# Course Guide 

2022-2023


# CHARLEROI AREA HIGH SCHOOL 

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## GRADUATION REQUIREMENTS

The minimum requirements for graduation from Charleroi Area High School are outlined in this section. Graduation is based on the subjects completed in grades nine through twelve and a completed graduation project. The Class of 2023 and beyond have statewide graduation requirements to meet as well. Students will be assisted in the development of a program of study in keeping with their interests and abilities, but they will be expected to assume responsibility for meeting the minimum requirements.

NCAA initial eligibility process, Division I worksheet, and Division II worksheet can be found at the end of this course guide.

## Graduation Requirements for the Honors Course Class of 2023, Class of 2024, Class of 2025, and Class of 2026

To graduate from Charleroi Area High School, students must successfully earn a total of 25 required credits during grades 9-12.

| Four English Language Arts Courses (Honors required grades 9-11 <br> Honors or AP English required in $12^{\text {th }}$ ) | 4.0 credits |
| :---: | :---: |
| Four Mathematics Courses (Honors Algebra II, Honors Geometry, Honors Trig) (Choice of AP Calculus or Prob/Stats) | 4.0 credits |
| Four Science Courses (Honors Biology, Honors Chemistry, Honors Physics, and one additional from the following: AP Biology, AP Physics, AP Chemistry, Honors Anatomy \& Physiology) | Minimum of 5.0 credits |
| Three Social Studies Courses (US/PA History, Modern American History, and World Cultures required) | 3.0 credits |
| World Language <br> (Two years same language) | 2.0 credits |
| Introduction to Computers | 0.5 credit |
| Personal Finance | 0.5 credit |
| Health and Physical Education | 2.0 credits |
| Arts and Humanities electives <br> - Arts include art, engineering, family and consumer sciences cours industrial technology courses, band, and chorus. <br> - Humanities include foreign language elective or extra social studies. | 2.0 credits es, <br> s. |
| Additional Electives | Minimum of 2.0 credit |
|  | 25.0 credits |

In addition to the credits noted above, students must complete a graduation project that consists of job shadowing, creating a resume and cover letter, senior interview, and a research paper with resources. If graduation year applicable, students must also meet the Pennsylvania statewide graduation requirements. See pages 6-8 for more information.

# Graduation Requirements for the Academic Course Class of 2023, and Class of 2024, Class of 2025, and Class of 2026 

To graduate from Charleroi Area High School, students must successfully earn a total of 25 required credits during grades 9-12.

| Four English Language Arts Courses <br> (Academic English required 9-12) | 4.0 credits |
| :--- | ---: |
| Four Mathematics Courses <br> (Academic Algebra I, Academic Algebra II, Academic Geometry, Academic Trig) |  |
| Three Science Courses <br> (Academic Biology, Academic Chemistry required) |  |
| Three Social Studies Courses <br> (US/PA History, Modern American History, and World Cultures required) | 3.0 credits |
| World Language <br> (Two years same language) | 2.0 credits |
| Introduction to Computers | 2.0 credits |
| Personal Finance | 0.5 credit |
| Health and Physical Education | 0.5 credit |
| Arts and Humanities electives |  |
| $\bullet \quad$ Arts include art, engineering, family and consumer sciences courses, |  |
| industrial technology courses, band, and chorus. |  |
| $\bullet \quad$ Humanities include foreign language elective or extra social studies. |  |
| Additional Electives | 2.0 credits |

In addition to the credits noted above, students must complete a graduation project that consists of job shadowing, creating a resume and cover letter, senior interview, and a research paper with resources. If graduation year applicable, students must also meet the Pennsylvania statewide graduation requirements. See pages 6-8 for more information.

# Graduation Requirements for the Core Course Class of 2023, and Class of 2024, Class of 2025, and Class of 2026 

To graduate from Charleroi Area High School, students must successfully earn a total of 25 required credits during grades 9-12.

| Four English Language Arts Courses <br> (English required 9-12) | 4.0 credits |
| :--- | :--- |
| Four Mathematics Courses <br> (Algebra IA, Algebra IB, Applied Geometry <br> and choose from Real World Math or Academic Algebra II) <br> Three Science Courses <br> (Biology required) | 4.0 credits |
| Three Social Studies Courses <br> (US/PA History, Modern American History, and World Cultures required) | 3.0 credits |
| Introduction to Computers 0.0 credits <br> Personal Finance 0.5 credit <br> Health and Physical Education 2.0 credits <br> Arts and Humanities electives  <br> - Arts include art, engineering, family and consumer sciences courses,  <br> industrial technology courses, band, and chorus.  |  |
| Humanities include foreign language elective or extra social studies. |  |

Additional Electives
6.0 credits
25.0 credits

In addition to the credits noted above, students must complete a graduation project that consists of job shadowing, creating a resume and cover letter, senior interview, and a research paper with resources. If graduation year applicable, students must also meet the Pennsylvania statewide graduation requirements. See pages 6-8 for more information.

## Class of 2023, Class of 2024, Class of 2025, and Class of 2026 Additional Graduation Requirements

Act 158 of 2018 changed the graduation requirements for the Class of 2022 and beyond. The statewide graduation requirements will apply, as will any other locally-established policies and requirements starting with the graduating Class of 2023.

Students can meet the statewide graduation requirements by one of the FIVE pathways:

- Keystone Proficiency Pathway: Scoring proficient or advanced on each Keystone Exam - Algebra I, Literature, and Biology.
- Keystone Composite Pathway: Earning a satisfactory composite score of 4452 on Algebra I, Literature, and Biology Keystone Exams while achieving a proficient score on at least one of the three exams AND no less than a basic score on the remaining two exams.
- Alternate Assessment Pathway: Successful completion of locally established gradebased requirements for academic content areas associated with each Keystone Exam on which the student did not achieve proficiency AND one of the following:
- Attainment of an established score on an approved alternative assessment where the student did not earn proficiency. Approved alternate assessments are:
- SAT: 1010
- PSAT: 970
- ACT: 21
- ASVAB: minimum score required to gain admittance to a branch of the armed services in the year the student graduates
- ACT WorkKeys: Gold Level
- Attainment of a 3 or higher on an Advanced Placement test in an academic content area associated with each Keystone Exam on which the student did not achieve at least a proficient score
- Algebra 1 Keystone: AP Calc AB, AP Cal BC, AP Statistics, AP Computer Science A, AP Computer Science Principles, AP Statistics, AP Physics 1, AP Physics 2, AP Physics C, or AP Chemistry
- Biology Keystone: AP Biology, AP Physics 1, AP Physics 2, AP Physics C, AP Chemistry, AP Environmental Science
- Literature Keystone: AP English Literature, AP English Language
- Successfully complete a concurrent enrollment course in an academic content area associated with each Keystone Exam in which the student did not achieve at least proficiency
- Credit-bearing non-remedial approved concurrent course
- Aligned to the respective Keystone Exam
- Passing grade in the approved concurrent course
- High School or college transcript as evidence
- Successful completion of a pre-apprenticeship program
- Specific career training designed to prepare a student for an occupation in an approved schedule of related instruction
- Program must be registered with the Director of Apprenticeship and Training Office, PA Department of Labor and Industry
- Meets all pre-apprenticeship program requirements, per specific industry requirements
- Acceptance in an accredited 4-year nonprofit institution of higher education and have evidence of the ability to enroll in college-level work
- Acceptance letter from an accredited 4-year nonprofit institution
- Placement test results indicating the student may enroll in college-level coursework
- College registration form confirming enrollment
- Local profile of an acceptable high school GPA, attendance record, and SAT/ACT score
- Evidence Based Pathway: Successful completion of locally established grade-based requirements for academic content areas associated with each Keystone Exam on which the student did not achieve proficiency AND demonstration of three pieces of evidence consistent with the student's goals and career plans, including
- At least one of the following:
- ACT WorkKeys: Silver level or higher
- SAT Subject Tests: 630
- Advanced Placement (AP) Program Exam: 3 or higher related to student career choice
- Acceptance to an accredited nonprofit institution of high education other than a 4 -year institution (trade schools, community colleges, etc.) evidenced by acceptance letter; placement test results; college registration form; or local profile of acceptable high school GPA, attendance record, SAT/ACT score
- Attainment of an industry-recognized credential as defined by the Office of Elementary and Secondary Education
- Successful completion of a concurrent enrollment or postsecondary course as evidenced by credit bearing non-remedial course, approved concurrent course aligned to the respective Keystone exams, passing grade on approved concurrent course, or high school/college transcript
AND
- Up to two of the following:
- Satisfactory completion of a service learning project
- Project proposal is presented in writing to the school official for pre-approval and must include project learning goals, project activities, and the project's contribution to the community
- Supervised and assessed by an adult and successful completion is verified in writing by the adult supervisor
- Of sufficient duration and intensity to address identified community needs and meet specific project learning goals.
- Attainment of a score of proficient or advanced on a Keystone Exam;
- A letter guaranteeing full-time employment or military enlistment per PDE template;
- A certificate of successful completion of an internship, externship, or cooperative education program;
- Satisfactory compliance with the NCAA's Division II for college-bound student athletes with a minimum grade point average (GPA) of 2.0
- Career and Technical Education (CTE) Pathway: For Career and Technical Education Concentrators
- Successful completion of locally established grade-based requirements for academic content areas associated with each Keystone Exam on which the student did not achieve proficiency; AND
- Attainment of an Industry-Based Competency Certification (NOCTI) related to the CTE Concentrator's program of study OR demonstration of a high likelihood of success on an approved industry-based competency assessment OR readiness
for continued meaningful engagement in the CTE Concentrator's program of study. Resource on CTE Requirement from PDE

Key:<br>Locally established grade-based requirement = passing grade in course of D or higher


#### Abstract

Pre-apprenticeship program, service learning project, internship, externship, or cooperative education program = defined in Appendix A: Work-Based Learning Activities of the IndustryBased Learning Indicator for the Future Ready PA Index: Guidelines for Data Collection, Monitoring, and Reporting which can be found at https://www.education.pa.gov/K12/ESSA/FutureReady/Pages/FRIndustryGuidelines.aspx


## Alternate Assessment Pathway - Additional Information

## ASVAB (Armed Services Vocational Aptitude Battery)

The ASVAB is a free test to evaluate one's personal skills and abilities. Not only can this test be used by students interested in pursuing enlistment in the armed services, it offers ALL students a closer look at their abilities and interests even if they are not interested in enlistment in the armed services. The ASVAB helps all students to determine how they learn and what they are good at, giving them choices to assist in post-secondary planning. Their interests and abilities are linked to occupations and careers that they may consider pursuing in the future.

The ASVAB is approved as an alternate assessment for the Keystone exam under Alternate Assessment Pathway of PDE's graduation requirements. This graduation pathway is offered after the Keystone Proficiency and Keystone Composite Pathways have been attempted.

School districts must apply each year in order to offer the ASVAB test. If our application is approved, all $10^{\text {th }}$ graders at Charleroi Area High School will have the opportunity to take the ASVAB. In order to use this pathway towards graduation, a minimum score to gain admittance to a branch of the armed services in the year the student graduates. Additionally, the score can be used if the student is enlisting in the military, but the score will not be shared with the military unless you choose to do so.

## PSAT

The PSAT/MMSQT exam is approved as an alternate assessment for the Keystone exam under Alternate Assessment Pathway of PDE's graduation requirements. A minimum score of 970 is required on the PSAT to count under this pathway. This graduation pathway is offered after the Keystone Proficiency and Keystone Composite Pathways have been attempted. Additionally, the PSAT serves as practice for the SAT.

The PSAT exam consists of Reading, Writing and Math questions and is typically administered each October at Charleroi Area High School to students in grades 10 and 11. The Charleroi Area School District will cover all or part of the cost for those students in grade 11 who do not qualify for a fee waiver under the criteria set forth by The College Board. School counselors share detailed information regarding the PSAT/NMSQT with students at the beginning of each school year.

## Scheduling and Guidance Office Information

## Selecting Courses

With the addition of our new Sapphire student information system, we can complete the scheduling process online. Our high school counselors will continue to assist students with the scheduling process. Although a parent signature is not required through Sapphire, we encourage parents to review their child's course selections to ensure the following:

1. Remain on track for graduation
2. Meet NCAA requirements (if applicable for athletes)
3. Meet post-secondary admission requirements.

Counselors are available by appointment to provide individual assistance to parents and students with the process.

## Class Standing

The minimum number of credits necessary for advancement is listed below, although the principal may use discretionary powers in unusual circumstances to waive the standards:

Advancement to:
Grade 10 - $\quad 4.75$ credits
Grade 11 - $\quad 10.75$ credits
Grade 12 - $\quad 17.75$ credits

## Credit Deficiencies

A credit deficiency, which occurs through a subject failure, may be resolved by repeating the course or by attending summer school. It is the student's responsibility to reschedule any credit deficiencies. However, students must get approval in advance from the counselor. Correspondence courses are not accepted.

## Course Changes

Course changes will be made only in the event of scheduling errors, academic misplacements and scheduling conflicts.

## Withdrawal from Class

No credit will be given for any course that has not been completed.

## Graduation Honors

A student is recognized as a high honor student in the Commencement Program if his/her final academic average at the end of grade 12 is a minimum of $94 \%$ average.

A student is recognized as an honor student in the Commencement Program if his/her final academic average at the end of grade 12 is a minimum of $90 \%$ average.

## National Honor Society

After completion of the first semester of Junior year, students with a $94 \%$ cumulative grade average will be invited via letter to apply for Charleroi's chapter of the National Honor
Society. The application process requires each student to showcase how they portray abilities of Leadership, Service, and Character, in addition to Scholarship. In order to be considered students must complete the entire application, which includes, but is not limited to:

- writing an essay demonstrating their leadership skills both in and out of the classroom
- proper documentation of volunteer hours; these can be individual or group service hours, but for which the student has received NO compensation
- proof of appropriate character traits in the form of teacher/sponsor recommendation letters
- student must not have any discipline referrals to the office

Once completed, each application is carefully reviewed by the Faculty Committee, where points are given based on a rubric. If the minimum number of points are met, the applicant is hereby accepted into NHS. Students MUST maintain the $94 \%$ minimum to remain in NHS along with all of the other pillars of NHS.

## Advanced Placement and Honors Courses

We are a percentage-based school, and courses with an Honors or Advanced Placement designation will have a 1.05 multiplier. A student will not receive the 1.05 multiplier if they receive below an $80 \%$ for the quarter. These courses will also be given extra "weight" towards GPA. The grade-weight for these courses will be A -5 points, $\mathrm{B}-4$ points, $\mathrm{C}-3$ points, $\mathrm{D}-1$ point, and $\mathrm{F}-0$ points. Listed below are the courses that receive extra "weight". All courses may not be offered every year depending on demand.
AP English Literature
AP US History
AP Physics C /College in HS
AP Biology/College in HS
AP Chemistry/College in HS
AP Art - 2D
AP Art - 3D
AP Art - Drawing
AP Calculus/College in HS

Honors English - 9, 10, 11, 12
Honors Algebra
Honors Geometry
Honors Algebra II
Honors Trigonometry
Honors Probability \& Statistics/College in HS
Honors Biology
Honors Chemistry
Honors Physics
Honors Anatomy \& Physiology
Honors Spanish IV
Honors French IV
Pre AP English

## Grading Scale

Student progress and achievement will be reported as follows:

| $100 \%-90 \%$ | $=\mathrm{A}$ |
| :--- | :--- |
| $89 \%-80 \%$ | $=\mathrm{B}$ |
| $79 \%-70 \%$ | $=\mathrm{C}$ |
| $69 \%-60 \%$ | $=\mathrm{D}$ |
| $59 \%-0 \%$ | $=\mathrm{F}$ |

Class rank will be reported at the end of the academic year only.

## Charleroi Area High School - Work Release - Class of 2023 Only

This non-credit opportunity is designed to meet the individual needs of seniors while ensuring that the student fulfills all of the requirements needed to graduate. Students who qualify will carry a reduced load of classes and then be excused for up to three periods at the end of the school day for Work Release. Students must be scheduled for the necessary courses for graduation before Work Release can be approved. Work Release will be reflected on the student's transcript as a non-graded course.

The intent of this program is to allow Seniors leave early from school when they have a parttime job. Students must work a minimum of fifteen (15) hours per week during the school day in order to be eligible for Work Release. If the school day is altered for any reason, students must still make themselves available for their scheduled classes.

Students participating in athletics are also eligible for Work Release if they have met their graduation requirements and are still satisfying all of the eligibility requirements for the Pennsylvania Interscholastic Athletic Association (PIAA). Student-athletes please refer to the PIAA handbook.

Eligibility:
Seniors must have the following prior to applying:

- Grades: Cumulative QPA of $75.00 \%$
- Attendance:
- Three-year average of no more than 5 unexcused absences
- Three-year average of no more than 4 unexcused tardies to school

Scheduling/Application:
Work Release should be requested during spring scheduling of the junior year. Requesting Work Release does not guarantee acceptance into the program.

Students must complete an application and supply additional required documentation. The application can be started at the end of the junior year. Students must supply proof of employment by attaching a letter from the employer, on business letterhead, stating the work schedule including days of the week and time of shifts during the school day. Students are not permitted to be self-employed, work for parents/relatives, or work "under the table" or in other situations where they are not covered by the employer's liability and workman's compensation insurance. If a Senior requesting Work Release is under 18 years old, the Senior must possess a valid work permit. See the High School Guidance Secretary for more information.

The application states that parents are giving permission for the school to allow their child to leave school in order to participate in work or college and that the district is no longer liable for their child at that time.

Seniors must provide their own transportation for Work Release. Being approved for Work Release does not guarantee or entitle any student to a parking pass. Parking passes will be distributed in accordance with the parking pass distribution procedure.

## Continued Proof:

Seniors with Work Release must submit proof of the hours worked to the school counselor at the end of each month.

Seniors with Work Release must sign out upon departure at the attendance desk in the main lobby.

Termination:
Continuation of Work Release throughout the year is at the discretion of the administration and the guidance department. Participation in Work Release will be terminated if the following occurs:

- The student's job is terminated. If a student is terminated from employment, the student must notify the school counselor and will have one week to obtain another job.
- The student does not submit monthly proof of employment to the school counselor.
- The student accumulates more than 5 unexcused absences.
- The student accumulates more than 4 unexcused cases of tardiness to school.
- The student's Quality Point Average falls below $75 \%$.
- The student violates code conduct that warrants Out of School Suspension.

If Work Release is terminated, the student will be required to attend school full time. The student will be placed in available courses and will be required to complete any and all missed work.

Work Release may be applied to situations involving long-term family illness. If a student is to be released for a reason of long-term family illness, the student must present proof that he/she is needed at home. This proof will be in a form of a letter from the student's family doctor. The letter will describe the need for the student's early release and will list the days and hours that he/she will be needed at home. The student must also present a letter from his/her parents verifying the need for the student to be at home and granting permission to be released at a designated time. This requirement for parental verification will be waived if the applicant is eighteen years of age or older and no longer lives with his/her parents.


## Summer Reading Policies

Charleroi Area High School English Department

English course selection/enrollment will be completed with your school counselor.

## Distribution

1. Summer reading assignments will be distributed to incoming Advanced Placement and Honors English students at the end of the previous school year.
2. New students who enroll in the district over the course of the summer will receive summer reading assignments from the high school guidance office prior to the start of the school year.
3. New students who enroll in the district on or after the first day of school will receive summer reading assignments from their respective English teacher.

## Requirements

As summer reading work is effectively the first English unit of the year, it is imperative that students complete the required readings for effective participation in class and assessment.

1. Advanced Placement and Honors English students who receive summer reading assignments prior to the start of the new academic year are expected to have the assignments completed by the due date specified by the assigning teacher.
2. New Advanced Placement English or Honors English students who enroll in the district on or after the first day of school will be required to read all assigned reading AND complete all summer reading assignments no later than mid-quarter. Reading must be done in a timely manner in an effort to keep up with the pace of the class.

## Class Transfers

Students are not permitted to transfer from one level English class to another after receiving summer reading assignments. However, if an extenuating circumstance occurs, the following applies:

Students who transfer from one class to another on or after the first day of school will receive a grade for the summer reading completed for the previous class. (If no work was completed the student will receive a zero for summer reading and will not be permitted to make-up work.) Once enrolled in his/ her new English class, the student will be required to read all of that course's assigned reading. Reading must be done in a timely manner in an effort to keep up with the pace of the class.

## Grade 9

## Prerequisite: Successfully complete English 8

The Ninth grade academic course in English encompasses materials in the areas of literature, vocabulary, writing, grammar, and speaking in accordance with the Common Core Standards. Students in the academic course will read, analyze, write about, and speak about works of fiction and nonfiction throughout the year. Students can expect units on short stories, poetry, novels, the play Romeo and Juliet, and a variety of nonfiction pieces including Elie Wiesel's Holocaust memoir, Night. Independent reading will also be utilized throughout the course. The variety of texts is designed to help students gain an appreciation of the written and spoken word. Students will be expected to complete research, write and revise single and multiparagraph writings, and create individual and group projects and presentations to demonstrate learning according to the Common Core Standards. The writing of the course begins with the structure of a single paragraph and continues with composition development throughout the year. Students identify the audience and purpose for informational, narrative, and persuasive writing pieces. In addition, the course addresses the characteristics of effective writing: focus, content, organization, style and conventions. Through the writing process students learn to develop, organize, and express their ideas with clarity. In addition, students will take various benchmark exams and practice assignments to help prepare and monitor progress toward the forthcoming Keystone exams at the end of the tenth grade English course.

## Honors English

1 Credit
Grade 9
Recommendation: A 90\% average in English 8 AND a 90\% in Reading 8. Summer readings are required to be completed before the fall term begins.

The Ninth grade Honors English program encompasses college preparatory material in the area of literature, vocabulary, writing, and speech. The literature covers a variety of genres from a blend of both classics and American literature. The course is designed to cover the Ninth grade college preparatory curriculum plus additional work in the areas of literature, grammar, and speech. The intensity of instruction is significantly increased in the study of literature through greater number of literary selections provided for reading and analysis. Students can expect units on short stories, poetry, novels, the play Romeo and Juliet, and a variety of nonfiction pieces including Elie Wiesel's Holocaust memoir, Night. Independent reading will also be utilized throughout the course. The variety of texts is designed to help students gain an appreciation of the written and spoken word. Students will be expected to complete research, write and revise single and multi-paragraph writings, and create individual and group projects and presentations to demonstrate learning according to the Common Core Standards. Students are scheduled for Honors placement by virtue of their academic achievements, teacher recommendation, and guidance input. Summer reading assignments are incorporated into the high school Honors English program for every grade level and will be reviewed at the beginning of the year.

## Grade 10

Recommendation: Successful completion Academic English 9

The Tenth grade English Academic course encompasses college preparatory material in the areas of literature, vocabulary, writing and speaking. The course also demonstrates through heightened college preparatory work the common core standards for reading, writing, speaking and listening. Students will be expected to complete with a higher standard the benchmarks based on the common core standards and objectives. The literature covers a variety of genres from a representative list of classic and world literature. Examples of genres include but are not limited to the following: nonfiction, fiction, poetry, and drama. Subgenres will also be analyzed within those genres. Students will be expected to analyze, evaluate, and respond to the literature through multi-paragraph compositions while incorporating specific units of grammar, mechanics, usage and various writing modes based on the writing standards: focus, content, organization, style, and conventions. The academic student will also complete comprehensive units of vocabulary in preparation for the PSATs, SATs, and Keystone exams. In addition, the student will also complete contextual word studies. Students will also orally present passages from literature as well as interpretation and explication of selected poems. Students will take the Keystone Literature Exam at the end of this course.

## Recommendation: An 80\% average in Honors English 9 or a 90\% Academic

 English 9. Summer readings are required to be completed before the fall term begins.The Tenth grade English Honors course encompasses college preparatory material plus additional work, which will be demonstrated through the common core standards for reading, writing, speaking and listening. The intensity of the course work will be especially expanded in the areas of literature and writing, not only in the area of analysis and interpretation, but also in the number of literary selections read. Students will be expected to complete with the HIGHEST academic standards the benchmarks based on the common core standards and objectives. The literature will cover a variety of genres from a representative list of classic and world literature. Students will be expected to analyze, evaluate, and respond to the literature through multiparagraph compositions incorporating specific units of grammar, mechanics, usage, and writing modes based on the Pennsylvania writing assessment domain scoring guides: focus, content, organization, style and conventions. The honors student will also complete units of vocabulary in preparation for the PSATs, SATs, and Keystone Literature exam. In addition, the student will orally present passages from literature as well as interpretation and explication of selected poems. Summer reading assignments are incorporated into the high school Honors English program for every grade level and will be reviewed at the beginning of the year. Students will take the Keystone Literature Exam at the end of this course.

The Eleventh Grade academic course in English will prepare students for the demands of college level work in the areas of literature, vocabulary, writing, and speaking. The course will also demonstrate, through the year's work, the common core standards for reading, writing, speaking and listening. Students will be expected to complete with a higher standard the benchmarks based on the common core standards and objectives. The literature covers a representation of American literature with a focus on modern American authors. Students will be expected to analyze, evaluate, and respond to the literature through a variety of oral and written assignments. Single and multi-paragraph compositions will be developed based on writing standards: focus, content, organization, style, and conventions. Individual oral presentations; group presentations; independent readings and corresponding projects; and technology based projects will be required throughout the year.

## Honors English

1 Credit
Grade 11
Recommendation: An 80\% average in Honors English 10 or 90\% average in Academic English 10. Summer readings are required to be completed before the fall term begins.

The Eleventh Grade Honors course in English will prepare students for the demands of college level work in the areas of literature, vocabulary, writing, and speaking. The course will also demonstrate, through the year's work, the common core English standards for reading, writing, speaking and listening. The intensity of the course work will be especially expanded in the areas of literature and writing, not only in the area of analysis and interpretation, but also in the number of literary selections read. Students will be expected to complete with the highest academic standards the benchmarks based on the common core standards and objectives. The literature covers a representation of American literature with a focus on modern American authors. Students will be expected to analyze, evaluate, and respond to the literature through a variety of oral and written assignments. Single and multi-paragraph compositions will be developed based on writing standards: focus, content, organization, style, and conventions. Individual oral presentation; group presentations; independent readings and corresponding projects; and technology based projects will be required throughout the year. In addition to their considerable reading load during the year, honors students are expected to read at least two novels during the summer months with the possible inclusion of short stories and/or poetry; summer reading criteria, depending on assignment, are assigned by the teacher, student selected from the AP book list, or student selected based on individual interest. Students will develop and exhibit a self-directed, independent learning style as well as a sharing of their insights orally, much in the style of a college seminar course.

Recommendation: A 70\% average in Academic English 11 or an 80\% average in Core English 11.

The academic course is designed to prepare college-bound students to read, write and think with the competence necessary for them to succeed in post high school education. British literature and poetry, both classic and contemporary, are the focus of this college preparatory course. Students in this course will have access to digital media as well as standard books. Students will be expected to analyze, evaluate, and respond to the literature through a variety of oral and written assignments. Single and multi-paragraph compositions as well as a writing portfolio will be developed based on writing standards: focus, content, organization, style and conventions. Speaking skills will be addressed via multimedia projects and presentations. Students will also be expected to complete a senior project. Students will be guided through a career awareness/resume' building process. Students are expected to complete a resume', participate in a mock senior interview, and participate in a job shadowing experience.

| AP English $12 \quad$ (AP Literature and Composition) 1 Credit |
| :--- | :--- |
| Grade 12 |
| Recommendation: An 80\% average in Honors English $\mathbf{1 1}$ or a $90 \%$ average in |
| Academic English $\mathbf{1 1}$. Summer readings given at the end of $\mathbf{1 1}^{\text {th }}$ grade are |
| required to be completed before the fall term begins. |

The rigorous, college-level course, approved by the AP College Board is designed to help advanced students to strengthen their skills as careful readers of challenging literary texts, and to become attentive to the role that language and form play in aesthetic production. Although the course will concentrate on "close reading," it is not restricted to the New Critical understanding of this practice; rather the course shall explore, in psychoanalytic, materialist, and deconstructive terms, a wide range of literary genres written in various historical periods. Poetry, drama, and prose works range from 1600 to the present; students will connect the works to the time period and the importance they play on society and vice versa. Extensive outside readings are mandatory throughout the year. Student in this course will have access to digital media as well as standard books. In Socratic-style, students will be called upon to share writings, analysis, and thoughts about assigned readings. Writing shall focus on expository and persuasive essays modeled upon the AP format. Students are required to submit several major papers, as well as an extensive research paper. Speaking skills will be addressed via multimedia projects and presentations. AP students will be guided through a career awareness/resume' building process. Students are expected to complete a resume', various types of applications, and use their skills in a mock senior interview. Students enrolled in this course shall be expected to participate in the AP Exam for university credit or advanced standing.
Completion of the AP course does not guarantee a satisfactory score on the College Board AP Exam.

## English Electives

## These courses will not be offered every year.

Tips for Success in High School and Beyond Grade 9-12<br>(This course will not be offered every year)

1/2 Credit

This course was designed to help students improve their learning effectiveness, attitude, and motivation towards learning. Students will learn a wide range to strategies to assist them in becoming successful high school students and productive individuals. This course emphasizes self-reflection; goal-setting; decision-making; setting of priorities; communicating; managing time, energy, and stress; and practical problem solving. Students may develop resiliency skills, independence, self-confidence, self-advocacy and coping skills as a result. Critical thinking will guide in-depth lessons using a variety of both innovative and traditional techniques, mid and long-range projects, cooperative learning activities, journal writing and computer applications. Ultimately, students will embark on a self-discovery mission to uncover personal values, goals, and attributes that will shape decisions that they make as they move through high school and beyond.

## Communication Skills

1/2 Credit Grade 9-12
(This course will not be offered every year)

Whether public speaking is something that you love to do or something that you know you need to improve, this is the course for you. This course is designed to show you that public speaking does not have to be intimidating, in fact, it can be fun! This course will provide students with the tools to both compose and deliver various types of speeches. In addition, through practice, students will develop the skills necessary to communicate in a variety of speaking situations such as small and large group discussion with a variety of audience members. The positive atmosphere maintained in this class sets the tone for a valuable and successful learning experience.

## Creative Writing I

1/2 Credit
Grade 9-12
(This course will not be offered every year)
Are you a creative person? Do you enjoy personal journaling, story writing, poetry writing, or lyric writing? If so, Creative Writing I is the perfect course for you to explore the powers of writing within your life. This course will expose you to a variety of writing types including short story fiction, poetry, and non-fiction writing. Additionally, it will help to facilitate creativity by introducing many writing exercises designed to draw from and expand upon your powers of observation, imagination, and language use. Ideas will be sparked, confidence acquired, and you'll gain a sense of purpose within your writing. Most writings will be shared in the classroom forum for student-to-teacher and peer-to-peer critiquing, editing, and revision. At the culmination of the course, students will have a working portfolio with many pieces of original writing and a collection of exercises from which they might create more original works.

## Creative Writing II <br> Grade 10-12 <br> Prerequisite: Successful completion of Creative Writing I. (This course will not be offered every year)

Creative Writing II will expand upon the foundations of Creative Writing I. Students will learn complementary and more advanced writing exercises and workshop techniques allowing the student to continue developing his/her creative process. Students will produce new works and will also revise elements of the original portfolio. A primary focus of the Creative Writing II course allows the students to select an independent area of study; students will select a primary interest area (short story, poetry / lyric writing, non-fiction writing) and compose a work or collection of works based upon student interest and ability level. The focus of this course will be to produce multiple finished-product writings that have undergone multiple revisions and are worthy of productions in a student publication. At the culmination of this course, students will assemble a classroom publication of works submitted by each member of the course. The publication will be designed by the students to display their creativity through both the writing of the pieces and visual arrangement of the pieces and supplemental artwork. Additionally, students will be encouraged to enter their finished products within the many scholarship and writing competitions that are advertised each year.

## American Drama

## Grade 10-12

Prerequisite: Successful completion of English 9. (This course will not be offered every year)
"My greatest hope for a play is always that it might prove generative of thought, contemplation, discussion-important components of what I think we want from our entertainments...I have always believed theater can be a useful part of our collective and individual examining." Tony Kushner, from Homebody/Kabul

This course uses US American theater as a means to analyze change. The theater is a place where change and a call to action for change is often articulated. Drama often acts as a catalyst to challenge and change societal norms. We will consider the notion that theater does not only reflect the world, but also attempts to change it-to make it better. In order to accomplish this goal, we will read plays, theater reviews, literary criticism, write thoughtful and thought-provoking responses and have meaningful class discussion. Film comparisons or short performances may accompany some plays. A variety of projects and assignments, quizzes, and exams will be used to assess performance in the class. This class is less about performing and more about discussing the impact of drama and theatre on society. If you are a person that loves to read and participate in class discussion, this class is for you!

## Grade 10-12

Prerequisite: Successful completion of English 9. (This course will not be offered every year)

Have you ever wanted to escape to a magical land? Have you ever wondered if a commoner can really become a prince or princess? Was one man really able to pull a sword from a stone and rule all of Britain? Did the ancient Mayans really predict the end of the world? How often did Gods and Goddesses champion Greeks and Romans? Was the creation of the Aztec world really reliant on two or three "people"? Well...take World Mythology and find out! In this course we will explore a variety of creation myths, classical myths, Arthurian legend, tales of rags to riches and much more! A variety of projects and short writing assignments (in the proper formats, of course) will accompany each tale. Film study comparisons may be necessary to some of the myths and tales as well. Be ready for a quiz or two per story, but most of all...ENJOY what we read! So much of what current society is built upon are the ideals and dreams of some of the characters and civilizations we will discover. If you are creative and love a good story, this is the class for you!

## Pre AP English

## 1 Credit

Grade 11
Recommendation: An 80\% average in Honors English 9 and 10 or a 90\% average in Academic English 9 and 10. Summer readings assigned at the end of the $10^{\text {th }}$ grade are required to be completed before the fall term begins. (This course will not be offered every year)

The rigorous, college-level course, with anticipated AP College Board approval in 2022, is designed as a precursor to AP English 12, to help advance and strengthen student skills as careful readers of challenging literary texts, and to become attentive to the role that language and form play in aesthetic production. The course focuses on "close reading," but is not restricted to the New Critical understanding of this practice; rather the course will explore, in psychoanalytic, materialist, and deconstructive terms, a wide range of literary genres written in various historical periods. Poetry, drama, and prose works range from 1600 to the present; students will connect the works to the time period and the importance they play on society and vice versa. Extensive outside readings are mandatory throughout the year. Students in this course will have access to digital media as well as standard books and materials. In Socraticstyle, students will be called upon to share writings, analysis, and thoughts about assigned readings. Writing will focus on expository and persuasive essays modeled upon the AP format. Students will be required to submit several major essays and projects. Speaking skills will be addressed via multimedia as part of the presentation process. Students enrolled in this course will be expected to participate in AP English 12. Completion of this AP course does not guarantee a satisfactory score on the College Board AP Exam.


## What math class do I take next year?

Currently Enrolled in


With This Average
0-89\%

90-100\% and pass
Algebra eligibility exam

0-79\%
80-100\% and fail
Algebra eligibility exam
80-100\% and pass
Algebra eligibility exam

60-69\%
70-89\%
90-100\%

60-89\%

90-100\%

60-89\%

90-100\%
Algebra IB


60-69\%
70-89\%
90-100\%

60-79\%

80-100\%

Take Next Year

Algebra IA

Algebra I

Algebra IA
Algebra IA

Algebra I

## Algebra IB

Academic Algebra II
Honors Algebra II

Algebra IB

Algebra I

Applied Geometry

Academic Algebra II

Applied Geometry
Academic Geometry
Honors Geometry

Academic Geometry

Honors Geometry

# What math class do I take next year? 

Currently Enrolled in
With This Average
Take Next Year


60-69\% in 11th grade
60-69\% in 10th grade
70-89\%
90-100\%
Real World

Academic Algebra II


Academic Trigonometry

Honors Trigonometry


60-79\%

80-100\%
Real World
Academic Probability \& Statistics
AP Calculus and/or H. Prob/Stats

Academic Probability \& Statistics

AP Calculus and/or H. Prob/Stats

Recommendation: Successful completion of Math 8; less than 80\% average in Accelerated Math 8.

Algebra 1 A is the first half of the study of Algebra 1. Concepts such as the order of operations involving rational numbers will be reviewed before focusing on solving various forms of equations, which will be the foundation for this course. A large focus will be on slope, the various forms of linear equations, functions, and data analysis. Connections will be made between functions, tables, and graphs throughout the course. Upon successful completion of Algebra 1A, students will take Algebra 1B to complete the Algebra 1 sequence.

Algebra IB
1 Credit
Grade 10
Recommendation: An 80 average in Accelerated Math 8 without a passing score on the Algebra eligibility exam; a 60-89\% average in Algebra IA; a 6069\% average in Algebra I

Algebra 1 B is the second half of the study of Algebra 1. The course will begin by reviewing concepts learned in Algebra 1A. An in-depth analysis of linear equations and one- and twovariable inequalities will be the main focus of this course, with an emphasis on systems of equations and inequalities. Operations with real numbers such as properties of exponents, operations with polynomials, and factoring quadratics will also be covered. Students will take the Algebra 1 Keystone Exam at the end of this course.

## Applied Geometry

1 Credit
Grade 11
Recommendation: A 60-89\% in Algebra IB; a 60-69\% in Academic Algebra II

Applied Geometry focuses on the study of points, lines, planes, angles, polygons, circles, and 3dimensional figures. This course takes a less theoretical approach than its academic counterpart, focusing more on real-world applications. Knowledge of solving equations is essential for successful completion of this course.

Real World Math
1 Credit
Grade 12
Recommendation: A 60-89\% average in Applied Geometry; a 60-69\% in Academic Trigonometry; a 60-69\% in Academic Geometry in 11 ${ }^{\text {th }}$ grade

Real World Math is a course designed to help students prepare for the math of everyday life. Skills like writing checks, balancing a checkbook, filing tax forms, filling out loan applications and many others are presented. In addition, valuable information about making budgets, buying automobiles and houses, choosing insurance coverage, using credit and other daily life issues are covered. This course will help prepare the student for the math needed to succeed in day-to-day life.

Recommendation: A 90\% average in Math 8 and pass the Algebra eligibility exam; an 80\% average in Accelerated Math 8 and pass Algebra eligibility exam; a 90\% average in Algebra IA

Academic Algebra 1 covers all the concepts of Algebra 1 in one school year. Students will take the Algebra 1 Keystone Exam at the end of this course. Concepts such as the order of operations involving rational numbers will be reviewed as well as solving various forms of equations. A large focus of the course will be on slope, the various forms of linear equations and inequalities, systems of equations and inequalities, functions, data analysis, properties of exponents, operations with polynomials, and factoring quadratics. This fast-paced course establishes the expectation for high levels of rigor and achievement in the academic track of the mathematics courses.

## Academic Algebra II <br> 1 Credit <br> Recommendation: A 70-89\% average in Algebra I; a 90\% average in Algebra IB; a 90\% average in Applied Geometry

After a brief review of basic mathematical skills and Algebra 1 concepts, the student is introduced to many new concepts such as linear equations and inequalities, systems of equations and inequalities, the complex number system, and rational exponents. The course also puts a lot of emphasis on quadratic polynomials and quadratic equations. The student will learn how to factor this type of equation and they will be responsible for graphing the equation and describing its characteristics.

## Academic Geometry <br> 1 Credit <br> Recommendation: A 70\% average in Academic Algebra II; a 60-79\% in Honors Algebra II

Geometry is the study of points, lines, planes, angles, polygons, and circles. Practice will include examples, hands on activities, visual thinking, and written exercises. Students will be tested on material to measure understanding and retention of what has been learned. This course may be taken concurrently with Algebra II.

## Academic Trigonometry

1 Credit
Recommendation: A 60-69\% in average Academic Geometry during 10 ${ }^{\text {th }}$ grade; a 70\% average in Academic Geometry; a 60-79\% in Honors Geometry

This course is an integrated course of Academic Algebra III and Trigonometry. Students in Academic Algebra III/Trigonometry will study concepts from geometric, graphing, and algebraic perspectives. The six major trigonometric functions are studied through the use of reference angles and the unit circle. Students will explore advanced algebra topics including radical equations and explore conic sections and trigonometric identities such as the Law of Sines and the Half Angle Identity.

Recommendation: A 70-89\% in Academic Trigonometry; 60-79\% average in Honors Trigonometry

This course is for college bound students once they finish Trigonometry. Students will focus on data analysis, combinations, probability, and statistics. This course will help to build the foundation for students that will need to take Probability \& Statistics courses in college.

## Honors Algebra II

1 Credit
Recommendation: A 90\% average in Algebra I

After a brief review of basic mathematical skills and Algebra 1 concepts, the student is introduced to many new concepts such as linear equations and inequalities, systems of equations and inequalities, the complex number system, and rational exponents. The course also puts a lot of emphasis on quadratic polynomials and quadratic equations. The student will learn how to factor this type of equation and they will be responsible for graphing the equation and describing its characteristics. Exponential and logarithmic functions will be studied.

Recommendation: A 80\% average in Honors Algebra II; a 90\% average in Academic Algebra II

This course deals with the study of points, lines, planes, angles, polygons and circles. Emphasis is placed upon proofs both direct and indirect. Accelerated geometry places a great deal of importance on the use of algebra, thereby introducing the student to analytical geometry.

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Honors Trigonometry
        1 Credit
Recommendation: A 80% average in Honors Geometry; a 90% average in
Academic Geometry
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This course is an integrated course of Algebra III and Trigonometry. Students in Honors Algebra III/Trigonometry will study concepts from geometric, graphing, and algebraic perspectives. The six major trigonometric functions are studied in depth and are the emphasis of the course. Some advanced algebra topics are also studied. Students will solve radical equations, explore conic sections, and study trigonometric identities such as the Law of Sines and the Half Angle Identity. Additionally, students will discover graphs of functions and their translations. Such graphs will include conic sections, parabolas, circles, ellipses, radical functions, and their inverses. Graphing calculators and laptops will be utilized in this class.

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AP Calculus with option for college credit
Recommendation: An 80\% average in Honors Trigonometry; a 90\% average in Academic Trigonometry
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AP Calculus AB is an advanced-level, extremely demanding, fast-paced course for students who are mathematically gifted and highly motivated. To do well in this course, students should expect to spend a minimum of one hour daily on assigned work, study, and review. This course is equivalent to a first semester calculus course at most colleges and universities and will be taught as such.

Topics covered will revolve around the three big ideas that make up AP Calculus AB: Limits, Derivatives, \& Integrals and the Fundamental Theorem of Calculus. Included in these big ideas are the following concepts: functions and their graphs, limits, the derivative, derivative applications, differentiation of exponential and logarithmic functions, integration and applications of the integral.

It is recommended that each student has a TI-84 Plus (or similar calculator) to use throughout the course, as a graphing calculator is essential for this course and will be used to help students solve problems, interpret results, and support conclusions through both verbal and written documentation. (Graphing calculators will be available for students who do not have their own.) Completion of the AP course does not guarantee a satisfactory score on the College Board AP Exam.

College in High School Prerequisite: A rigorous high school algebra background that includes exponentials and logarithmic functions. Proficiency in algebraic manipulation is essential. A score of 61 or greater on the ALEKS placement examination is required to register for the College in HS credits.

```
Honors Probability/Statistics with option for college credit 1 Credit
(Can be taken as a College in the High School Course through the University of Pittsburgh to
earn 4 credits in Basic Applied Statistics)
Grade 11, }1
Recommendation: An 80% average in Honors Trigonometry; a 90% average
in Academic Trigonometry
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This course teaches methods of descriptive and inferential statistics. Topics include data collection and description, hypothesis testing, correlation and regression, the analysis of variance, and contingency tables. Students will draw statistical conclusions about populations based on data collected from a sample. Students may opt to participate in the College in High School option, enabling them to receive college credits through the University of Pittsburgh.

## Social Studies



Students will complete a study of the major themes in our country's history through the use of all of the social sciences, highlighting history, geography, economics, political science, and sociology. This course is a chronological study of America from the Jacksonian Era to the beginning of the twentieth century. A lecture/discussion format is used, and textbooks, maps, worksheets, and videos are utilized. Individual teachers will add, at their discretion, compositions, book reports, three-dimensional projects, oral histories, historical readings, and library research as needed to enhance learning. At the conclusion of this course, students will continue with Modern America/PA Studies.

## Modern America

1 Credit
Grade 10

Students will complete a study of the major themes in our country's history, from WWI to modern day America, through the use of all the social sciences highlighting history, geography, economics, political science, and sociology. This course is in a lecture/discussion format utilizing textbooks, maps, worksheets, videos, and supplemental historical readings concerning American heritage. Individual teachers will add, at their discretion, compositions, book reports, three dimensional projects, oral histories, and research as needed to enhance learning.

## World Cultures

1 Credit

## Grade 11

World Cultures is a world history course that is the chronological study of world history from the Middle Ages to the Industrial Revolution. Students will be expected to develop a global perspective of the history, geography, government, economy, and social structure of other countries. Students will investigate and discuss the historical importance of these countries' changing political structures through time. As the course progresses, students will develop their reading, writing, and discussion skills through group projects, research, hands-on geography, interdisciplinary units, and critical thinking activities. The goal of the course is to provide students with a chronological sequence of events before American history, increase cultural awareness, and identify the influence of world history on American history.

## Social Studies Electives

## These courses may not be offered every year.

History of the Pittsburgh Region
1/2 Credit

Grade 10-12<br>Prerequisite: Successful completion of US/PA History

Students will explore how powerful and influential the Pittsburgh region has been in building the country both literally and figuratively. Students will examine the relevance that industry, production, and culture has had in cultivating the rest of the country. Some of the country's best musicians emerged from the Hill District along with world renowned photographers, artists and authors made their home right here. Our histories are forged in steel, but banking, medicine, and production of premade goods for household use also saw their heyday right here in Western Pennsylvania. History of the Pittsburgh Region is a class where upon students can delve into the impact of innovations that have emerged from Western Pennsylvania in depth to help us preserve our rich local history as well as act as a catalyst in bringing success back to our region.

AP United States History
1 Credit
Grade 11-12
Prerequisites: Successful completion of US/PA and Modern America.

Advanced United States History is intended to prepare students for college level History courses. The course will require students to know and understand factual information and deal critically with the problems and events in U.S. History. They will assess historical materials, interpret their relevance, and determine their reliability. Students will develop skills to arrive at conclusions on the basis of an informed judgment. Students must evidence and make interpretations based on prior and newly learned knowledge. They will develop skills necessary to draw conclusions and base those conclusions on readings and research. The students will be required to present their ideas and evidence clearly and persuasively in an essay format, as well as an oral argument. Written expression and analysis will be an integral part of this course; therefore, competency of standard English grammar and usage is required, as well as mastery of the writing process. Students enrolled in this course shall be expected to participate in the AP Exam for university credit or advanced standing.
Completion of the AP course does not guarantee a satisfactory score on the College Board AP Exam.

## Current Events

1/2 Credit
Grade 11-12

Current Events is a course that is not rigidly designed; it is extremely topical and dependent on the "news of the day". The students will be exposed to local, national, and global news. The students will be expected to peruse news websites as homework on a regular basis. In this course, they will become literate about the world around them and will compare the tone of different news sources, such as The Washington Post, NPR, and the BBC.

Political Science is a course intended to educate students about the United States government: its form, function, and effect. The students will study topics that include: the application of the Constitution to current day, court cases that shaped our government, political ideologies, and different forms of government used by other countries, interest groups, public opinion, and the media's influence on our society. The students will need to be able to discuss topics in class using information from the textbook, independent internet research, and personal experience. This class will deepen the basic knowledge base the students have about our country, and is intended for those students who already have an interest in government, the Constitution, and politics.

## Sociology

1/2 Credit
Grade 12

Sociology is the social science that studies human society and social behavior. Students will focus their attention on such things as the understanding of group behavior, interactions, present day social problems, basic skills in sociological research, cultural relations, adaptations, and conformity. The course also covers the social role of the environment, values and norms, tolerance for various ethnic and racial groups. As the course progresses students will build their reading, writing, and discussion skills based on reason and logic. Finally, students should be able to apply the sociological concepts to the understanding of their own lives.

## Psychology

1/2 Credit
Grade 12

Psychology is the study of the brain and human behavior. The course is intended to prepare students for a college-level course. Throughout the course, students will study the development of learning and cognitive processes, memory and thought, classical and operant conditioning. In addition to these, students will study personality theories. Theorists such as Freud, Skinner, and Maslow will be taught. Students will also study the concept of abnormal behavior and focus on varying types of disorders such as Bipolar, Obsessive-Compulsive, and Post-Traumatic Stress disorders. Because the course is college preparatory, students will be expected to have mastery of Standard Written English and oral communication skills. Students will also be expected to read the textbook and take reading quizzes to show comprehension of the material.


Life Science is a course that provides students with the opportunity to learn that Life science is the study of living things. The life sciences comprise all fields of science that involve the scientific study of living organisms, the environment, evolution, and how we affect the world we live in. Emphasis will be placed on skill development to provide students with the basic tools they need to be successful in the course and to begin preparing for the Biology Keystone Exam.

Academic Biology
1 Credit

## Grade 9

Recommendation: A 70\% average in 8 $^{\text {th }}$ grade Science

Biology begins with a discussion of the unique properties of living organisms that set them apart from the non-living. The presentation of molecular and cellular biology follows, and gives a background for the concepts of reproduction and genetics. Understanding the continuity of life and the transmission of characteristics to offspring by hereditary determiners will give meaning to organic variations and scientific classification. Units dealing with microbiology, multi-cellular plants, invertebrate animal life, and the vertebrate animals follow in logical sequence. The progression from cell to protozoa to plant and animals will come naturally. In this systemic approach to the study of biology, the student discovers unity in the organisms. Students will take the Keystone Biology Exam at the end of this course.

## Honors Biology

1 Credit
Grade 9
Recommendation: An 80\% average in $8^{\text {th }}$ grade Science.

This course is designed to be an introductory course for college students intending to major in science or a related field. Students who successfully complete this course will accelerate their high school science sequence by taking chemistry in $10^{\text {th }}$ grade, physics in $11^{\text {th }}$ grade and an advanced placement science course in $12^{\text {th }}$ grade. Course topics include: Principles of Cell Biology, Principles of Genetics, Principles of Evolution, Exploring Diversity, Exploring Plants and Exploring Invertebrates and Vertebrates. Students will take the Keystone Biology Exam at the end of this course.

This is a survey course of the concepts taught in chemistry and physics. This course will explore the relationship between matter and energy. This course will investigate and explore the force of motion, the chemical and physical properties of mater, certain interactions of matter with the world and the forms and properties of energy. This course uses hands on laboratory investigations to supplement the lecture. By the end of the course students should have the basic foundations of chemistry and physics.

## Earth/Space Science

Earth Science is a detailed look at our planet and the processes that have shaped it. During the one year course, students will be exposed to important concepts in astronomy, meteorology, geology, the natural gas industry including Marcellus Shale drilling, and physical oceanography. The point of the course is to expose the students to the various fields in the earth sciences and to the basic content in those fields.

This course provides a broad descriptive survey of astronomy. Topics covered include the night sky, seasons, moon phases, eclipses, tides, telescopes, light, properties of stars, stellar evolution, the Milky Way, galaxies and cosmology. This course also provides students with a survey of our solar system, including the Sun, the planets and their satellites, asteroids and comets. The history of astronomy and exploration of the solar system is also covered. Students should have a fundamental background in chemistry and physics. The school's planetarium is used to further reinforce learning in the classroom.

## Honors Anatomy \& Physiology

1 Credit
Grade 11, 12
Recommendation: Successful completion of Honors Biology, a 70\% average in Academic Biology, or an 80\% average in Core Biology.

Anatomy and Physiology is essentially the study of the human body. Course contents includes studies of the major body systems (integumentary, muscular, circulatory, skeletal, muscular, reproductive and nervous) as well as how the body works. Surface and internal investigations will be done through the dissection of cats. This course is designed for students intending to continue studies in the biological sciences or an occupation that requires a strong background in sciences such as nursing, medical assistants, physical therapists, etc.

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AP Biology with option for college credit
(Can be taken as a College in the High School Course through the University of Pittsburgh to
earn 3 credits in Preparation for Biology)
Grade 11, }1
Recommendation: An 80% average in Honors Biology and Honors Chemistry
or a 90% average in Academic Biology and/or Academic Chemistry.
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Advanced Placement Biology is a course designed for students that have a strong interest in, or desire to pursue a career in, the sciences. The AP Biology course provides an advanced science course taught on a college entry level. The basic text is a college freshmen text. Course topics include: Biological chemistry, Cell structure and function; Molecular genetics; Heredity: Evolution; Plants: Animals: and Ecology. Laboratory activities include: Mitosis and Meiosis; Plant Pigments and Photosynthesis; Cell Respiration; Transpiration; Diffusion and Osmosis; Enzyme Catalysis; Molecular Biology; Genetics of Organism; Animal Behavior; Population Genetics and Evolution; Physiology of the Circulatory system and dissolved Oxygen and Aquatic Primary Productivity. At the conclusion of the course, students may take a test prepared by the College Entrance Examination Board. The results will be certified by the testing agencies to college admissions offices for a possible standing and/or credit in the freshman year at college.

Requirement: The student will also do a written and oral report on current event issue in Biology. Students enrolled in this course shall be expected to participate in the AP Exam for university credit or advanced standing.

Completion of the AP course does not guarantee a satisfactory score on the College Board AP Exam.

College in High School Requirement: Students must attend one lab at the University of Pittsburgh. It will be conducted as a day-long experience.

This course is designed to provide college-bound students a solid foundation in Chemistry. Chemistry is the study of matter and change. In class, we will focus using chemistry to explain how and why things happen in both lab and the real world. Class activities will consist of lecture, chemical demonstrations, group discussion and lab work. Students will be expected to regularly communicate their understanding of material through written work and lab reports. In addition, chemistry is a quantitative science and students should expect mathematical problem solving to be a regular part of the class. Among the topics covered in class are metric system and measuring, atomic theory, chemical and physical changes, the Periodic Table, chemical bonding and reactions, heat and energy.

Grade 10
Prerequisite: Concurrently enrolled in Algebra 2
Recommendation: Successful completion of Honors Biology or 90\% average in Academic Biology.

This course is designed for college-bound students that will likely pursue an eventual career in a science related field. Class activities will consist of lecture, group work, problem solving and lab-based inquiry. While class time will focus on solving problems, working in lab and discussing concepts, students should expect to complete a significant portion of the work outside of the classroom. Chemistry at this level is largely quantitative and is recommended that students be highly proficient in mathematical reasoning. In addition, students will be required to communicate their understanding of lab activities and class concepts through formal lab reports. Among the topics covered in this course are Atomic Theory, Periodic Law, chemical bonding and reactions, quantitative chemistry and kinetic molecular theory. It is strongly recommended that students who wish to take upper-level science courses during their senior year complete Honors Chemistry I.

## AP Chemistry with option for college credit 1.5 Credits (Can POSSIBLY be taken as a College in the High School Course through the University of Pittsburgh for 4 credits in General Chemistry I) <br> Grade 11, 12 <br> Recommendation: An 80\% average in Algebra II plus an 80\% average in Honors Chemistry or 90\% average in Academic Chemistry.

This course is designed for those students seeking to pursue a science major in college or seeking college credit by taking the AP Chemistry test. The class will follow the Advanced Placement curriculum, covering the six Big Ideas of chemistry; Structure of Matter, Properties and States, Reactions, Reaction Rates, Thermodynamics and Equilibrium. Course work will consist of problem solving and assigned reading on a daily basis along with weekly labs and a formal lab report per chapter. In addition, students will be expected to complete online assignments in preparation for the AP Exam. Students will be given material to review over the summer in preparation for a review exam during the first week of the course. This exam will cover measurement and conversions, lab practices, chemical formulas and reactions. The pacing of the class is rigorous, with chapter exams every two weeks along with content that students must work through independently.

Completion of the AP course does not guarantee a satisfactory score on the College Board AP Exam.

College in High School Requirement: Students must attend three labs at the University of Pittsburgh. It will be conducted as a day-long experience.

Prerequisites: Successful completion of Trigonometry or taking Trigonometry concurrently.

Academic Physics takes a less mathematical approach to describing the physical world than does Honors Physics. Motion, force, energy, and waves are investigated on a conceptual level through demonstrations, lab experiments, and discussions. Though less challenging mathematically, Academic Physics gives the student insight into the fascinating laws of the physical world.

## Honors Physics

1.5 Credits

Grade 11 or 12
Prerequisites: Concurrently enrolled in Trigonometry
Recommendation: Successful completion of Honors Chemistry or 90\% average in Academic Chemistry.

Honors Physics is designed for the college bound student who is considering a major in Science or Engineering. The course takes an algebra-based mathematical approach to describing the physical world and how nature works. Many demonstrations, lab experiments, and discussions explore a variety of topics: Newtonian mechanics; work, energy and power; and mechanical waves and sound. It will also include electric circuits and light properties. Though challenging, the interested student will find that physics isn't just confined to the classroom, but is everywhere and it can be fun!

AP Physics C: Mechanics with option for college credit 1.5 Credits (Can POSSIBLY be taken as a College in the High School Course through the University of Pittsburgh for 4 credits in Basic Physics for Science \& Engineering 1)
Grade 11, 12
Recommendation: An 80\% average in Honors Physics.

Advanced Placement Physics C: Mechanics is a college level course for those students planning to specialize in a physical science or engineering major. Physics C: Mechanics explores concepts such as kinematics; Newton's laws of motion, work, power, and energy; systems of particles and linear momentum; rotation, oscillations, and gravitation. Students will do in-class activities to investigate phenomena and use calculus to solve problems. It is recommended that AP Calculus AB be taken concurrently. The course covers the material included on the standard Advanced Placement Exam prepared by the College Entrance Examination Board. The results will be certified by the testing agency for possible credit in the freshman year of college. The exam will test the student's understanding of the scientific concepts covered in the course units, as well as their ability to use calculus when solving problems related to kinematics, linear momentum, and more.

The laboratory experience will be hands-on and is a major component of the course. AP students should be able to design experiments, organize, display, and critically analyze data, analyze sources of error, and draw inferences from data, among other skills that will be taught and practiced in the course. Students are expected to keep a thorough lab notebook, as colleges may ask to see them before giving credit.

Completion of the AP course does not guarantee a satisfactory score on the College Board AP Exam.

College in High School Prerequisite: Calculus is needed and should be taken at least concurrently.


## Introduction to Computers <br> Prerequisites: Successful completion of $\mathbf{8}^{\text {th }}$ grade.

This course will utilize Google products, Microsoft office and various online software applications. Basic keyboarding skills using the home row method will be developed and used throughout this course. This course will further the study of word processing formatting production skills. Students will develop the skills in preparing tables, graphics, merges and text enhancement techniques. Students will be introduced to spreadsheet applications such as financial statements and payroll calculations. This course will provide students with an overview of multimedia. The students will learn how to create multimedia presentations. The students will learn the fundamentals of designing web pages using online software.

The goal of Personal Finance is to help students to become financially responsible members of society. This course will develop students understanding and skills in such areas as banking, credit cards, loans, housing, saving, investing, taxes, and insurance. Students will analyze their personal financial decisions as well as evaluate the costs and benefits of their decisions. This course will provide a foundation for making informed personal financial decisions that students may encounter in practical real life situations. The course is required for graduation for the Class of 2020 and beyond.

## Exploring Careers

1/2 Credit
Grade 9-12
Prerequisites: Successful completion of $\mathbf{8}^{\text {th }}$ grade.

Exploring Careers takes a unique approach to career planning by using a self-discovery process to match a career area to a student and by equipping students with the tools they need to develop and implement their own personal career plans. Students who successfully complete this course will be more self-confident about taking responsibility for the education and career decisions that affect their lives. This course will assist students in planning for the future as well as preparing for employment.

## World



In Spanish I, students are introduced to one of the most widely spoken languages in the world. Students learn basic conversational phrases as well as vocabulary that allows them to communicate on a variety of topics, such as: weather, school subjects, family relationships, and more! They also discover the fascinating culture of the Spanish-speaking countries. This course begins the development of the four basic skills of listening, speaking, reading, and writing.

## Spanish II

1 Credit
Grade 10-12
Prerequisites: Successful completion of Spanish I.

In Spanish II, students build upon the linguistic base of vocabulary and grammar that they learned in Spanish I. New vocabulary topics are also presented, such as: animals, clothing, and food. Grammar lessons focus on the conjugation of regular and irregular Spanish verbs in the present tense. Students study culture through the use of authentic media, such as film and music. This course continues the development of the four basic skills, with emphasis on listening and speaking. The majority of this class is taught in Spanish.

## Spanish III <br> Grade 11, 12 <br> Prerequisites: Successful completion of Spanish II.

1 Credit

In Spanish III, all vocabulary and grammar from previous classes are reviewed. New vocabulary topics are presented through varied thematic units. Grammar lessons focus on the conjugation of regular and irregular Spanish verbs in the preterite and imperfect tenses. Culture is presented through film, literature, and music, with a special focus on Mexico. Students work in groups to present on various cultural topics. They also continue to strengthen the four basic skills of language learning. The majority of this class is taught in Spanish.

## Honors Spanish IV

1 Credit
Grade 12
Recommendation: A 70\% average in Spanish III.
In Honors Spanish IV, all vocabulary and grammar from previous classes are reviewed. New vocabulary topics are presented through varied thematic units. Grammar lessons focus on the conjugation of regular and irregular Spanish verbs in the future, conditional, and subjunctive tenses. Culture is presented through film, literature, and music, with a special focus on Spain. Students work in groups to present on various cultural topics. This course continues the development of the four basic skills, with emphasis on reading and writing. The majority of this class is taught in Spanish.

## French I

Prerequisites: Successful completion of English 8 and Reading 8.

It's fun to learn about France and the lives of French teenagers. In French I you will learn basic French vocabulary, a fundamental knowledge of the grammar structure and an opportunity to learn the cultural background of French speaking countries. Using the four basic skills of listening, speaking, reading, and writing students will develop these competencies.

## French II

1 Credit
Grade 10-12
Prerequisite: Successful completion of French I.

French II is a continuation of basic skills already learned in French I. You will increase your vocabulary and knowledge of French structure. You will also learn some geography of France and its culture through the use of maps, videos, and posters. Emphasis will be placed on conversation through further development of the audio-lingual skills.

## French III

1 Credit
Grade 11, 12
Prerequisite: Successful completion of French II.

In French III it is the goal for each student to attain an acceptable degree of proficiency by employing the four basic skills of language study. Students will also have the opportunity to gain knowledge about the history of France and of the French people and their customs.

## Honors French IV

1 Credit
Grade 12
Recommendation: A 70\% average in French III.

French IV is a continuation of French III with a deeper exploration of French culture and history. There will be a continuation of the grammar and vocabulary with an emphasis on reading and appreciating French literature.

## Technology Education <br> 



## Introduction to Programming and Computer Science I <br> Grade 9-12 <br> Prerequisite: Successful completion of Algebra I

Computer Science and computational problem solving are fundamental skills for engaging the $21^{\text {st-century marketplace of ideas and economies. This CS curriculum is designed for students }}$ with algebra readiness skills and no prior programming experience is required. It is inspired by a highly successful course that has been taught at Carnegie Mellon University for the past 10+ years. It is predicated on the notion that learning about programming and computer science should be fun and engaging. Students will have interesting problems to solve, as computational problem-solving is the core of computer science. The lessons are visually engaging, allow for multiple correct solutions, and provide visual cues when solutions go awry.

Each unit (1-6) provides content for a topic to be investigated, a worked problem(s) to illustrate and let students explore the topic, a set of exercises to hone their mastery of the topic, and a creative task that lets them further explore the topics in a manner driven by their interests.

The course provides its own browser-based Integrated Development Environment (IDE) that the students will use to create and run their programs. It encompasses an editor and compiler, a custom graphics package, and an autograder that is capable of grading not only textual problems and solutions but also a broad range of graphics problems and solutions.

## Introduction to Programming and Computer Science II <br> 1/2 Credit <br> Grade 9-12 <br> Prerequisite: Successful completion of Introduction to Programming and Computer Science

Similar to Year 1, each unit (7-12) provides content for a topic to be investigated, interactive lecture notes with detailed examples, a set of engaging exercises to develop problem-solving skills and mastery of the topic, and a creative task that lets them further explore the topics in a manner driven by their interests.

The course provides its own browser-based Integrated Development Environment (IDE) that the students will use to create and run their programs. It encompasses an editor and compiler, a custom graphics package, and an autograder that is capable of grading not only textual problems and solutions but also a broad range of graphics problems and solutions. CS1b firmly embraces learning-by-doing.

> | Introduction to Cybersecurity I |
| :--- |
| Grade $\mathbf{9 - 1 2}$ |
| This course is designed to provide fundamental knowledge in the field of cybersecurity. The |
| course begins with defining cybersecurity and its importance at the individual, corporate, |
| government, and international levels. Next, the course discusses the CIA triad and gives a basic |
| introduction to computer hardware, which are knowledge units needed for the rest of the |
| course. After providing this foundational introduction to the field, the course explores how |
| cybersecurity is integrated into the fabric of human life by examining its impact on nations, |
| laws, economics, and personal data. Ethics, thinking like an adversary, careers, and historic |
| components are interwoven throughout the course. |

## Introduction to Cybersecurity II

This course is more technical in nature. Students are introduced to the principles of software design, physical security controls, cryptography, authentication and identity management, software vulnerabilities, the OSI model, network standards and protocols, the Internet, and hardware and software integration. The course ends by teaching security testing and assessment, securing cyber physical systems, and design trade-offs to prevent adversaries from haring the technology system. Careers and historic components are interwoven throughout the course.

## Introduction to Engineering Drawing

1 Credit
Grade 9-12
Prerequisite: Successful completion of $\mathbf{8}^{\text {th }}$ grade.

This is an introductory course to drafting skills and practices. The students will be exposed to multi-views, obloquies, isometrics, and sections. Dimensioning will be part of the drawing. At the completion of the course the student will be able to read and draw most types of mechanical drawings. He or she will also be introduced to Computer Aided Drafting (CAD). With the explosion of technology, computers are the main tools for draftsmen \& engineers. The student actually designs and constructs drawings on the machine. This class is a foundation for Advanced Engineering Drawing, Architecture Design and Architecture Design and Modeling. This course is an excellent learning opportunity for students planning a career in architecture or any engineering technical field. Math is an integral component of this course. Students should be able to work with fractions, measuring, and decimals.

## Advanced Engineering Drawing

Prerequisite: Successful completion of Introduction to Engineering Drawing.
This is a detailed in depth course in machine drawings. The student will draw detailed machine parts and understand the process and theory behind the industry and its function. He or she will design working drawings such as exploded views, orthographic assemblies, and isometric assemblies. Computer aided drafting (CAD) will also be a part of this course. The student will do the designing and drawing on the computer itself. This class is built on the processes and theories of Intro to Engineering Drawing. This advanced course is an excellent learning opportunity for students planning a career in the engineering or technical fields.

## Architecture Design 1 Credit <br> Grade 11, 12 <br> Prerequisite: Successful completion of Advanced Engineering Drawing.

This is an introductory course to the field of Architectural design. The student will design and draw 2 different types of houses. At the completion of this course the student will be able to draw all 4 types of houses and draw all types of architectural drawings. He will also be able to read professional architecture prints. The student will be able to read and/or draw: elevations, floor plans, wall sections, stair sections, electrical plans \& plumbing plans. Computer aided drafting will also be used in this course. The student will be instructed in designing their plans on the computer. This advanced course is an excellent learning opportunity for students planning a career in an architecture or engineering field.

## Architecture Design and Modeling 1 Credit Grade 12 <br> Prerequisite: Successful completion of Architecture Design.

This is an advanced course in architecture. The student will design his or her own house and complete all the detailed drawings of it. After the drawings are completed the student will build to scale a framed model of the structure. We also try to put the students into a life-like situation with real clients. People who are wishing to build a house are brought in and we have the students design the house that their clients wish. This is an ideal learning situation. As in Intro to Engineering Drawing, Advanced Engineering Drawing and Architecture Design, the computer (CAD) will be used in designing the drawing. This course is an excellent learning opportunity for students planning a career in architecture or engineering.

## Technology Education I 1 Credit <br> Grade 9-12 <br> Prerequisite: Successful completion of $8^{\text {th }}$ grade.

Technology Education I is a hands-on, project based introductory class in woodworking. Through the development and construction of an amazing folding stool, students will learn the safe operation of both hand and power woodworking tools. Student will construct a second project to further develop their woodworking skills and gain knowledge in cabinet making techniques such as case and drawer construction and joinery. Along with operation of all power equipment, students will integrate cutting edge CNC router operation into both student projects. This course will provide students with the basic technological knowledge and hands on skills they will need to continue in a technical field or the trades.

Prerequisite: Successful completion of Technology Education I.

Technology Education II is a hands-on course to further develop skills presented in Tech Ed I. Students will produce an oak night stand as the project used to learn advanced techniques such as dovetails, frame and panel construction and spray finishing. In addition, students will have the opportunity to program the CNC router to add personalized touches to their project. This course will provide students with the advanced technological knowledge and hands on skills they will need to continue in a technical field or the trades.
Technology Education III
Grade 11
Prerequisite: Successful completion of Technology Education II.

Technology Education III is a hands-on course to further develop skills presented in Tech Ed I and Tech II. Students will produce a class chosen project, such as an oak rocker as the project used to learn problem solving and advanced techniques such as mortise and tenon, leg and rail construction, basic upholstery and glaze finishing. Students will also program the CNC router using the Vcarve Pro software to produce parts for their project and have the opportunity to design and produce individual projects on the CNC router. This course will provide students with the advanced technological knowledge and hands on skills they will need to continue in a technical field or the trades.

## Technology Education IV

## Grade 12

Prerequisite: Successful completion of Technology Education III.

Technology Education IV is a hands-on, project based introductory class in metal manufacturing and basic welding. Students will learn the safety and basic fundamentals in the areas of sheet metal fabrication, basic welding (oxy-acetylene, spot, arc and MIG), plasma cutting and machining including mill and metal lathe operation. Students will complete several projects to demonstrate their knowledge and understanding as well as programming and operation of the CNC router to complete individual projects. This course will provide students with the advanced technological knowledge and hands on skills they will need to continue in a technical field or the trades.

## Family <br> Consumer <br> Sciences <br>  <br> "FCS the Original STEM"

## Grade 9-12

This course is designed to focus on the 21st Century process skills which align with STEM literacy skills of:

- Problem solving
- Decision making
- Goal setting
- Cooperation
- Management
- Leadership
- Communication
- Critical thinking

Pennsylvania Career Education and Work Academic Standards (CEW)

- Career retention and advancement
- Work habits
- Cooperation and teamwork
- Group interaction
- Time management

We will focus on the science of food and nutrition. Experiences will include food safety and sanitation, culinary technology, food preparation and dietary analysis to develop a healthy lifestyle with pathways to career readiness. Laboratory based experiences strengthen comprehension of concepts and standards outlined in STEM education.

## Nutritional Awareness II

1/2 Credit
Grade 9-12
Prerequisite: Successful completion of Nutrition I.

This course is designed to focus on principles of food preparation, specifically yeast breads, soups, sauces, pastry arts, baking and the foods of Eastern Europe. The study and application of nutrition, sanitation, food science and technology in the course provides students with laboratory-based experiences that will strengthen their comprehension of concepts and standards outlined in STEM.


Art I is a basic introduction to the art elements, perspective, color theory and the principles of design using a variety of art mediums that make up the foundations of the fine arts. Students will be introduced to the two-dimensional mediums of drawing, painting, printmaking and digital art. Introductory experiences with 3-dimensional media will be sculpture and ceramics. Development of artistic and perceptual awareness in art, the critical and appreciative study of art history and its analysis, and the development of basic art skills in selective art media are the primary goals.

## Art II

1 Credit
Grade 10-12
Prerequisite: Successful completion of Art I.

Art II continues to build on the art skills and concepts introduced in Art I along with a refinement of drawing, painting, printmaking, digital art, sculpture and ceramics. The course, however, involves a more intuitive approach as opposed to a strictly analytical approach to art elements and design. The recognition of multiple intelligences in perception is used to further the development of one's ability to see and therefore to create. An understanding of the relationships among art forms of different times, places and cultures, between the student's own work and that of others, and of personal interests and possible art careers will also be undertaken.

## Art III

 1 CreditGrade 11, 12
Prerequisite: Successful completion of Art II.

The Art III course offers further explorations into two-dimensional media with increased opportunities to draw and paint from observation including figure study, still life and portraiture. Printmaking will be used to master the concepts of the principles of design found in both fine art and commercial settings. An increasing concentration on threedimensional media and techniques will also be emphasized using STEAM curriculum concepts. Advanced ceramic techniques will be used in the creation functional objects with sculptural elements and design. Studies in perceptual awareness, art history and art cultures play a major role in the three-dimensional aspects of art form as they continue to do so in the two-dimensional.

Interested in things like figure drawing, or still life drawing? Do you want to focus on developing your abilities to draw world around you? In AP Art Drawing, students explore drawing issues including line quality, light and shade, rendering of form, composition, surface manipulation, the illusion of depth and mark-making through a variety of means, such as painting, printmaking or mixed media. The final goal for students is to develop technical skills and familiarize themselves with the functions of visual elements as they create an individual portfolio of work for evaluation at the end of the course.

## AP Art 2-D Design

1 Credit
Grade 11, 12
Prerequisite: Successful completion of Art 1, 2, and 3
Interested in things like graphic design or photography? Do you have an eye for fashion and design? In AP Art 2-D Design, students will demonstrate mastery through any two-dimensional medium or process, such as graphic design, digital imaging, photography, collage, fabric design, weaving, fashion design, fashion illustration, painting and printmaking. Each student will develop technical skills and familiarize himself with the functions of visual elements as he creates an individual portfolio of work for evaluation at the end of the course.

Are you a hands-on artist? Are you not bothered by clay under your fingers or love to watch a project develop into "real-life" model? In AP Art 3-D Design students will demonstrate mastery through any three-dimensional approach, such as figurative or non-figurative sculpture, architectural models, metal work, ceramics, glass work, installation, assemblage and 3-D fabric/fiber arts. Each student will develop technical skills and familiarize himself with the functions of visual elements as he creates an individual portfolio of work for evaluation at the end of the course.

Music


Symphonic band is a co-curricular instrumental music ensemble taught in the Comprehensive Music style. Literature and exercise in this class are designed to expose students to a wide variety of musical styles, periods and cultures. Studied and applied in this course are the Musical Elements of Melody, Harmony, Rhythm, Dynamics, Pitch, Articulation, Tempo, Style, Balance, and Blend.

In this course, students continue individual development from previous music lessons as they participate in the ensemble. The student will have the opportunity to develop strong individual, solo and small group performance skills. This course is a requirement for participation in all PMEA, County, and District-type Honors music events. All Symphonic Band performances are mandatory including the CAHS Commencement Ceremony.

## Concert Choir

1 Credit
Grade 9-12
Recommendation: Previous choir experience preferred but not required.

This course is open to all students in grades 9-12 who are interested in being a part of a choral group. In this ensemble, students will learn and perform a variety of repertoire in differing styles and musical genres. Throughout the course, students will expand their knowledge of music vocabulary relating to terms, signs, and symbols of music literacy. A focus will be placed on learning proper singing techniques and healthy vocal habits. Students will perform at least two concerts outside of the school day in which participation is required.

## Show Choir

## 1 Credit

Grade 9-12
Prerequisites: Acceptance is based on an audition. Previous choir experience is required. Students must be able to sing and dance at the same time.

This auditioned group is open to all students in grades $9-12$. Students will audition in the spring of each year for membership the following year. This ensemble will be comprised of students who will perform a variety of challenging pieces within the vocal jazz, pop, and musical theater genres. These students also perform with concert choir, but they do not need to be registered for both groups. Throughout the course, students will expand their knowledge of music vocabulary relating to terms, signs, and symbols of music literacy. A focus will be placed on learning proper singing techniques and healthy vocal habits. The show choir will perform in a variety of settings throughout the year. Participation in events is mandatory, including events outside of the school day.

## Health and

 Physical Education

This course is designed to teach students to understand their bodies, both mentally and physically. The curriculum includes strong emphasis on drug, alcohol, tobacco, and sex education as a means of providing information and enabling students to make the correct choices as they go through life. Components of wellness, nutrition and fitness also are stressed empowering students to develop strategies for incorporating healthy habits into their lives and reducing the risk factors for common diseases. The curriculum also includes instruction on hands-only CPR and the use of automatic external defibrillators (AED).

## Physical Education

1/2 Credit

## Grade 9-12

This course builds upon the skills and strategies for team sports, dual sports, lifetime sports, fitness and health that students learned in previous grades. Skill refinement, offensive and defensive strategies, coordination, technique, flexibility and fitness are some of the concepts that will be taught. Organized games are played with an emphasis on rules and the improvement of skills.

## Strength and Conditioning

## 1/2 Credit

Grade 9-12
Prerequisite: Successful completion of Physical Education

The goal of this course in Strength and Conditioning is for our students to become well versed in lifetime fitness, conditioning elements, and proper use of weights and weight training to live longer and healthier lives. This course will help students define personal goals when it comes to fitness and apply elements of training to accomplish their goals. Students will not only learn training principles, but also improve muscular endurance and strength, cardiovascular endurance, flexibility, proper form when using weights, what types of exercises to do for their specific goals, basic nutrition needs including macronutrients and proper caloric intake, and basic muscle anatomy to understand why certain exercises are better than others for their specific needs/goals. This course is designed to add to the elements in their basic health and physical education classes. This course is a good balance for students who need multiple PE courses in one year or prefer fitness training to the traditional sports-based PE.

$$
\begin{gathered}
\text { Mon Valley } \\
\text { Career \& } \\
\text { Technology } \\
\text { Center }
\end{gathered}
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## MON VALLEY CAREER \& TECHNOLOGY CENTER

Career and Technical Education
Program of Studies

1. Students may elect for one, two, or three years of Career and Technical Studies.
2. Career or program specific mathematics is offered to interested students or students with a schedule conflict. Credits apply toward graduation requirements.
3. A student doing satisfactory work at the CTC and home school may be eligible for a paid work experience during school time in their field of study.
4. First year students will attend in the AM session. Second and third year students in a program attend in the PM session.


## MON VALLEY CTC CAREER MAJORS

There are thirteen Career and Technology Education Career Majors at Mon Valley CTC. The curriculum for each program is designed for students to progress through approved tasks and corresponding theoretical activities. Mon Valley CTC provides opportunity for students to gain industry recognized certifications in respective programs. However, enrollment in a program does not guarantee certification. The Career Majors offered at Mon Valley CTC are as follows:

## Agriculture Technology

An instructional program that generally describes the principles and practices of agricultural research and production and may prepare individuals to apply such knowledge and skills to the solution of practical agricultural problems. This program includes instruction in basic animal, plant, soil science and mechanization, animal husbandry, plant cultivation, soil conservation and mechanical technology. Instruction may include an emphasis in aquaculture, hydroponics, food science and/or environmental science. This program includes instruction in processes, scientific principles and management decisions concerned with agricultural production of agriculturerelated processing and storage techniques.

## Auto Collision Repair Technology

Students in this program have the opportunity to learn the skills necessary to rebuild and refinish automotive bodies, repair and replace trim and upholstery, align frames, weld, replace glass and make estimates of repair cost. Students develop a basic understanding of automotive body and chassis construction. They use tools of the trade and learn the maintenance and safety procedures required by automobile industry.

## Automotive Technology

This course offers the students practical instruction in the diagnosis and repair of all automotive systems and their components. It is designed to provide instruction in the theory and principles of the automobile engine, electrical circuitry, chassis, clutch, transmission, lubrication systems, electrical controls, and computerized controls. Students can train to become an automotive technician or focus upon an area of specialization such as 4-wheel alignment, electrical/electronic diagnosis, and others. The students are also afforded the opportunity to obtain the SP/2 Safety certifications and ASE Certifications prior to graduation.

## Carpentry

Students in this program will be prepared to interpret designs and specifications in order to build residential, commercial and industrial construction projects. Students learn to erect, install and repair structures using all types of construction material, as well as to estimate and select the specific materials needed for each project. Students learn to lay out projects using the framing square, transit and various measuring, cutting and assembling instruments. They also learn to apply interior and exterior finishes and to fit and install prefabricated cabinets, plastic laminates, floor and ceiling tiles, insulation, weather-stripping, finish hardware and locksets.

## Computer Engineering Technology

This course will cover computer repair basics and maintenance that will give students the knowledge to obtain entry level positions in the computer repair industry. With this training, students will understand the basics of computer repair and will be able to incorporate skills that they learned to troubleshoot hardware and software problems. Students will receive training in network wiring, configuration and Administration. They will also learn how to design and implement local and wide area networks. After completing this three year course students will be able to take certification exams in Comptia A+, Comptia Network+, and Microsoft Certified Systems Administrator.

## Construction Technology

This course prepares students to apply technical knowledge and skills required for the design, development, installation, and erection of buildings and other structures. Students will develop technical and math skills required in all stages of the construction process including safety, blueprint reading, rough framing, door and window installation, stair construction, roofing and siding, basic wiring, design and layout, finishing and trim installations, as well as masonry, plumbing and HVAC.

## Cosmetology

Students choosing this course, who successfully complete 1,250 hours of instruction in this program, are eligible to take the Pennsylvania State Board of Cosmetology Examination and become certified as licensed cosmetologists. Practical skills taught in the program include shampooing, cutting, wet setting, thermal styling, relaxing, coloring, permanent waving, manicuring, and giving facials. Included in the instruction are, management, marketing and public relations.

## Culinary Arts

Culinary Arts is a course that provides practical instruction and applied theory to a broad range of skills concerning the selection, preparation and handling of foods. Skill development will center on: safety and sanitation, proper use and handling of food service tools and equipment, preparation of food, dining room service, buffet and banquet service, baking, meat cutting and basic management skills. Unlike the home economics courses offered by most high schools, the instruction and on the job training will be conducted in the school's fully equipped, commercial kitchen and restaurant.

## Electrical Power Technology

The electrical technology program provides instruction on the installation of all types of wiring systems including residential, commercial and industrial facilities, as well as powerline technologies. Students will learn to layout, assemble, install, and test electrical components in wiring systems. The course also introduces students to basic robotic engineering, security systems and programmable logic controls (PLC's). In addition to training as a construction electrician, students will also receive competencies as a maintenance electrician, teaching them to maintain the equipment they install. Graduates are not only limited to building trade construction but they are also prepared to enter maintenance, and industrial electrical occupations. Seniors are given the opportunity to complete the first year of apprenticeship with the Associated Builders and Contractors.

## Emergency and Medical Services

A program that prepares individuals, under the remote supervision of physicians, to recognize, assess, and manage medical emergencies in prehospital settings and to supervise ambulance personnel. Includes instruction in basic, intermediate, and advanced EMT procedures; emergency surgical procedures; medical triage; rescue operations; crisis scene management and personnel supervision; equipment operation and maintenance; patient stabilization, monitoring, and care; drug administration; medical terminology, legal and ethical aspects of health care and communications; identification and preliminary diagnosis of diseases and injuries; communication and computer operations; basic anatomy, physiology, pathology, and toxicology; and professional standards and regulations.

## Health Occupations

The Health Occupations curriculum is a cluster program designed to introduce careers in health care. The Health Occupations core instruction includes planned courses in Health Care Careers, Safety Practices, Anatomy, Legal and Ethical Issues, Communications, Medical Terminology, Growth and Development, Nutrition, Infection Control, and Health Care Skills. Graduates of this program often pursue careers in nursing as well as in the rehabilitation fields such as physical therapy and occupational therapy. Students prepare and will have the opportunity to test for CPR Certification.

## Multimedia Design

This program gives students the freedom to be creative, imaginative, and inspired artistically to design presentations for entertainment, industrial and commercial use. Students will learn to use digital and video cameras. Today's designers must be familiar with many forms of production, illustrative techniques, computer graphics and photography. From simple line drawings to computer generated imaging, the students create art that requires them to apply technical theory. Students will apply their designs on state-of-the-art equipment including digital printers, laser engravers, vinyl cutters, a sublimation system and embroidery machines. This program is designed to allow students to bring together many areas of creative graphic design and production technologies. The course content is designed to create animations, manipulate photographs, create pictures, presentations podcasts and websites using state-of-the-art Illustrator software. Both platforms of personal computers and Apple Macs are taught. Finally, students complete a digital portfolio showcasing their "best works".

## Precision Metalworking \& Welding

This is an instructional program that prepares individuals to apply technical knowledge and skills in a variety of metalworking occupations. Instruction includes welding and cutting processes; setting up and operating machine tools (precision machining); metal fabricating, forming and cutting machines; and assembling of metal products and structures. Instruction is also provided in the use of hand and portable power tools in making computations related to work dimensions, the physical properties of materials and other related instruction and skills associated with metalworking occupations. Metals are cast, formed, shaped, molded, heat-treated, cut, twisted, pressed, fused, stamped or otherwise worked upon.

## NCAA INITIAL-ELIGIBILITY PROCESS

This chart presents a general overview to help you, students and parents to better understand the components of the initial-eligibility process. Please see detailed information throughout the rest of the guide to supplement this overview.

NCAA institution recruits students by placing him/her on their institutional request list, which begins a request for certification from the NCAA Eligibility Center.


## GRADE 9

Student asks counselor for a list of high school's core courses to ensure he or she takes the right classes.

## GRADE 10

$\square$ Student registers with the NCAA Eligibility Center at eligibilitycenter.org.
$\square$ At the end of the year, counselor provides student's official transcript to the NCAA Eligibility Center.

## GRADE 11

$\square$ Student checks with counselor to make sure he or she will graduate on time with all required NCAA core courses.

- Student takes the ACT or SAT, submitting his or her scores to the NCAA using code 9999.
I. At the end of the year, counselor provides student's official transcript to the NCAA Eligibility Center.


## GRADE 12

$\square$ Student finishes last NCAA core courses.
$\square$ Student takes the ACT or SAT again, if necessary, submitting his or her scores to the NCAA using code 9999.
$\square$ After April 1, student requests final amateurism certification decision from the NCAA Elgibility Center.
$\square$ After graduation, counselor provides student's final official transcript with proof of graduation to the NCAA Eligibility Center.

## DIVISION I WORKSHEET

This worksheet is provided to assist you in monitoring the progress of your student-athletes in meeting NCAA initial-eligibility standards. Remember to use your high school's list of NCAA-approved courses for the classes students have taken.

Use the following scale: $\mathrm{A}=4$ quality points; $\mathrm{B}=3$ quality points; $\mathrm{C}=2$ quality points; $\mathrm{D}=1$ quality point.


Core-Course GPA (16 roquiroc). Ten cons coursee must be completed before the sovonth semestar and sevon of the 10 must be a combination of Engleh, math or natural or physical science for compottion puposes.

## DIVISIDN II WDRKSHEET

This worksheet is provided to assist you in monitoring the progress of your student-athletes in meeting NCAA initial-eligibility standards. Remember to use your high school's list of NCAA-approved courses for the classes students have taken.

Use the following scale: $A=4$ quality points; $B=3$ quality points; $C=2$ quality points; $D=1$ quality point.

## ENGLISH (3 YEARS REQUIRED)

| COURSE TITLE | CREDIT | X | GRADE | $=$ | QUALITY POINTS (MULTIPLY CREDIT BY GRADE) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Example: English 9 | .50 |  | A |  | $(.5 \times 4)=2$ |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| TOTAL ENGLISH UNITS |  |  |  |  | TOTAL QUALITY POINTS |

MATHEMATICS (2 YEARS REQUIRED)

| COURSE TITLE | CREDIT | X | GRADE | $=$ | QUALITY POINTS (MULTIPLY CREDIT BY GRADE) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Example: Algebra I | 1.0 |  | B |  | $(1.0 \times 3)=3$ |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| TOTAL MATHEMATICS UNITS |  |  |  |  | TOTAL QUALITY POINTS |
| NATURAL/PHYSICAL SCIENCE (2 YEARS REQUIRED) |  |  |  |  |  |
| COURSE TITLE | CREDIT | X | GRADE | $=$ | QUALITY POINTS (MULTIPLY CREDIT BY GRADE) |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| TOTAL NATURAL/PHYSICAL SCIENCE UNITS |  |  |  |  | TOTAL QUALITY POINTS |
| ADDITIONAL YEARS IN ENGLISH, MATHEMATICS OR NATURALPHYSICAL SCIENCE (3 YEARS REQUIRED) |  |  |  |  |  |
| COURSE TITLE | CREDIT | X | GRADE | $=$ | QUALITY POINTS (MULTIPLY CREDIT BY GRADE) |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| TOTAL ADDITIONAL UNITS |  |  |  |  | TOTAL QUALITY POINTS |
| SOCIAL SCIENCE (2 YEARS REQUIRED) |  |  |  |  |  |
| COURSE TITLE | CREDIT | X | GRADE | $=$ | QUALITY POINTS (MULTIPLY CREDIT BY GRADE) |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| TOTAL SOCIAL SCIENCE UNITS |  |  |  |  | TOTAL QUALITY POINTS |
| ADDITIONAL ACADEMIC COURSES (4 YEARS REQUIRED) |  |  |  |  |  |
| COURSE TITLE | CREDIT | X | GRADE | $=$ | QUALITY POINTS (MULTIPLY CREDIT BY GRADE) |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| TOTAL ADDITIONAL ACADEMIC UNITS |  |  |  |  | TOTAL QUALITY POINTS |

TOTAL QUAUTY POINTS FROM EACH SUBJECT AREA / TOTAL CREDITS = cORE-COURSE GPA

|  | / |  | $=$ |  |
| :---: | :---: | :---: | :---: | :---: |
| qualty | I | credits | = | CORE-course gra |

