |
| 1.0 | $\underline{\text { Computer Aided Design }}$ | 108429 | $10,11,12$ |
| 1.0 | Engineering Design | 108519 | 11,12 |
| 1.0 | $\underline{\text { Architectural Design }}$ | 108539 | 11,12 |
| 1.0 | $\underline{\text { Advanced Architecture }}$ | 108550 | 12 |
| 1.0 | $\underline{\text { Video Production }}$ | 108619 | $9,10,11,12$ |
| 1.0 | $\underline{\text { Advanced Video Production }}$ | 108631 | $10,11,12$ |
| 1.0 | TV Production (PRTV) | 108640 | 10,12 |
| 1.0 | $\underline{\text { Robotics Engineering }}$ | 108719 | $10,11,12$ |
| 1.0 | Computer Aided Manufacturing (CAM) | 108721 | 11,12 |
|  |  |  |  |
|  | (PLTW): $\underline{\text { Pathway to Engineering The Project }}$ |  |  |
|  | Lead the Way courses below(excluding Honors |  |  |


|  | Research Design and Manufacturing ), are <br> being phased out. IED will no longer be <br> offered. The remaining courses will be <br> available only to those who have previously <br> enrolled in a PLTW course. |  |  |
| :---: | :--- | :--- | :--- |
| 1.0 | Principles of Engineering (POE) | 108810 |  |
| 1.0 | Civil Engineering and Architecture (CEA) | 108815 | $10,11,12$ |
| 1.0 | Computer Integrated Manufacturing (CIM) | 108820 | 11,12 |
| 1.0 | Conors Research Design and Manufacturing | 108826 | 11,12 |

Pine-Richland High School currently offers a series of courses in PLTW's Pathway to Engineering (PTE). PTE provides students with the opportunity to learn and apply the design process, acquire strong teamwork and communication proficiency and develop organizational, critical thinking and problem solving skills.

Along the way students investigate a variety of careers in STEM fields.

| Course Title: | Introduction to <br> Technology <br> \& Engineering | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 108101 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Education and Training | Manufacturing <br> Science, Technology, Engineering and Mathematics <br> Transportation, Distribution and Logistics |  |
|  |  |  |  |

Description: This course is recommended for first year students to introduce them to different areas of Engineering \& Technology at Pine-Richland High School. The areas covered in the course are Informational Systems, Construction Systems and Transportation Systems, and Video Production. This class is divided into four equal sessions in each of the above areas. In the Construction Systems area, the students use various materials and tools and are exposed to the safe operation of the major hand and power tools used in the manufacturing processes. The Informational Systems area includes Computer Aided Design (CAD) and architectural and engineering design. The Transportation Systems area includes topics covering air transportation, land transportation and an introduction to robotics and power technology. The Video Production area provides hands-on experience with video camcorder operations and field techniques, as the students create short films.

| Course Title: | Systems Engineering | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 108219 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Manufacturing <br> Science, Technology, Engineering and Mathematics | Transportation, Distribution and Logistics |  |

Description: This course is designed to provide the student with the problem solving activities related to scientific and engineering principles. The students will construct individual and group projects dealing with construction, transportation and manufacturing. Some of the hands-on activities include: mousetrap powered vehicle design, marine transportation, tower construction and ergonomic design. Emphasis is placed on applying current technology applications to everyday problems and situations.

| Course Title: | Advanced Systems Engineering | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 108239 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Systems Engineering with <br> a 70\% or higher | Open to Grades: | 11,12 |
| Career Cluster(s): | Education and Training <br> Manufacturing | Science, Technology, Engineering and Mathematics |  |

Description: This course is designed to provide an opportunity for the advanced research, design and development of activities dealing with the various areas of Engineering \& Technology. The concentration of areas include: Construction Systems, Transportation Systems and an introduction to Bio-Technology. Students will research, collect data, problem solve, design and develop prototypes that an engineer would face in the real world. These hands-on activities include bridge construction, catapult design, aerodynamic design and boat construction.

| Course Title: | $\underline{\text { Materials }}$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Processing |  | Credit Value: | 1.0 |
| Course Number: | 108319 |  | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | $10,11,12$ |  |
| Career Cluster(s): | Manufacturing | Science, Technology, Engineering and Mathematics |  |  |

Description: This course is designed to introduce students to various common materials and the machine processes used to transform these materials into a product. Students participate in hands-on activities that require them to cut, form, join and finish materials while safely using the tools and machines located in the production lab. Students will individually construct various given projects and will learn how to operate the laser engraver and CNC router. This course mainly deals with woodworking, although other materials such as metal and plastics will be introduced.

| Course Title: | Computer Aided <br> Design | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 108429 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Geometry | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Information Technology | Manufacturing <br> Science, Technology, Engineering and Mathematics |  |

Description: This course is designed to give a better understanding to those students who plan to go on in the field of engineering and architecture or want to develop computer generated movies. This course introduces each student to the many uses of CAD (Computer-Aided Design). Each student will have extensive experience with AutoCAD, Inventor, AutoCAD Architecture, Revit and 3DS Max software. Two-dimensional and three-dimensional designs will be created and produced. Three-dimensional renderings will be produced and the world of solid modeling and computer generated animations will also be introduced.

| Course Title: | Engineering <br> Design | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 108519 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Computer Aided Design or <br> Introduction to Engineering Design <br> (PLTW) with a 70\% or higher <br> AND <br> Completion of Introduction to Technology <br> \& Engineering or Materials Processing <br> with a 70\% or higher | Open to Grades: | 11,12 |
| Career Cluster(s): | Information Technology <br> Manufacturing | Science, Technology, Engineering and Mathematics |  |

Description: This course is designed to give a better understanding to those students who plan to go on into the field of engineering or to the student who plans to enter the industrial force as a future draftsman or designer. Through the use of computer-aided design, mechanical drawing, orthographic projection, sectioning, auxiliary views and isometric drawings will be created. As students work on these units they learn how to convey ideas and detail to other people and understand and interpret the ideas of others. Students develop a set of detailed working drawings and are introduced to solid modeling and creating 3-D objects to solve various problems.

| Course Title: | Architectural <br> Design | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 108539 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Computer Aided Design <br> with a 70\% or higher | Open to Grades: | 11,12 |
| Career Cluster(s): | Architecture and Construction <br> Information Technology | Science, Technology, Engineering and Mathematics |  |

Description: This course is an introduction into architectural drafting using AutoCAD Architecture or Revit. Building materials and construction principles are expressed using developed plans and construction procedures. Students study construction techniques and develop floor plans, foundation plans, roof plans, wall sections and elevations of a home. A 3D exterior model is produced which includes a walk-thru video.

| Course Title: | $\underline{\text { Advanced Architecture }}$ | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 108550 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Architectural Design or <br> Civil Engineering and Architecture | Open to Grades: | 12 |
| (PLTW) with a 70\% or higher | Science, Technology, Engineering and Mathematics |  |  |
| Career Cluster(s): | Architecture and Construction <br> Information Technology |  |  |

Description: Advanced Architectural Design is designed to provide the student with further advanced problem solving activities related to architectural design. Students develop the ability to think creatively and critically towards the design and problem solving processes. Various scenarios and issues are given to the students to solve which require ideas and solutions, testing solutions and the development of plans using AutoCAD Architecture. Plumbing, electrical, HVAC layouts and small models of their solutions may be created. Students enter an architectural design competition to potentially win a $\$ 1500$ scholarship.

| Course Title: | Video Production | Credit Value: | 1.0 |  |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 108619 |  | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | $9,10,11,12$ |  |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications <br> Information Technology | Science, Technology, Engineering and Mathematics |  |  |

Description: This course introduces students to the communications field of video media. Students experience hands-on video camcorder operations, camera movements and field production techniques associated with the real world media. Students complete various assignments within the classroom in order to practice the skills learned. Students are introduced to non-linear editing (digital) processes and HD video. A completion of hands-on projects, covering an array of topics and skills, enables the students to learn and practice professional video techniques. Students also have the opportunity to gain knowledge of the latest technology available in the field of video media. Students interested in careers associated with media communications are encouraged to take this foundation course.

| Course Title: | Advanced <br> Video <br> Production | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 108631 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Video Production with a <br> $70 \%$ or higher | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Arts, Audio/Video Technology and Communications <br> Information Technology | Science, Technology, Engineering and Mathematics |  |

Description: This course covers advanced techniques in video and television production. Students learn advanced digital video editing (Adobe Creative Suite), music creation, text/graphics generation and video animation. Copyright and authoring laws are studied and practiced. Students learn the skills necessary to properly light a set/scene and record professional audio. Students will participate in local/national student film festivals/competitions. Students contribute material for PRTV programming.

| Course Title: | TV Production <br> (PRTV) | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 108640 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Video Production or <br> Advanced Video Production | Open to Grades: | $10,11,12^{*}$ |
| Note(s): | Students are eligible to participate as sophomores, juniors and seniors. Students can earn <br> credit each year. *Any senior can take this course. |  |  |
| Career Cluster(s): | Ars, Audio/Video Technology and Communications <br> Information Technology | Science, Technology, Engineering and Mathematics |  |

Description: This course continues to build upon the student's skills and techniques of video/television production. Utilizing the knowledge learned in Video Production and Advanced Video Production, students expand their production skills by completing several projects. Students learn the skills necessary to write, produce, operate, and film television/movie programs, within a studio environment. Students write and produce daily school announcements (PRTV), variety shows, talk shows and Pine-Richland events. All students study/practice on-air skills. This class provides students the opportunities to create a variety of programs for Pine-Richland School District. Students interested in careers associated with media communications, television broadcasting, news anchoring, and public speaking are encouraged to take this course.

| Course Title: | Robotics <br> Engineering | Credit Value: | 1.0 |  |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 108719 |  | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | $10,11,12$ |  |
| Career Cluster(s): | Manufacturing | Science, Technology, Engineering and Mathematics |  |  |

Description: Robotics integrates mechanical, electrical and software engineering. In this technical course, students design robots and robotic systems with an emphasis on engineering as well as project management. Throughout this course, students use a team approach to problem-solve large projects just as professional engineers do. Students learn the importance of mechanical design for manipulators and mobile robots, as well as pneumatic systems, including physics of fluid power and types of actuators. Electronics, including proper wiring solutions for motors and sensors, as well as control systems using both remote control and computer programming are incorporated into this course. Students use Robot C software to program their robots and Autodesk Inventor 3D modeling software to devise prototypes to be created on the 3D printer. Robotic sensors and their programming are also among the skills learned in this challenging course.

| Course Title: | Computer Aided <br> Manufacturing <br> (CAM) | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 108721 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Robotics Engineering with <br> a 70\% or higher | Open to Grades: | 11,12 |
| Career Cluster(s): | Information Technology <br> Manufacturing | Science, Technology, Engineering and Mathematics |  |

Description: Computer Aided Manufacturing (CAM) is a course that builds upon the knowledge and skills learned in CAD. In this course, students will learn how to use CAM software to transform digital designs into programs that can be used by Computer Numerical Controlled (CNC) machines to manufacture products. Students will also learn about automation and how to integrate robotic arms into manufacturing systems. Students will gain hands-on experience with CAM software and CNC machines, including CNC mills, plasma cutters, laser engravers, and 3D printers. This course is an exciting opportunity for students to learn about the latest technologies in manufacturing and automation. It is also a valuable course for students who are interested in pursuing a career in manufacturing or engineering.

## Project Lead the Way (PLTW) **The Project Lead the Way courses below (excluding Honors

Research Design and Manufacturing ), are being phased out. IED will no longer be offered in the 24-25 school year. The remaining courses will be available only to those who have previously enrolled in a PLTW course.

## Program Overview

Project Lead the Way (PLTW) is the nation's leading provider of rigorous and innovative Science, Technology, Engineering and Mathematics (STEM) curriculum for schools. PLTW's hands-on, Activities-, Project-, Problem-Based (APPB) comprehensive curriculum is aligned with relevant national standards and is collaboratively developed and updated by subject matter experts including teachers, university educators, engineering and biomedical professionals and school administrators. PLTW's programs emphasize critical thinking, creativity, innovation and real-world problem solving. The hands-on learning engages students on multiple levels, exposes them to areas of study that they may not otherwise pursue and provides them with a foundation and proven path to post-secondary training and career success
in STEM-related fields. Students who are enrolled in Project Lead the Way courses have the opportunity to receive three undergraduate credits through Rochester Institute of Technology (RIT). To qualify, students must earn a score of 6 or higher on the end-of-year exam (6 equals a C; 7 equals a B; 8 and 9 equal an $A$ ) and have a class average of $85 \%$ or higher. The cost for the course is $\$ 225$. Students who wish to earn RIT credits may do so by completing the current registration form and sending it directly to RIT. More information and the required form can be found at https://www.rit.edu/emcs/pltw/undergraduate-credit/students-and-parents.

Pathway to Engineering (PTE)
Throughout PTE, students learn and apply the design process, acquire strong teamwork and communication proficiency and develop organizational, critical thinking and problem solving skills. Along the way students investigate a variety of careers in STEM fields.

## Principles of Engineering (POE)

Designed for 10th or 11th grade students, this survey course exposes students to major concepts they will encounter in a postsecondary engineering course of study. Topics include mechanisms, energy, statics, materials and kinematics. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work and communicate solutions.

## Specialization Courses

Civil Engineering \& Architecture (CEA)
Students learn about various aspects of civil engineering and architecture and apply their knowledge to the design and development of residential and commercial properties and structures. In addition, students use 3D design software to design and document solutions for major course projects. Students communicate and present solutions to their peers and members of a professional community of engineers and architects. This course is designed for 11th or 12th grade students.

## Computer Integrated Manufacturing (CIM)

How are things made? What processes go into creating products? Is the process for making a water bottle the same as it is for a musical instrument? How do assembly lines work? How has automation changed the face of manufacturing? While students discover the answers to these questions, they're learning about the history of manufacturing, robotics and automation, manufacturing processes, computer modeling, manufacturing equipment and flexible manufacturing systems. This course is designed for 11th or 12th grade students.

## Capstone Course (1)

## Honors Research Design and Manufacturing

Completion of the following courses with a $70 \%$ or higher: PLTW IED, POE and CIM OR CAD, Robotics and Advanced Robotics. This course is the capstone course in the PLTW high school engineering program. It is an engineering research course in which students work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. This course applies and develops secondary level knowledge and skills in mathematics, science and technology.

| Course Title: | Project Lead the Way: Principles of <br> Engineering | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 108810 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Introduction to <br> Engineering Design or Advanced | Open to Grades: | $10,11,12$ |
| $\underline{\text { Systems Engineering }} \boldsymbol{\text { Career Cluster(s): }}$ | Architecture and Construction <br> Information Technology | Science, Technology, Engineering and Mathematics |  |

Description: This year-long course helps students understand the field of engineering/engineering technology. Projects include an automated marble sorter, hydraulic robot arm, ping pong ball launcher, bridge construction and testing to list a few. Topics of study include thermodynamics, fluid systems, electrical systems, control systems; statics and strength; linear and trajectory motion.

## Specialization Courses (2)

| Course Title: | Project Lead the Way: Civil Engineering <br> \& Architecture (CEA) | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 108820 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of Principles of Engineering <br> or Computer Aided Design | Open to Grades: | 11,12 |
| Career Cluster(s): | Architecture and Construction <br> Information Technology | Science, Technology, Engineering and Mathematics |  |

Description: Students learn about various aspects of civil engineering and architecture and apply their knowledge to the design and development of residential and commercial properties and structures. In addition, students use 3D design software to design and document solutions for major course projects. Students communicate and present solutions to their peers and members of a professional community of engineers and architects.

| Course Title: | Project Lead the <br> Way: Computer <br> Integrated <br> Manufacturing | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| (CIM) |  | Term(s) Offered: | Full Year |
| Course Number: | 108820 | Open to Grades: | 11,12 |
| Prerequisite(s): | Completion of Principles of Engineering <br> or Robotics Engineering | Science, Technology, Engineering and Mathematics |  |
| Career Cluster(s): | Architecture and Construction <br> Information Technology |  |  |

Description: Computer Integrated Manufacturing (CIM) is the study of manufacturing planning, integration and implementation of automation. This course explores manufacturing history, individual processes, systems and careers. In addition to technical concepts, the course incorporates finance, ethics and engineering design. This reflects an integrated approach that leading manufacturers have adopted to improve safety, quality and efficiency. Students will analyze, design and build manufacturing systems. While implementing these designs, students will continually hone their interpersonal skills, creative abilities and understanding of the design process. Students apply knowledge gained throughout the course in a final open-ended problem to build a manufacturing system.

## Capstone Course (1)

| Course Title: | Honors Research <br> Design and <br> Manufacturing | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 108826 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Completion of the following courses with <br> a 70\% or higher; PLTW IED, POE and <br> CIM or CAD, Robotics and Computer <br> Aided Manufacturing. . | Open to Grades: | 11,12 |
| Career Cluster(s): | Manufacturing <br> Marketing | Science, Technology, Engineering and Mathematics |  |

Description:.This capstone honors course will challenge students to apply the knowledge and skills they have learned in previous robotics, CAM, and CAD courses to the design, manufacture, and testing of a 151 lb battle bot. Students will work in teams to research, design, and build a robot, using their creativity and engineering skills to develop a machine that is both effective in combat and meets all safety and competition rules. Students will use CAD software to create detailed drawings of their designs and use CAM software to generate toolpaths for manufacturing the different components. Students will have access to a variety of CNC machines. They will use these machines to manufacture the different components of their robots and assemble them into a complete bot. Students will also have the opportunity to compete against other high schools in competitions. These competitions are a great way for students to test their robots in a real-world setting and learn from other teams.

## Family \& Consumer Science

| Credit | Elective Course Title | Course \# | Open to Grades |
| :---: | :--- | :---: | :---: |
| 0.5 | Independent Living | 109130 | $9,10,11,12$ |
| 0.5 | FCS Design Lab I | 109131 | $9,10,11,12$ |
| 0.5 | $\underline{\text { FCS Design Lab II }}$ | 109132 | $9,10,11,12$ |
| 0.5 | Child Development I | 109210 | $10,11,12$ |
| 0.5 | Child Development II with Preschool | 109220 | $10,11,12$ |
| 0.5 | Practicum |  |  |
|  | Child Development III with | 109230 | 11,12 |
| 0.5 | Preschool Practicum |  | $10,11,12$ |
| 0.5 | Science of Baking | 109422 | $10,11,12$ |
| 0.5 | Global Cuisine | 109430 | $10,11,12$ |


| Course Title: | Independent Living | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 109130 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Finance <br> Government and Public Administration | Hospitality and Tourism <br> Human Services <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics |  |

Description: Throughout the semester you will experience real-life simulations and projects to prepare you to live on your own after high school. Students will earn a "credit score" while learning about-credit reports \& scores, interest rates, loans and credit cards as they go through the process of paying bills, buying a car and home. Additionally, they will learn money management skills as they learn about paychecks, taxes, online vs. traditional banking, and budgeting. Consumer skills and aspects of daily living such as renting an apartment, meal preparation, and insurance will also be taught. Students will have the opportunity to practice basic hand-sewing and cooking skills in the food laboratory 3-5 times throughout the semester.

| Course Title: | Design Lab I | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 109131 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Finance <br> Government and Public Administration | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics |  |

Description: Express your creativity in this hands-on semester course learning about fashion and design using specialized technology and equipment in class. Let your creativity climb as you learn to operate a heat press and vinyl plotter while designing and creating your own fashions using graphic design and CAD software. Students will follow technical directions and interpret diagrams as they learn about apparel construction in our machine sewing unit. Throughout the semester you are able to select from a variety of textile and garment projects.

## Some of the exciting projects will be:

- Creating your own fashion brand.
- Study textiles through the lens of a forensic investigator.
- Design and create custom apparel and our PR spiritwear line
- Fiber arts projects (knitting, embroidery, punch needle, weaving, and more)
- Construct a pair of pajama pants or shorts using a sewing machine.

| Course Title: | Design Lab II | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 109132 | Term(s) Offered: | Semester |
| Prerequisite(s): | Design Lab I | Open to Grades: | $9,10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Finance <br> Government and Public Administration | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics |  |

Description: Students enrolled in this course will study product design and development, fashion marketing, and merchandising. This class is specifically designed for students who excelled in Design Lab I. New equipment, technology, and techniques will be introduced; enriching and building from knowledge and skills learned in Design Lab I. You can expect to expand your skill set to design and create intermediate-advanced level projects, with the flexibility, independence and freedom to choose which design techniques and projects interested you most from Design Lab I. Students enrolled in this class will be heavily involved in our PR spiritwear store. Imagine seeing the crowd at a home game wearing the shirt or hat you created or your teacher wearing a shirt you embroidered! Put your creative skills to work producing products for our school store, take orders from clients and make personalized items for sports teams, clubs, and community businesses. Can't wait to see what you create!

| Course Title: | Child | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- | :--- |
| Development I |  | Term(s) Offered: | Semester |
| Course Number: | 109210 | Open to Grades: | $10,11,12$ |
| Prerequisite(s): | None | Government and Public Administration |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Arts, Audio/Video Technology and Communications Science <br> Business Management and Administration <br> Education and Training | Human Services <br> Science, Technology, Engineering and Mathematics |  |

Description: Healthy development in the early years provides the building blocks for educational achievement, economic productivity, responsible citizenship, lifelong health, strong communities and successful parenting of the next generation. Learning about early childhood development is critical to ensure that children have a strong foundation for future development and success. In this course the student will study prenatal development, pregnancy and the first years of life. The physical, emotional, social, and intellectual growth, development and milestones of infants and toddlers will be examined. Students will also gain hands-on experience completing observations and assisting 1-2 days a week in our PRHS preschool laboratory working with preschool age children.

| Course Title: | Child Development II with Preschool <br> Practicum | 0.5 |  |
| :--- | :--- | :--- | :--- |
| Course Number: | 109220 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of Child Development I | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Government and Public Administration | Health Science <br> Human Services <br> Information Technology <br> Science, Technology, Engineering and Mathematics |  |



Description: Students will put theory into practice within our PRHS preschool laboratory working one on one with preschool age children three days a week for 12 weeks in our classroom. During this experience you will be given an opportunity to apply learning through observations, teaching, and interactions with children. You will be responsible for lesson planning, guiding, teaching, assessing and helping children learn and develop through play and directed activities. With the help of your instructor you will be responsible for our preschool curriculum development specifically following the PA Early Childhood PreK Standards. Using these standards and objectives to plan literacy, mathematics, science, fine and gross motor activities for our classroom. You will learn best practices for differentiating activities based on our preschoolers' ages and abilities. Students will be immersed in learning as we learn and practice developmentally appropriate guidance and communication techniques to interact with children, explore stages of handwriting, art, and play during this critical age. This class will specifically focus on the physical, intellectual, social and emotional needs, growth and development of preschoolers, children's health and communicable diseases, early literacy and handwriting development.
High schoolers interested in pursuing careers working with children in the medical/healthcare, education, or health \& human services careers are strongly encouraged to enroll in this course.

Left (File Photo): Students interact with preschool students in the child development course.

| Course Title: | Child Development III with Preschool <br> Practicum | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 109230 | Term(s) Offered: | Semester |
| Prerequisite(s): | Completion of Child Development with <br> Preschool Practicum II | Open to Grades: | 11,12 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Government and Public Administration | Health Science <br> Human Services <br> Information Technology <br> Science, Technology, Engineering and Mathematics |  |

Description: Students will study advanced theories, topics, and current issues affecting children and families. The class will closely examine research for the developing child on brain architecture, child neglect and abuse, toxic stress, executive functioning, and resilience. Students enrolled in this class will continue to participate in the PRHS preschool program with additional responsibilities. In addition to assisting in the PRHS preschool laboratory students will be strongly encouraged to participate in job shadowing experiences in careers working with children that they are interested in exploring for their future.

| Course Title: | Science of Baking | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 109422 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Government and Public Administration <br> Hospitality and Tourism | Human Services <br> Information Technology <br> Manufacturing <br> Science, Technology, Engineering and Mathematics |  |

Description: Students learn the fundamentals and science involved in the making of quick breads, yeast breads, pastries, cakes and seasonal items. Students learn the lost art of baking from scratch which is great on the budget and limits preservatives and additives. Emphasis on equipment, functions of ingredients, the importance of accurate measurements and baking terminology gives students the skills to ensure their success in the kitchen. Teamwork, communication, organization and conservation skills are integrated into the class as students read and follow directions and make healthy substitutions whenever available.

| Course Title: | Global Cuisine | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 109430 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Government and Public Administration | Hospitality and Tourism <br> Human Services <br> Manufacturing <br> Science, Technology, Engineering and Mathematics |  |

Description: Enjoy Chicago-style pizza, Jambalaya or a dinner straight from Europe in this course that offers students the chance to prepare and eat foods representing the melting pot of American cuisine and foods from all over the world. Students use historical and cultural influences that have contributed to regional food specialties and mimic their dishes here in the kitchen labs of Pine-Richland. The course allows students to explore selected ethnic foods in weekly labs as well as share customs of their own individualized heritage. When studying regions, students consider factors such as geography, climate and culture that show influence on food selection and preparation and utilize food safety and sanitation to ensure a safe product. Learn culture through taste in Global Cuisine.

| Course Title: | Food Explorations | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 109441 | Term(s) Offered: | Semester |
| Prerequisite(s): | None | Open to Grades: | $10,11,12$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Manufacturing <br> Science, Technology, Engineering and Mathematics |  |

Description: Let's Eat! If you aren't excited about what's for breakfast, lunch or dinner, then take this course and learn to create and cook something totally unique to you and your tastes. Food explorations allows you the creative freedom to choose your own recipes, change ingredients and plan your own meals. Your choices will be guided by the basic food groups and we will discuss the psychology behind why you are making certain food choices. Be prepared to cook and work within a group to gain the everyday skills to ensure a successful nutritious future while using the safety and sanitation skills necessary in food preparation.

## Health and Physical Education

| Credi <br> t | Course Title | Course \# | Open to Grades |
| :---: | :--- | :---: | :---: |
| 1.0 | Health and Physical Education | 109715 | $9,10,11,12$ |
| 0.5 | Personal Fitness and Lifetime Activities | 109800 | *recommended for 9 |

## HEALTH AND PHYSICAL EDUCATION VISION



| Course Title: | Health and Physical Education | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 109715 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | $9,10,11,12$ <br> *recommended <br> for Grade 9 |
| Career Cluster(s): | Education and Training <br> Health Science | Human Services <br> Science, Technology, Engineering and <br> Mathematics |  |

Description: This course integrates the concepts of healthy decision making through classroom instruction in health concepts and multiple physical fitness venues. The health aspect of this course emphasizes healthy habits that lead to reduced illness and disease and encourage educated decision-making. Course topics include Physical, Social, \& Mental Health (The Health Triangle), Decision Making, First Aid, Drugs, Human Growth and Development, Human Sexuality and Sexually Transmitted Infections, Nutrition, Physical Fitness, Sleep, Mental Health and Stress and the Muscular and Skeletal Systems. The physical education aspect of this course is tailored toward the development of a lifelong, positive attitude toward physical activity, fitness and recreation and the understanding of the relationship between a physically active lifestyle and wellness. Students are instructed in a comprehensive curriculum in a co-educational setting that includes aerobic, aquatic, fitness, lifetime, recreational and team activities.

| Course Title: | Personal Fitness and Lifetime Activities | Credit Value: | 0.5 |
| :--- | :--- | :--- | :--- |
| Course Number: | 109800 | Term(s) Offered: | Full Year |
| Prerequisite(s): | None | Open to Grades: | $10,11,12$ |
| Note(s): | Class meets either A or B day. | Human Services <br> Science, Technology, Engineering and <br> Mathematics |  |
| Career Cluster(s): | Education and Training <br> Health Science |  |  |

Description: Personal Fitness \& Lifetime Activities is a course that helps you remain active for the rest of your life! The course is designed to give students the opportunity to gain basic knowledge and skills in a variety of lifetime activities. In addition, students will be introduced to the latest trends and technology in the fitness industry. Students will learn to design their own personal fitness plan, create a strength training program and set goals to improve nutrition and exercise performance. Activities include but may not be limited to archery, badminton, bowling, disc golf, golf, hiking, kayaking, mountain biking, pickleball, stand up paddleboard (SUP), tennis, water polo and yoga. This course will also have opportunities for field trips which may be at an additional cost.

| Course Title: | Applied Health and Physical Education | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 609710 | Term(s) Offered: | Full Year |
| Prerequisite(s): | IEP Team Based Decision | Open to Grades: | $9,10,11,12$, <br> $12+$ |
| Career Cluster(s): | Education and Training <br> Health Science | Human Services <br> Science, Technology, Engineering and <br> Mathematics |  |

Description: Applied Health and Physical Education is a course for students whose IEP states they require health instruction following alternate standards and/or the need for adapted physical education. In health, this course produces health literate students through a curriculum that addresses physical, mental, emotional and social dimensions of health. Adapted PE is a sequentially planned, part time course with developmentally appropriate curriculum and instruction that promotes lifelong physical activity. It helps students develop the knowledge, motor skills, self-management skills, social skills, attitudes and confidence needed to adopt and maintain physical activity throughout their lives.

## Career and Technical Education (CTE) Opportunities

| Course Title: | A.W. Beattie Career Center | Credit Value: | 3.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 510500 AM Session <br> 510550 PM Session | Term(s) Offered: | Full Year |
| Prerequisite(s) | AWBCC Program of Studies | Open to Grades: | $10,11,12,12+$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |

A.W. Beattie Career Center offers students an opportunity to prepare for their chosen career field through advanced career and college preparation during their 10th, 11th and 12th grade years.

Students attending A. W. Beattie Career Center are enrolled in the morning or afternoon session and spend the remaining half day at PRHS. Three credits are awarded each year to students successfully completing career coursework. A. W. Beattie Career Center credits and grades are included in the QPA and class rank.


A Day in the Life of PR/Beattie Students

> A.W. Beattie Career Center Spotlight

All A. W. Beattie Career Center Programs offer advanced college credit upon successful completion. Potential college credits range from three to twenty credits.
A.W. Beattie Career Center Programs are approved Programs of Study (POS) providing for seamless transition to post-secondary education through rigorous content aligned with challenging academic and relevant career context in a non-duplicative progression of courses aligned to post-secondary education. SOAR (Students Occupationally and Academically Ready) is a Pennsylvania program which allows CTE students to earn free college credits. Students earn free credits with a qualifying score from the NOCTI (National Occupational Competency Testing Institute) exam, senior year assessment and confirmation that they have completed the entire CTE program of study. To obtain these free credits, students must submit the proper paperwork to the college, as outlined below. This paperwork requires CTE administrative signatures for submission.

To determine the free credits offered for Pennsylvania CTE Programs of Study (POS) visit the website http://www.collegetransfer.net/. After selecting your Program of Study and your high school graduation year, you can view all of the colleges offering free credits for your particular CTE program. Additionally, A.W. Beattie Career Center maintains many college credits articulation agreements with two and four year post-secondary institutions. Please visit our website www.beattietech.com for additional information.

Students who attend A. W. Beattie may be eligible to earn math and/or science credits toward graduation requirements. Please see your Counselor for additional information.

A number of A. W. Beattie's programs require uniforms and equipment. The student and parents assume this cost. Therefore, students should obtain accurate cost information before enrolling for a course. Transportation is provided by the School District.

Applications to attend A.W. Beattie Career Center should be made during the second semester of the $9^{\text {th, }} 10^{\text {th }}$ or $11^{\text {th }}$ grade and will be carefully reviewed. Further information concerning the A. W. Beattie Career Center's program is available in the School Counseling Office.

## Course Offerings:



Advertising Design-The Advertising Design program at A. W. Beattie Career Center focuses on a wide variety of professional art-related fields, including: Digital Graphic Design, Multimedia, Digital Photography and Web Design. Students will train in a dual-platform (Mac and PC) environment using the latest in professional graphic design software and equipment, such as: Adobe Photoshop CS5.5, Adobe illustrator CS5.5, Adobe Premier Pro, Adobe Dreamweaver CS5.5 and many others. Achieve advanced standing at local colleges or universities by utilizing college credits you can earn while you are an Advertising Design student working towards your Adobe Certified Associate Certificate in our customized designed studio.

Automotive Collision Technology-Automotive Collision Technology prepares students in all aspects of the industry including MIG welding, computerized paint mixing and spraying techniques. Using the latest technology in our fully equipped auto shop keeps students up-to-date with current standards. The Automotive Collision Technology program utilizes the nationally recognized I-CAR curriculum. Students earn their $\mathrm{SP} / 2$ industry Safety Certification leading to enhanced employment opportunities. Cooperative education experiences in local area dealerships provide authentic educational experiences. The Automotive Collision Technology program is certified by NATEF (National Automotive Technicians Education Foundation) ensuring that the Career Center meets strict education and industry standards.

Automotive Technology-The NATEF (National Automotive Technicians Education Foundation) ensures the Automotive Technology program within A. W. Beattie Career Center meets strict standards, providing students with hands-on experience using up-to-date diagnostic equipment in our state-of-the-art auto shop. Automotive Technology is an AYES (Automotive Youth Education Systems) training facility. AYES provides students authentic experiences during their senior year, with on-site experiences in local area dealerships, allowing for those important career connections. NATEF and AYES certifications assure students the best training and preparation to complete their ASE (Automotive Service Excellence) certification in less time, upon graduation. Students will have the opportunity to earn their PA Safety and Emissions Inspection credentials prior to graduation.

Carpentry/Building Construction - The use of hand and power tools, blueprint reading, framing, finishing, roofing, drywall and insulation are taught through hands-on experience in the Carpentry/Building Construction program. Students have the opportunity to learn skills in the carpentry, masonry, plumbing and electrical fields. BAMP activities and competitions, as well as community projects challenge students during the year, preparing them for immediate employment. Students have the opportunity to experience live work by taking part in the ongoing project of building a modular home. Students will gain educational experiences with industrial rigging, scissor lift operations and forklift training. Students will have the opportunity to earn their OSHA-10 Safety Certification and PA Builder's Certificate.

Computer System, Network Engineering and Cyber Security—In this integrated dual learning pathway students will have the opportunity to explore and develop their interest in two of the most sought-after skill sets in the computer field; Network Engineering and Cyber Security and/or Computer Systems Technology. Building, maintaining and troubleshooting computers and peripherals is part of the curriculum. Students will learn the basics of networking, build and create virtual servers and they will also set up and maintain Internet client services. Students participate in the Cisco approved IT Essentials course through the Cisco Networking Academy. The curriculum builds upon itself to create a pathway for students to participate in the next step of the curriculum with Networking and Cyber Security. Students will be able to test for the CISCO Certified Networking Associates Certification.

Cosmetology - In Cosmetology, the Beattie Salon provides qualified Cosmetology students with the opportunity to use their energy, skills and imagination on clients from the community, in a state-of-the-art Cosmetology Salon. Students will study the care of hair, nails and skin. They will learn the proper use of cosmetology tools and equipment, as well as techniques in hair cutting, styling, coloring, permanent waving and relaxing, manicuring, pedicuring and skin care. Students will also focus on professionalism and customer relations, while preparing to test for their Pennsylvania State Cosmetologist License.

Culinary Arts - The Culinary Arts Department has built a solid reputation as one of the finest programs throughout the State. The Beattie Dining Room, given a three-star rating by the Pittsburgh Press, serves breakfast and lunch to more than 150 people a day! Located in the Dining Room, the Bake Shop sells cookies, brownies, pies, cakes and various pastries. Students learn all aspects of the restaurant business from meal planning, food preparation, baking and carving, top dining room management and banquet serving. There are many job opportunities within the always growing Culinary Industry as well as scholarships for students provided by prestigious culinary colleges. Students practice their craft in a commercially equipped kitchen and bakery while earning their ServSafe Food Safety Certification.

Dental Careers-In Dental Careers students learn the necessary skills for employment in Dental Assisting, Lab Technician, Infections Control Assistant and many more opportunities within the Dental Industry. Seniors participate in hands-on work experiences in dental offices learning and assisting in four-handed dentistry, chair-side assisting, administrative skills and other techniques. Students will prepare to test for their PA Radiological Certification on the Career Centers state of the art Digital X-Ray System. Upon successful program completion and two years of employment, students will be eligible for their Dental Assisting National Board exam.

Early Childhood Education-Students enrolled in Early Childhood Education program experience the opportunity to apply their child development and teaching skills will be engaged in a variety of settings. In addition to a variety of classroom activities, students learn the industry standards for hands-on activities with infants, toddlers and preschool age children. Students participate in a college and career program of study in a variety of facilities, including the on-site accredited Kiddie Tech Early Learning Center; practicing and refining their creative teaching skills, as well as learning the basics in caring for and managing children. Students will participate in the Childhood Development Association (CDA) Ready Certification. Additionally, students will have the opportunity to be certified in First-Aid and CPR as part of their classroom curriculum. Our ECE students are actively engaged with a number of community-based activities through the local libraries and Junior Achievement of Southwest Pennsylvania. The Early Childhood Education program is an excellent introduction to the post-secondary elementary education major.

Emergency Response Technology-The ERT course challenges students with exciting hands-on training in a fully equipped on-site lab, as well as field trips to the local Police and Fire Academies, throughout the school year. Students study several technical fields including police science, fire science, rescue operations, hazardous materials and emergency medical services. Certification as an Emergency Medical Technician (EMT) at A. W. Beattie Career Center will prepare students for immediate employment in the growing Emergency Response Industry.

Health and Nursing Sciences-The Health and Nursing Sciences program will prepare students for the medical field that is rapidly growing and changing. There's never been a better time to pursue a career in the Health Industry. The core curriculum will prepare students for entry level positions, such as Medical Assisting, Nurse Assisting and Patient Care Technician. For those students that have an interest in becoming a Nurse, Radiology Technician, or related positions, this program will prepare them for post-secondary education. During the course of study, students may have the opportunity to gain valuable hands-on clinical experience in hospitals, nursing homes, physical therapy clinics and private offices where they will practice and perfect their skills, preparing them for an exciting and rewarding career in healthcare. Certification as a Patient Care Technician is available to students who successfully complete their clinical rotation and certification exam through A.W. Beattie or nurse aide certification is one post-secondary pathway with an industry partner facility. Students have an opportunity to participate in a dual enrollment opportunity through CCAC as part of this program for college credits.

Heating, Ventilating and Air-Conditioning-In HVAC, students will master the necessary skills to become qualified technicians and mechanics within their field. Students learn heating installation and service, air-conditioning installation and service, plumbing, electrical wiring, refrigeration and sheet metal fabrication. Students will put these skills into use when they participate in the plumbing, ventilating and wiring of the Beattie modular home. They also test for their EPA certification and OSHA-10 Safety Certification at A. W. Beattie, helping to ensure immediate employment opportunities along with post secondary opportunities. In addition, students may gain experience with industrial rigging, scissors lift operation and forklift training.

Network Engineering \& Cyber Security- A.W Beattie Career Center offers a challenging networking cyber security program for high school students that teaches the fundamentals of how computers communicate with each other and how to protect them from malicious attacks. The program covers topics such as network architectures, protocols, devices, security principles, encryption, firewalls, malware, and ethical hacking. The program also provides hands-on experiences with various tools and software that are used in the field of cyber security and computer networking. The program aims to prepare students for careers or further education in computer networking and cyber security. The program also prepares students for industry certifications such as CompTIA A+, Network+, and Security+. The program also allows students to earn college credits through articulation agreements.

Pastry Arts-The Pastry Arts course provides students with an opportunity to learn all functions of a commercial bakery while perfecting their creative pastry skills. Students keep the bakery cases, located in the Beattie Dining Room, stocked full of cakes, cookies, pies, brownies, breakfast pastries and specialty breads and rolls. Students receive quality training in our fully equipped Pastry Arts lab learning everything from baked goods preparation to merchandising and
dining room service. There are classroom demonstrations from industry professionals throughout the school year, as well as field trips to local bakeries and restaurants. Students will prepare special orders for holidays, weddings and special events throughout the year. Students have the opportunity to earn their ServSafe Food Safety Certification.

Pharmacy Operations-Pharmacy Technicians and Pharmacists employment openings are projected to grow at a rate of 25 to 32 percent over the next ten years. Positions exist in the public and private sector making this exciting career a sound, desirable career choice. Students will experience an interactive learning environment, experimenting on state-of-the-art equipment. Students will learn firsthand the skills needed to process patient medication orders. Students will be prepared to move into advanced post-secondary studies or test for entry level employment. The potential is endless in our ever-changing society.

Robotics Engineering Technology (RET)—The Robotics Engineering Technology (RET) program is designed to train students in skills related to the rapidly developing, innovative robotics and manufacturing industries. In RET, students integrate math and science concepts with cutting-edge technology in robotics and/or manufacturing. The RET curriculum has been developed in partnership with the Advanced Robotics for Manufacturing Institute based primarily at Carnegie Mellon University. Students selecting the RET program are typically preparing for a career in robotics, electronics, mechatronics, advanced manufacturing, or engineering. All students in the RET program study the core curriculum of electronics and robotics. Students also choose at least one specialty from among 3D modeling and design (for 3D printing and CNC machining), coding on platforms such as Arduino, Raspberry Pi and LocoRobo and Fanuc robotic arm operation. Individual projects assigned by the instructor or chosen by the student are encouraged. The FIRST Robotics Competition is part of the in-class robotics curriculum. Additionally, students interested in attending the competitions work in the evenings and weekends during the robot build season. RET students may earn up to 20 credits for use in post-secondary education in Robotics or Mechatronics Engineering at California University of Pennsylvania. Numerous other articulation agreements provide students with 4-14 credits at local colleges upon successful completion of the RET curriculum. Industry-related certifications are also available for students.

Sports Medicine-Rehab Therapy and Exercise Sciences Technology (SMART-EST) - The SMART-EST program is designed for students that are looking towards the fields of: physical therapy, occupational therapy, physical rehabilitation, exercise physiology and sports medicine. Students will develop valuable skills in diagnosis, differential diagnosis, assessment and prevention, along with prognosis and the rehabilitation of bodily injuries and related health conditions. Students will learn the therapy and application principles of a patient care plan including: assessment, evaluation, interventions of exercise, manual therapy, modalities and neuro re-education. Students will also develop goal setting and discharge plans for patients. Students will participate in nutrition understanding, as they learn how to develop proper diet plans for healthy individuals and they will learn how to tailor diet plans for special populations. Career Pathways for SMART-EST are listed at www.beattietech.com.

Surgical Sciences-Surgical Sciences will introduce students to the operations of the Surgical Operating Room (OR). Students will experience and master the skills required to prep surgical instruments for patient care procedures. Students will learn medical terminology that will coordinate with post-secondary options and career employment. Students will learn in a simulated operating room environment where central sterile environment procedures will be practiced. Our students will interact with medical professionals that will enhance the daily learning environment. Surgical Science students will develop their communication, math and medical dexterities to prepare them to become successful adults. Join us for a career pathway that has endless potential.

Veterinary Sciences Technology-Students enrolled in the Veterinary Sciences program will experience a wide variety of care and management techniques throughout the program. Students will learn to maintain medical records, schedules, offer client education, explore authentic laboratory procedures and assist with nursing and prepare for surgical duties; along with routine exams. Students will gain a solid foundation in the Veterinary Sciences program on which to build a post-secondary degree. Students will have the opportunity to earn the following recognized industry certifications: Purina Certified Weight Coach, Pet Tech First Aid and CPR.

## Certifications:

Through strategic planning and partnerships with local employers, A.W. Beattie Career Center offers a variety of nationally recognized validated industry skills certifications. Senior students will participate in the annual National Occupational Competency Testing Institute exams (NOCTI).

Training related externships are required for all students wishing to earn a Performance Certificate with honors during their enrollment at A. W. Beattie Career Center. These related externship experiences can be paid or unpaid and fall into one of the following categories: Cooperative Education, Job Shadowing, Clinical Experiences or Internships and Volunteer opportunities.

Student Success Center services are open to all students. The Center is designed to facilitate the needs of students to help them reach their full potential. Facilitators provide support services through tutoring, study guides, test assistance and curriculum modification. Facilitators and Instructional Assistants offer support in the classrooms and labs.

## Accreditation:

A.W. Beattie Career Center meets all requirements as established by the PA Department of Education under the guidelines of Chapter 339. The Career Center is the only recognized United States Department of Education Green Ribbon School award recipient career center in Pennsylvania.

Contact A.W. Beattie Career Center for more information. A.W. Beattic Career Center<br>9600 Babcock Blvd.<br>Allison Park, PA 15101<br>Phone: 412-847-1912<br>Fax: 412-366-9600<br>Email: kim.zylinski@beattietech.com

## Experiential Learning Opportunities

| Credit | Elective Course Title | Course \# | Open to Grades |
| :---: | :---: | :---: | :---: |
| 1.0 | AFJROTC Cultural Studies: <br> An Introduction to Global Awareness/Principles of Management/Survival | 510930 | 9, 10, 11, 12 |
| 1.0 | AFJROTC A Journey into Aviation History/Citizenship, Character \& Air Force Tradition | 510900 | 9, 10, 11, 12 |
| 1.0 | AFJROTC: The Science of Flight/Communication, Awareness \& Leadership | 510910 | 9, 10, 11, 12 |
| 1.0 | AFIROTC Exploring Space: <br> The High Frontier/Life Skills \& Career Opportunities | 510920 | $9,10,11,12$ |
| 1.0 | Peer Buddies/Community Service | 510201 | Peer Buddies not open to 9 th grade students 10, 11, 12 |
| 1.0 | Vocational Instruction | 609910 | 9, 10, 11 |
| 1.0 | Vocational Volunteers | NEED \# | 12, 12+ |
| 1.0 | Life Skills Training | 609920 | 9, 10, 11, 12, 12+ |
| 1.0 | Goal Progress Support | multiple | $9,10,11,12,12+$ |

All Air Force JROTC cadets earn valuable skills while developing into better citizens. Cadets never incur any military obligations. Cadets have opportunities (all voluntary) to: fly aboard Air Force aircraft, tour Air Force bases, compete with other JROTC schools in sports activities (dodgeball, volleyball), learn how to fly with simulators, RC aircraft and drones and build and launch rockets. They also have the opportunity to participate in summer cadet leadership camps, visit historical sites, attend socials (bonfires, holiday parties and caroling, pool party), support local veterans events, attend drill competitions (as shown in picture below) and participate in numerous community service opportunities and academic challenges.

| Course Title: | AFJROTC: A Journey into Aviation History/Citizenship \& Air Force Tradition | Credit Value: | 1.0 |
| :---: | :---: | :---: | :---: |
| Course Number: | 510900 | Term(s) Offered: | Full Year 2025-2026 |
| Prerequisite(s): | None | Open to Grades: | 8 thru 12th |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics <br> Transportation, Distribution and Logistics |  |

Description: Cadets' experiences include leadership characteristics, practices and mentoring and community service as well as core values of integrity; service before self and excellence in all we do. Get the honor/privilege to wear the Air Force uniform. This course focuses on the development of flight throughout the centuries. Class emphasizes civilian and military contributions to aviation; the development, modernization and transformation of the Air Force; and a brief astronomical and space exploration history. Principles of flight include basic aeronautics, aircraft motion and control, flight power and rockets. Course includes readings, videos, hands-on activities and in-text and student workbook exercises. Leadership includes, "Citizenship, Character \& Air Force Tradition" and introduces cadets to the Air Force Junior Reserve Officer Training Corps (AFJROTC) and the basis for progression through the AFJROTC program while instilling elements of good citizenship. It contains sections on cadet and Air Force organizational structure; uniform wear; customs, courtesies and other military traditions; health and wellness; fitness; individual self-control; and citizenship. We focus on "Real World" life issues that center on dealing with doing what is right, especially when no one is looking, along with helping others and how to become a positive role model. Wellness training will be offered one day per week. No military obligation is imposed, expected or incurred by students participating in AFJROTC classes.

| Course Title: | AFIROTC: The <br> Science of <br> Flight/Communicati <br> on Awareness E <br> Leadership |  | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 510910 | Term(s) Offered: | Full Year <br> 2026-2027 |  |
| Prerequisite(s): | None | Open to Grades: | 8 thru 12th |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and <br> Mathematics <br> Transportation, Distribution and Logistics |  |  |

Description: Cadets' experiences include leadership characteristics, practices, mentoring and community service. Core values of integrity, service before self and excellence in all we do, are instilled. Cadets earn the honor/privilege to wear the Air Force uniform. This course is designed to acquaint the student with the aerospace environment, the human requirements of flight, principles of aircraft flight and principles of navigation. The course begins with a discussion of the atmosphere and weather. Developing an understanding of the environment and how that environment affects flight is introduced. Discussions include the forces of lift, drag, thrust and weight. Students also learn basic navigation including map reading, course plotting and the effects of wind. The portion on the Human Requirements of Flight is a survey course on human physiology. Discussed here are the human circulatory system, the effects of acceleration and deceleration and protective equipment. The leadership portion of this course, "Communication, Awareness and Leadership", stresses communications skills and cadet corps activities. A great deal of information is provided on communicating effectively, understanding groups and teams, preparing for leadership, solving conflicts and problems and personal development. Written reports and speeches complement the academic materials. Cadet corps activities include holding positions of greater responsibility in the planning and execution of corps projects. We focus on "Real World" life issues that center on dealing with the ability to communicate productively and effectively in leadership situations. Wellness training will be offered one day per week. No military obligation is imposed, expected or incurred by students participating in AFJROTC classes.

| Course Title: | AFJROTC Exploring Space: The High <br> Frontier/Life Skills E Career Opportunities | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 510920 | Term(s) Offered: | Full Year <br> $2027-2028$ |
| Prerequisite(s): | None | Open to Grades: | 8 thru 12th |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics <br> Transportation, Distribution and Logistics |  |

Description: As mentioned in the previous course, Cadets' experiences include leadership characteristics, practices, mentoring and community service. Core values of integrity, service before self and excellence in all we do, are instilled. Cadets earn the honor/privilege to wear the Air Force uniform. This course includes the study of the space environment from the earliest days of astronomy to the present day including the Earth, sun, stars, Moon and solar system. This course will involve discussion of critical issues involved in traveling in the upper atmosphere such as orbits and trajectories, unmanned satellites, space probes and the importance of entering space, manned and unmanned space flights, focusing on concepts surrounding spaceflight, space vehicles, launch systems and space missions. Leadership Education will be helpful to students deciding which path to take after high school. The course topics include application and admission procedures to college, vocational or technical school as well as how to begin a job search for private, federal government and aerospace career opportunities. Financial planning, contracts, leases, wills, warranties, personal bills and citizen responsibilities will also be discussed. Instruction will focus on "Real World" life issues that center on dealing with personal finance and investing for a lifetime of success. Wellness training will be offered one day per week. No military obligation is imposed, expected or incurred by students participating in AFJROTC classes.

Below (File Photo): Cadets participate in the Honor Flight veteran reception.


| Course Title: | AFJROTC Cultural Studies: An Introduction to <br> Global Aworeness/Principles of <br> Management/Survival | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 510930 | Term(s) Offered: | Full Year <br> $2024-2025$ |
| Prerequisite(s): | None | Open to Grades: | 8 |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing |  |
| Science, Technology, Engineering and |  |  |  |
| Mathematics |  |  |  |
| Transportation, Distribution and Logistics |  |  |  |,

Description: Cadets' experiences include leadership characteristics, practices, mentoring and community service. Core values instilled included integrity; service before self; and excellence in all we do. Cadets get the honor/privilege to wear the Air Force uniform. The course introduces students to different cultures through the study of world affairs, regional studies and cultural awareness. The course delves into history, geography, religions, languages, culture, political systems, economics, social issues, environmental concerns and human rights. Cadets learn about major events and significant figures that have shaped each region. There are readings, video segments, hands-on activities, other optional activities, technology enrichment and assessments to guide in the reinforcement of the materials. In the "Basic Survival" units, students will learn how to survive in situations where life and safety depends on their decisions. They will learn the basic survival medicine procedures, treatments and prevention measures when faced with emergency situations. The students will understand the necessities to maintain life, such as; building shelters, identifying, preparing and preserving food, fire
 craft and water purification. They will learn the concepts of orienteering, traveling, land navigation and map reading through the use of the compass and global positioning systems. Throughout the course, there are readings, videos, hands-on activities and in-text and student workbook exercises to guide in the reinforcement of the material. The information and hands-on skills learned in this course will aid the student throughout their life. The leadership portion provides insight into the fundamentals of management. The text contains many leadership topics that will benefit students as well as provide them with some of the necessary skills needed to put into practice what they have learned during their time in AFJROTC. Throughout the text are many ethical dilemmas, case studies and role play activities built into the lessons. Activities are based on real experiences and will allow students the opportunity to practice what they learn by getting involved in discussions and expressing their opinions. We focus on "Real World" life issues that center on leading and managing people. Wellness training will be offered one day per week. No military obligation is imposed, expected or incurred by students participating in AFJROTC classes.

| Course Title: | Community Service: Peer Buddies | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 510201 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Students must complete training, which is <br> provided the first few days of class | Open to Grades: | Peer Buddies <br> not open to <br> 9th grade <br> students |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics <br> Transportation, Distribution and Logistics |  |

Description: This course provides hands-on experience in working with individuals with disabilities. The goal for each participant is to be a better mentor, role model and advocate for a person with disabilities. Independent learning takes place through reading, interpreting and producing original writings regarding current topics in Special Education, as well as weekly logs and one hands-on project each quarter. Performance is evaluated through experiential opportunities provided in the Life Skills Support, Autistic Support, or general education environments.

| Course Title: | Goal Progress Support | Credit Value: | 0.5 or 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | Multiple | Term(s) Offered: | Semester or <br> Full Year |
| Prerequisite(s): | Individualized Education Program (IEP) or <br> educational team decision | Open to Grades: | $9,10,11,12$, <br> $12+$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing |  |
| Marketing <br> Science, Technology, Engineering and Mathematics <br> Transportation, Distribution and Logistics |  |  |  |

Description: This directed study period is a non-graded course designed for students who need additional support in academic, functional, emotional, social and/or behavioral areas. Prior team recommendation required based on pre-established individual goals.

| Course Title: | Vocational Instruction | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | 609910 | Term(s) Offered: | Full Year |
| Prerequisite(s): | Placement in LSS or AS classroom; previously <br> qualified for PASA | Open to Grades: | $9,10,11$, |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics <br> Transportation, Distribution and Logistics |  |

Description: This vocational training course uses the Model Transition Program (Job Readiness Curriculum). These lessons provide tools that create valuable resources to plan for the future and knowledge on how to get and maintain a job in the workforce.The Unique Curriculum helps with the creation of a vocational portfolio to help identify areas of interest, learning styles, positive work skills, and work environment preference. The PAES Lab utilizes a "hands-on" approach to learning the skills needed in common vocational workplaces. The Vocational Training Course also uses the Brigance Transition Skills Inventory, which provides a baseline of knowledge in the areas of educational interests, career interests, career choices, work ethics and attitudes, social security applications, simple employment applications, complex employment applications, resume, W-4 form, employment eligibility verification, date writing, job interview questions, pre-employment vocabulary, words found on employment forms, phrases and questions found on employment forms, directions found on employment forms, employment pay and benefits vocabulary, payroll statements and checks, direction words for performing manual skills, direction words for processing information, abbreviations, alphabetization, labels, manuals, and paragraphs in workplace manual.

## New to PRHS!

## PAES Lab

## PRACTICAL ASSESSMENT EXPLORATION SYSTEM

The PAES Lab is research-based age appropriate transition assessment for employability skills, functional skills, work behaviors and interests. PAES is a functional skills curriculum with an embedded assessment of vocational potential and employability skills. The PAES Lab identifies aptitude for community-based employment, functional skills, interests and work behavior strengths and barriers to success through hands-on activities and curriculum. PAES is conducted in a simulated work environment within a classroom setting where students work on simulations of actual tasks performed on community-based jobs. PAES has five different components which include: Computer Technology, Construction/Industrial, Processing/Production, Consumer/Service, and Business Marketing.


| Course Title: | Vocational Volunteers | Credit Value: | 1.0 |
| :--- | :--- | :--- | :--- |
| Course Number: | NEED NEW | Term(s) Offered: | Full Year |
| Prerequisite(s): | Placement in LSS or AS classroom; previously <br> qualified for PASA | Open to Grades: | $12,12+$ |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics <br> Transportation, Distribution and Logistics |  |

Description: This course advances the content learned through the Vocational Instruction course taught to students in grades 9-11. Students in this course will apply what they have learned in the real world through unpaid work experiences, travel training, and job exploration. Units taught in the Vocational Instruction course will be reviewed throughout with a higher expectation of mastery and application. This course is considered part of the PRHS transition program for students with intellectual disabilities, autism, and other special learning needs.

## Community Based Work Experiences



Time on task


Professional Attitudes


Following Directions


Workplace Hygiene


Attention to Detail


Communication Skills


Problem Solving


Teamwork

| Course Title: | Life Skills Training |  | Credit <br> Value: | 1.0 |
| :--- | :--- | :--- | :--- | :--- |
| Course Number: | 609920 | Term(s) <br> Offered: | Full Year |  |
| Prerequisite(s): | Placement in LSS or AS classroom; previously qualified <br> for PASA | Open to <br> Grades: | $9,10,11$, <br> $12,12+$ |  |
| Career Cluster(s): | Agriculture, Food and Natural Resources <br> Architecture and Construction <br> Arts, Audio/Video Technology and Communications <br> Business Management and Administration <br> Education and Training <br> Finance <br> Government and Public Administration <br> Health Science | Hospitality and Tourism <br> Human Services <br> Information Technology <br> Law, Public Safety, Corrections and Security <br> Manufacturing <br> Marketing <br> Science, Technology, Engineering and Mathematics <br> Transportation, Distribution and Logistics |  |  |

Description: The Life Skills Training course uses the Transition Passport, which is a part of the Unique Learning Curriculum. Transition Passport includes Vocational, Daily Living, Personal Life and Community lessons. These lessons provide tools that create valuable resources to plan for future educational, vocational and adult living outcomes. The Life Skills Training course also uses the Brigance Transition Skills Inventory, which provides criterion-referenced assessments to support transition planning for post-secondary, employment and independent living skills.

## Pine-Richland School District Administration

| Pine-Richland Central Offices 702 Warrendale Rd., Gibsonia PA 15044 Phone: 724-625-7773 \& Fax: 724-625-1490 www.pinerichland.org |  |  |
| :---: | :---: | :---: |
| Dr. Brian R. Miller | Superintendent | $\times 6100$ |
| Barbara Williams | Administrative Assistant to Superintendent/School Board Secretary | $\times 6100$ |
| Dr. Michael Pasquinelli | Assistant Superintendent of Secondary Education \& Curriculum | $\times 6110$ |
| Dr. Kristen Justus | Assistant Superintendent of Elementary Education \& Curriculum | $\times 6121$ |
| Carolyn Will | Administrative Assistant to Assistant Superintendents | $\times 6110$ |
| Abigail Cercone | Receptionist | x 6307 |
| Christopher Juzwick | Director of Financial \& Operational Services | $\times 6303$ |
| Rachel McCarthy | Accounting Specialist | x 6300 |
| Rebecca Powell | Accounts Payable/Accounts Receivable Specialist | x 6306 |
| TBD | Transportation \& Facilities Use Coordinator | $\times 6200$ |
| Davida van Mook | State Reporting Coordinator/PIMS Coordinator | $\times 6000$ |
| Brian Glickman | Director of Human Resources | $\times 6201$ |
| Sarah Dindak | Human Resources Specialist | x 6304 |
| Alexia Meijer | HR Support | $\times 6301$ |
| Doris McCartney | Payroll and Employee Benefits Specialist | $\times 6302$ |
| Erin Hasinger | Director of Communications | x 6202 |
| Steve Karpinski | Media Services Specialist | x 1505 |
| Andrew Mundy | Media \& Communications Coordinator | $\times 6203$ |
| Shawn Stoebener | Director of Technology | x 6305 |
| Jeff Zimmerman | Director of Facilities Management | $\times 6750$ |
| Bruce Riemer | Assistant Director of Facilities | $\times 6754$ |
| Jamie Rucker | Assistant Director of Facilities | $\times 6751$ |
| Andrew Petyak | Safety \& Security Coordinator | x 1607 |
| Parker Freshwater | Safety \& Security Coordinator | x 1607 |
| Brad Nowosielski | School Resource Officer | x 1999 |
| Ryan Wilson | Sodexo Food Services Manager | $\times 2236$ |
| Pine-Richland Pupil Services <br> 3811 Bakerstown Rd., Gibsonia, PA 15044 Phone: 724-443-7230 \& Fax: 724-443-7374 |  |  |
| Dr. Maura Paczan | Director of Student Services | $\times 6501$ |
| Brenda Provenzano | Special Education Secretary | $\times 6501$ |
| Mary Pegher | Special Education Administrative Assistant | x 6500 |
| Dr. Greta Kuzilla | Assistant Director of Students Services and Special Education | x 6503 |
| Dr. Taylour Kimmel | School Psychologist (Grades K-6) | $\times 6505$ |
| Dr. Melissa Ramirez | School Psychologist (Grades 7-12) | $\times 6504$ |
| Carolyn Welschonce | Social Worker (Grades 7-12) | $\times 1677$ |

## Pine-Richland School Board

The Pine-Richland School Board is made up of nine school directors, who set policy for the school district. The board reorganizes every year in December. Below is a list of board members. Mrs. Barbara Williams serves as board secretary.

Board of Directors
Philip Morrissette, President
Amy Terchick, Vice President
Marc Casciani, Treasurer
Christina Brussalis, Director
Joseph Cassidy, Director
Ashley Fortier, Director
Lisa Hillman, Director
Leslie Miller, Director
Mike Wiethorn, Director


Pine-Richland School District will not discriminate in its education programs, activities or employment practices, based on race, color, national origin, gender, religion, ancestry, disability, union membership or any other legally protected classification. Announcement of this policy is in accordance with state and federal laws, including Title IX of the Educational Amendments of 1972 and Sections 5043 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990.



[^0]:    Left (File Photo); Students investigate the integumentary system which is made up of the skin, hair, nails, sweat glands, and sebacrous glands.

